Undergraduate Catalog 1985-87

Tennessee State University

VOL. LXVI—1985-87

TENNESSEE STATE UNIVERSITY
LIBRARY

The provisions of this catalog constitute a contract between the University and a student who commences any program of study insofar as it relates to the degree requirements for that program during the effective period of this catalog. Degree requirements are subject to change during such period only to the extent required by federal or state laws of accreditation standards. The specific courses or activities constituting the degree requirements for any program are subject to substitution at any time prior to completion by the student.

The remaining provisions of this catalog reflect the general nature of and conditions concerning the educational services of the University in effect at this time, but do not constitute a contract or otherwise binding commitment between the University and the student. Any fees, charges or costs, and all academic regulations set forth in this catalog are subject to cancellation or termination by the University or the State Board of Regents at any time.

The University provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the University, are trained and qualified for teaching at the college level. However, the acquisition of knowledge by any student is contingent upon the student's desire to learn and his or her application of appropriate study techniques to any course or program. As a result, the University does not warrant or represent that any student who completes a course or program of study will necessarily acquire any specific knowledge or skills, or will be able to successfully pass or complete any specific examination for any course, degree or license.

Graduate Catalog is published under separate cover and may be obtained from the Graduate School Office.

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UNIVERSITY POLICY ON EQUAL OPPORTUNITY, AFFIRMATIVE ACTION, AND COMPLIANCE WITH TITLE IX

Tennessee State University is an Affirmative Action University. Applicants and candidates will be considered for program participation without discrimination for any non-merit reason such as race, color, national origin, sex, religion, age, or handicap. Further, it is the policy of Tennessee State University not to discriminate on the basis of sex in the education programs or activities which it operates, including employment therein and the admission of students thereto; and Tennessee State University is required by Title IX of the Education Amendments of 1972, and regulations issued pursuant thereto (45 C.F.R. Part 86) (and by Sections 799A and 845 of the Public Health Service Act, and regulations issued pursuant thereto) not to discriminate in such manner. Inquiries concerning the application of the Acts and the regulations to Tennessee State University, may be referred to:

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CONTENTS

I. General Information 4
Admission to the University 12
II. Fees 27
Financial Aid 30
III. Academic Information 16
IV. University College 36
Developmental Studies 42
V. The School of Agriculture and Home Economics 44
The School of Allied Health Professions 58
The School of Arts and Sciences 73
The School of Business 123
The School of Education 134
The School of Engineering and Technology 155
The School of Nursing 173
Aerospace Studies 177
VI. The Graduate School 179
Continuing Education, Extension and Public Service 180
Cooperative Agriculture Research Program 183
Office of International Affairs 179
University Personnel 186
Index 191

INFORMATION DIRECTORY

Academic Affairs
320-3410 and 251-1223

Applications, Admission and Enrollment
320-3420 and 251-1161

Alumni Correspondence
320-3326

Athletics
Gentry Complex
320-3597

General Information
Office of Public Relations
320-3688 or 251-1141

Student Development Services
320-3626

Student Housing
320-3061

Dean of Students
320-3209

Health Services
320-3671

Fees and Business Matters
320-3450

Transcripts of Records
320-3420

Veterans Affairs Benefits
320-3009

Graduate School
320-3491 or 3492

Continuing Education
251-1104

Air Force ROTC Programs
320-3710

Purpose of Catalog

The Tennessee State University Catalog is the general information publication for the University Community. It is intended to provide information for students and other persons interested in the academic programs and organizations of TSU. In order to understand the activities and programs of the institution it is important for students to know how to use this catalog effectively.

Students should thoroughly familiarize themselves with the General information section of the catalog. This section answers questions concerning such diverse needs as locations of buildings and other facilities on campus, requirements for admission and graduation, financial aid information, student services, housing regulations, etc.

Students who have already made decisions concerning what area of study they are interested in, such as English, Mathematics, Business Education, Engineering or some other field, should turn to the section of the Catalog dealing with their particular interest for information about courses and degree requirements. The reader will find that schools are arranged in alphabetical order, with course listings by department and course number.

Students who have questions concerning their academic progress, curricula or academic standing should consult their advisors or their academic deans. Those students with specific questions concerning specialized areas of study should consult with each specific department.

Graduate students interested in graduate work should refer to the Graduate Catalog, or inquire at the Office of the Dean of the Graduate School.

Students' guides to the catalog are the index, the table of contents, and the glossary. Major events, holidays, and semester schedules are listed in the University Calendar.

GLOSSARY

Academic Good Standing: An indication that a student meets or exceed minimum academic requirements to be enrolled at the University.

Academic Probation: An indication of marginal academic performance. A warning that a student is in jeopardy of losing academic good standing.

Accreditation: Recognition granted schools and colleges upon examination by groups of visiting professionals based upon objective standards developed by interested professional agencies. An accredited school or college has measured up to the standards of quality imposed by professional groups and accrediting agencies.

Curriculum: The total program of courses required for a degree in a particular subject.

Credit Hours: Generally the number of hours a course meets each week determines its worth in credit hours.

Elective: A course that is accepted toward fulfillment of credit for a degree but is not required for that degree. So termed because a student "elects" or chooses to take the course.

Evaluation: Any credit for academic work completed at another institution and transferred to TSU must be evaluated in terms of the requirements of TSU. Such evaluation is done by the Office of Admissions.

Full-time Student: A student who registers for 12 or more credits each semester.

Grade-point average: A student's grade-point average may be computed numerically by dividing the number of quality points earned by the number of hours of coursework attempted.

Major: A major is the academic area in which one specializes.

Matriculation: Enrollment in the University or a particular college or school. This includes payment of fees.

Minor: A minor is the academic area in which one places special emphasis as a secondary specialization.

Non-resident: A student who is not a resident of the State of Tennessee.

Part-time Student: A student who registers for less than 12 credit hours a semester.

Prerequisite: Certain courses must be completed before others may be attempted. Such first courses are said to be prerequisites for following courses in the same or similar areas. It is the student's responsibility to check for prerequisites in the current bulletin.

Semester Hour of Credit: The semester hour is a unit of academic credit. A student, for example, must earn a minimum of 32 semester hours in order to graduate. The number of hours earned in a given semester is the measure of a student's academic load. A normal load ranges from 12 to 18 semester hours of work. The hours of credit of various courses are indicated in the catalog.

Transcript of Credit: A certified copy of credits which a student has earned in high school or in colleges attended. The submission of a transcript is one of the most important prerequisites for admission to the University.

HISTORICAL STATEMENT

The present-day Tennessee State University exists as a result of the merger on July 1, 1979 of the former Tennessee State University and the University of Tennessee at Nashville.

Through successive stages Tennessee State University has developed from a normal school to its current status. By virtue of a 1909 Act of the General Assembly, the Agricultural and Industrial State Normal School was created, along with two other normal schools in the State and began serving students on June 19, 1912.

In 1922, the institution was raised to the status of a four-year teachers' college and was empowered to grant the bachelor's degree. The first degrees were granted in June, 1924. During the same year, the institution became known as the Agricultural and Industrial State Normal College; and in 1927, "Normal" was dropped from the name of the College.

The General Assembly of 1941 authorized the State Board of Education to upgrade substantially the educational program of the College which included the establishment of graduate studies leading to the master's degree. Graduate curricula was first offered in several branches of teacher education. The first master's degree was awarded by the College in June, 1944.

Accreditation of the institution by the Southern Association of Colleges and Schools was first obtained in 1946 and reaffirmed in 1969.

In August, 1951, the institution was granted university status by approval of the State Board of Education. The reorganization of the institution's educational program included the establishment of the Graduate School, the School of Arts and Sciences, the School of Education, and the School of Engineering.

Provisions were also made for the later addition of other schools in agriculture, business and home economics, respectively.

The University was elevated to a full-fledged Land-Grant University by the State Board of Education in August 1958. The Land-Grant University program, as approved by the State Board of Education, included: The School of Agriculture and Home Economics, the Graduate School, the Division of Business, the Division of the Extension and Continuing Education, and the Department of Aerospace Studies.

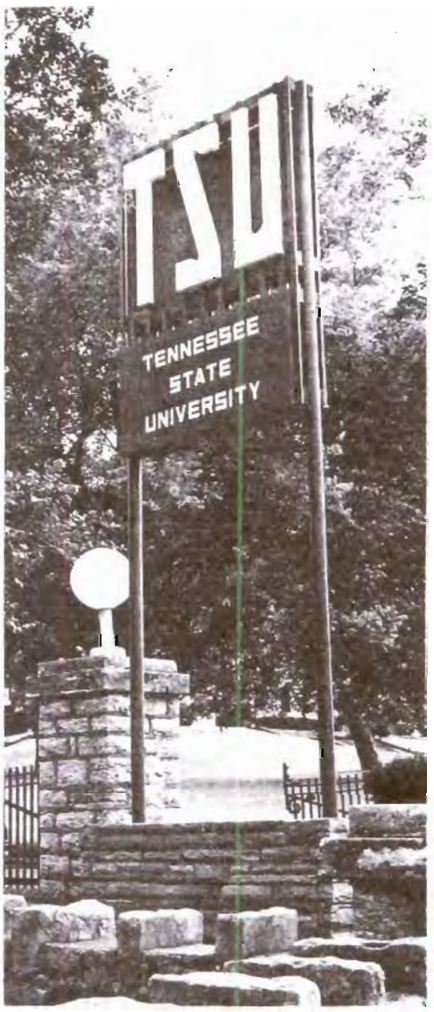
A School of Allied Health Professions was authorized in 1974, from which the School of Nursing was created in 1979. Meanwhile, the School of Business was established in 1974.

Begun initially in 1947 as an extension center of the University of Tennessee, which is based in Knoxville, the University of Tennessee at Nashville only offered one year of extension credit until 1960, when it was empowered by the Board of Trustees of the University of Tennessee to offer two years of resident credit. Authorization was granted to extend this to three years of resident credit in 1963, even though degrees were awarded by the Knoxville unit.

To more fully realize its commitment as a full-function evening university, the Center at Nashville became a full-fledged, four-year, degree-granting institution in 1971 upon successfully meeting the requirements for accreditation of the Southern Association of Colleges and Schools. During the same year, the General Assembly sanctioned the institution as a bona fide campus of the University of Tennessee, and the new university occupied its quarters in the then recently completed building at the corner of Tenth and Charlotte.

It was the erection of the above mentioned building which gave rise to a decade-long litigation to "dismantle the dual system" of higher education in Tennessee which culminated in the court ordered merger by Judge Frank Gray in February, 1977.

The missions of the two universities, Tennessee State University and the University of Tennessee at Nashville, were highly compatible due to their historic backgrounds or connection to a land-grant institution.



PURPOSE OF THE UNIVERSITY

As a land-grant institution, Tennessee State University has as its mandates instruction, research and service. The University contributes to the advancement of all who seek its services and can profit from its broad educational programs. Tennessee State University stimulates its students and the citizens of Tennessee to reach their full potential through respect for inquiry and appreciation of their cultural traditions, imbues them with the desire to develop basic knowledges and skills that will enable them to succeed in an ever changing world, develops the leadership needed for advancement of knowledge, and applied that knowledge toward the improvement of the quality of life for citizens of the state and the nation.

The University aims:

1. To maintain high standards of instruction in general education, in continuing education, and in the curricula and field of specialization through which degree programs are offered.

2. To encourage faculty and students to engage in research, which advances knowledge in the areas with which the various academic departments and divisions are concerned.

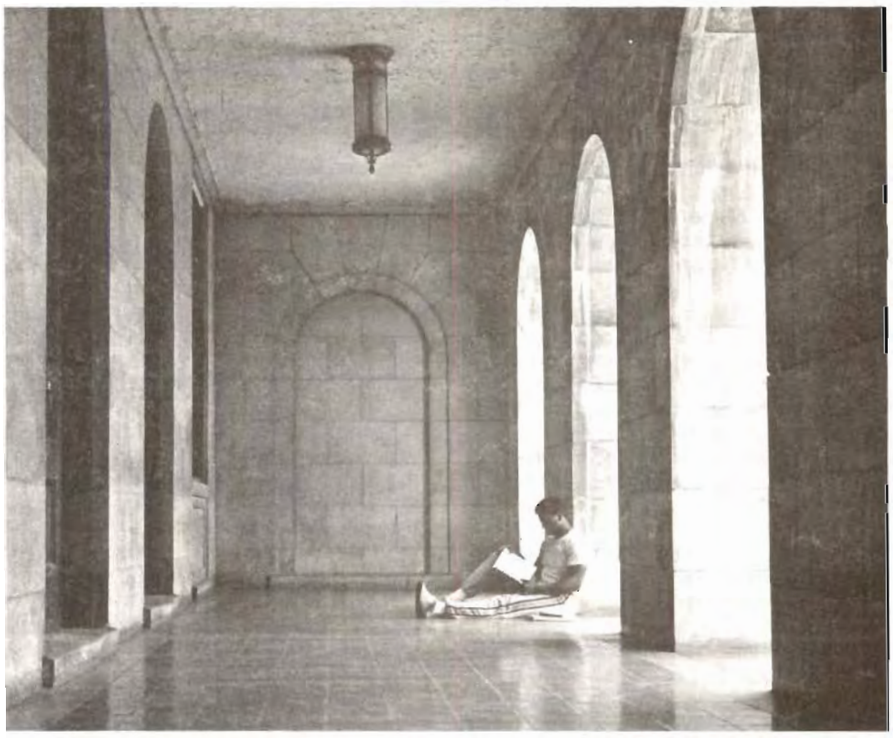
3. To continue expanding its role as a servant and leader of the citizens of the State by disseminating knowledge and providing a broad variety of education services, both credit and non-credit, to the public.

4. To identify and develop the talents of all students who have the potential for college work, including those whose educational, socio-economic, and cultural disadvantages have prevented their being prepared fully to puruse college work successfully without special assistance.

5. To provide a full array of degree programs and services especially tailored to the needs and convenience of college students of all ages, including a full array of degree programs and services for the working adults of the mid-state area.

6. To provide an intellectual atmosphere which stimulates students and faculty to apply knowledge and skills toward the improvement of humanity and the society.

The University's objectives mirror these general and specific purposes. They also reflect the University's priorities.



Tennessee State University projects itself to the students, faculty, alumni, and to the citizens of the State through the motto: "Think, Work, Serve."

PROGRAM ACCREDITATIONS (As of June, 1984)

	Year
The Council of Social Work Education Undergraduate NABTE	1969
National Council for Accreditation of Teacher Education	1968
National Association of School of Music	1962
Southern Association of Colleges and Schools	1946
American Home Economics Association	1973
Tennessee Board of Nursing	1973
American Dental Association Commission on Accreditation of Dental and Dental Auxiliary Educational Programs	1973
Reaccreditation by SACS	1969
National League for Nursing National Collegiate Athletic Association	1975
National University Extension Association (FAA) Federal Aviation Agency	1970
Accreditation Board for Engineering and Technology Civil Engineering, Electrical Engineering	1978
Architectural Engineering, Mechanical Engineering	1977
American Medical Association Committee on Allied Health Education and Accreditation in Collaboration with the American Medical Association	1980
American Speech Hearing and Language Association	1984

THE CAMPUSES

The University has two campus sites. Its central campus is located between 28th and 39th Avenues North and is bounded by the Cumberland River on the north and Albion Street on the south, at 3500 John A. Merritt Boulevard. Its sixty-five buildings, parking lots, outdoor facilities, pasture and farm lands occupy some 450 acres.

The downtown campus is housed in a large modern building which is located at Tenth and Charlotte Avenues with adjacent parking facilities.

MAJOR BUILDINGS

The **Administration Building** is located on John A. Merritt Blvd. between 35th and 36th Avenues, on the south side of the campus. It contains the chief administrative offices, the computer center, the general auditorium which accomodates approximately one thousand persons, the Little Theatre for student productions in drama, and a swimming pool. Originally occupied in 1933, it was renovated and enlarged in 1967.

The **Harned Hall** of Science erected in 1927, is located on the north campus, north of the library. It provides classrooms, lecture auditoriums, laboratories, staff offices and other facilities for instruction and research in the biological sciences.

The **Industrial Arts Building** is located on the south campus at Centennial Boulevard and 35th Avenue, it was renovated in 1975. It contains a variety of laboratories, shops, and classrooms for metal work, plumbing, welding, refrigeration, radio and electricity. Instructional staff offices and the main office for the departments of Industrial Arts and Technology is also located in this building. The School of Allied Health professions offices, Department of Medical Records Administration, and Respiratory Therapy area are also housed in this Facility.

The **Queen Washington Health Service Building,** located on the north campus west of Hankal Hall and has facilities for complete examination and limited treatment for students. The Health Services Staff includes three nurses, three physicians, and a psychiatrist.

The Counseling Center is located on the second floor of the Queen Washington Health Center and has facilities for individual and group counseling. The Counseling Center Staff includes counselor, Vocational Rehabilitation Coordinator, New Student Orientation Coordinator and a Clinical Psychologist.

The **Marie Brooks Strange Music Building,** erected in 1968, is located on the south campus. It contains many facilities designed to provide instruction in music which include classrooms, listening laboratories, studios for piano and instrumentation, a recital hall seating 226, and faculty offices. The office of the Music Department head is housed in this building.

The **Walter S. Davis Home Economics and Nursing Education Complex** is located on the northeast campus on John A. Merritt Boulevard across from 31st Avenue. It is a three story air conditioned building that contains classrooms and laboratories for teaching and research in Home Economics and Nursing. The main offices of the departments are located in this complex.

Goodwill Manor is a two story colonial type structure that was formerly used as the University President's Residence. Plans are being made to renovate the structure and maintain it as an historical university landmark.

Howard C. Gentry, Health, Physical Education, Athletic and Convocation Complex is located on the north side of the campus east of the Edward S. Temple Track. This new facility contains a 10,000 seat basketball and convocation arena, and indoor track, handball courts, dance studio, offices, classrooms, and a thirty-five (35) meter swimming pool. The main offices of the Physical Education and Athletics Departments are housed in this complex. Exterior accommodations include tennis and handball courts, playing fields, baseball diamond, and parking for 2,000 cars.

Frank G. Clement Hall is located on 35th Avenue, south of the Brown-Daniel Library. This structure was formerly used as a men's residence hall. It was renovated in 1969 and serves as a classroom/laboratory building containing the department of Dental Hygiene and the University of Tennessee School of Social Work.

The R. E. Clay Education Building, erected in 1958, is located on 35th Avenue. This building is equipped with classrooms and special laboratories for Teacher Education, Psychology, and Reading. The main offices of the departments of Administration, Curriculum and Instruction, Psychology, and Teacher Education are housed in this building. It also houses the office of the Dean of the School of Education.

The **Martha M. Brown-Lois H. Daniel Library** is located on the south campus at John A. Merritt Boulevard and 35th Avenue. The ultramodern Library is a three-story contemporary structure constructed of warmtone architectural

Administration Building

Marie Brooks Strange Music Building

Howard C. Gentry Convocation/Athletic Complex

Martha M. Brown-Lois Daniel Library

concrete and coarse aggregate Tennessee River gravel and has cantilevered second and third floors.

The recently completed main Library houses 333,710 volumes and contains subscriptions to 790 periodicals with over 37,567 bound periodicals. Built in 1977 at a cost of $2,400,000, the Library has 82,000 square feet of space with special study and research facilities for faculty and graduate students. A unique special collections room houses the Library's historical archives, theses and special collections.

The **Downtown Library,** established in the early 1960's as the University of Tennessee at Nashville Library, became a branch of the Main campus Library concurrently with the merger of the two Universities. The Downtown Library offers a full range of public services, and is fully staffed. Utilizing a book collection 204,683 volumes, 7,023 microfilm reels, and 223,172 microfiche sheets, the service is further enhanced by subscriptions of 454 periodicals with 19,325 bound periodicals.

The **W. W. Lawson Agriculture Building** is located on the north side of the campus adjacent to the University Agricultural Laboratories. The building contains classrooms and laboratories equipped for teaching and research in scientific agriculture.

The **Joseph Payne Student Union Building,** erected in 1959 and added to in 1968, houses the offices of the Vice President for Student Affairs, Student Government Association, and other student organizations. Facilities included in the Student Union Building are lounges, conference rooms, a game room, a grill and fountain, the University Bookstore, and Post Office. It also contains the main cafeteria for University and a faculty/staff cafeteria.

The **Lewis R. Holland School of Business Building** is located on the southwest side of the campus. This building contains classrooms, lecture hall, faculty offices for the personnel of the School of Business.

The **Alger Boswell Physics and Mathematics Building,** completed in the fall of 1965, is located west of the Student Union Building. It houses undergraduates and research laboratories, classrooms, a lecture hall, the academic computer center, faculty offices, and the office of the head of the department of Physics and Mathematics.

Lewis R. Holland Hall

Learning Resource Center

Alger Boswell Physics and Mathematics Building

Andrew J. Torrence Engineering Building

The **Jane E. Elliott Hall** (Women's Building) is located west of the Old Library on the north side of the campus. The building contains laboratories, lecture room, faculty offices, work rooms, and studios for the fine arts and crafts. The main offices of the department of Art, Social Welfare, and Sociology are housed in this building as is the office of the Dean of Extension and Continuing Education.

The **Hubert B. Crouch Hall** (Graduate School) located directly west of the Administration Building contains classrooms, laboratories, faculty offices, and offices for the Dean of the Graduate School and the Dean of the School of Arts and Sciences. Also located in this building are the main offices for the departments of Communication, Government and Public Affairs, History and Geography, Modern Foreign Languages, Speech Pathology and Audiology.

The **Andrew P. Torrence Engineering Building** is located in south campus behind the Physics and Mathematics Building. Its laboratories are equipped with the most up-to-date equipment available for instruction and research in civil, mechanical, architectural and electrical engineering. The building was completed in 1982.

The **University Learning Resources Center,** formerly known as the "Old Library'," is located on north campus and provides audiovisual support to the University. Centers on both campuses circulate many types of media covering a wide range of subject areas. Multimedia study carrels are available for use of these materials by students on an individual basis. An inventory of audiovisual equipment is on hand for loan to faculty for classroom use of media. Facilities, staff, and equipment for the reproduction of slides, transparencies, graphics, video and audio recorded materials are also available through the L.R.C.

ACADEMIC CALENDAR*

Fall 1985—Summer 1987

FALL SEMESTER, 1985

August 16, Sat.	Residence Halls open for Freshmen and New Students
August 17, 18, 19, 20 Sat.-Tues.	Freshmen Orientation and registration
August 21, Wed.	Residence Halls open Upperclassmen
August 21, 22, 23, 24 Wed.-Sat	Registration for all students by alphabet
August 26, Mon.	Classes begin
Sept. 2, Mon.	Labor Day
	Last day for 75% reimbursement
Oct. 18, Fri.	Application for graduation due for students completing degree requirements during Fall Semester
Oct. 10, 11 Thurs.-Fri.	Mid-Semester Examinations
Oct. 25, Fri.	Last day to withdraw from courses or the University
Nov. 28, 29 Thurs.-Fri.	Thanksgiving Holidays
Dec. 10, 11, 12, 13 Tues.-Fri.	Final Examinations for Fall Semester
Dec. 17-Jan. 2	Christmas break

SPRING SEMESTER, 1986

Jan. 2, Thurs.	Faculty Institute-Faculty Report at 8:00 a.m.
Jan. 3, 4, 6 Fri., Sat., Mon.	Registration for Spring Semester
Jan. 7, Tues.	Classes begin
	Last day for 75% reimbursement
Feb. 14, Fri.	Applications for graduation due for students completing degree requirements Spring Semester
Feb. 20, 21 Thurs.-Fri.	Mid Semester Examinations
Mar. 10-14 Mon.-Fri.	Spring Recess
Mar. 7, Fri.	Last day to withdraw from courses or the University
Apr. 17-18 Thurs.-Fri.	Final Examinations for Graduating Seniors
April 29, 30, May 1, 2	Final Examinations for Spring Semester
May 3, Sat.	Commencement Exercises

SUMMER TERM I, 1986

May 30, 31 Fri.-Sat.	Registration
June 3, Tues.	Classes begin
June 9, Mon.	Applications for graduation due for students completing degree requirements during Summer Semester
July 3, Thurs.	Final Examinations

SUMMER TERM II, 1986

July 7, Mon.	Registration
July 8, Tues.	Classes begin
August 8, Fri.	Final Examinations
August 9, Sat.	Commencement Exercises

FALL SEMESTER, 1986

August 16, Sat.	Residence Halls open for Freshmen and New Students
August 17, 18, 19 Sun.-Tues.	Freshmen Orientation
August 18, Mon.	Faculty Institute-Faculty Report at 8:00 a.m.
August 19, 20, 21, 22 Tues.-Sat.	Registration for all students by alphabet
August 25, Mon.	Classes begin
Sept. 1, Mon.	Labor Day
	Last day for 75% reimbursement
Oct. 17, Fri.	Application for graduation due for students completing degree requirements during Fall Semester
Oct. 9, 10	Mid Semester Examinations
Oct. 24, Fri.	Last day to withdraw from courses or the University
Nov. 27, 28	Thanksgiving Holidays
Dec. 9, 10, 11, 12 Tues.-Fri.	Final Examinations for Fall Semester
Dec. 15-Jan. 2	Christmas Recess

SPRING SEMESTER, 1987

Jan. 2, Fri.	Faculty Institute-Faculty Report at 8:00 a.m.
Jan. 5, 6 Mon.-Tues.	Registration for Spring Semester
Jan. 7, Wed.	Classes begin
	Last day for 75% reimbursement
Feb. 16, Mon.	Applications for graduation due for students completing degree requirements for Spring Semester
Feb. 19, 20 Thurs.-Fri.	Mid Semester Examinations
Mar. 9-13 Mon.-Fri.	Spring Recess
Mar. 6, Fri.	Last day to withdraw from courses or the University
Apr. 16, 17 Thurs.-Fri.	Final Examination for Graduating Seniors
Apr. 28, 29, 30, May 1 Tues.-Fri.	Final Examinations for Spring Semester
May 2, Sat.	Commencement Exercises

SUMMER TERM I, 1987

May 29, 30 Fri.-Sat.	Registration
June 2, Tues.	Classes begin
June 8, Mon.	Applications for graduation due for students completing degree requirements during Summer Semester
July 2, Thurs.	Final Examinations

SUMMER TERM II, 1987

July 6, Mon.	Registration
July 7, Tues.	Classes begin
August 7, Fri.	Final Examinations
August 8, Sat.	Commencement Exercises

*This calendar is subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution.

DEGREE PROGRAMS OFFERED 1985-1986

Agriculture and Home Economics	Agricultural Science	M.S.
	Home Economics Education	M.Ed., M.A.Ed., B.S.
	General Home Economics	B.S.
	Early Childhood Education	B.S., A.S.
	Animal Science	B.S.
	Plant Science	B.S.
	Rural Development	B.S.
Allied Health Professions	Dental Hygiene	B.S., A.S.
	Health Care Administration and Planning	B.S., A.S.
	Medical Records Administration	B.S.
	Medical Technology	B.S.
	Respiratory Therapy	B.S.
	Speech Pathology and Audiology	B.S.
Arts and Sciences	Art	B.S.
	Arts and Sciences	B.A., B.S., A.A.
	Biology, Biochemistry	B.A., B.S., M.A., M.S.
	Chemistry	B.S., M.S.
	Computer Science	B.S.
	Criminal Justice	B.S., M.C.J.
	English	B.A., B.S., M.A.
	English	B.A., B.S., M.A.
	History	B.A., B.S.
	Mathematics	B.A., B.S.
	Modern Foreign Language	B.A.
	Music	B.S.
	Music Education	M.A.Ed., M.S.
	Physics and Mathematics	B.A., B.S.
	Political Science	B.A., B.S.
	Public Administration	M.P.A.
	Social Welfare	B.A., B.S.
	Sociology	B.A., B.S.
	Speech Communication and Theatre	B.A., B.S., M.A., M.S.
Business	Accounting	B.B.A.
	Business Administration	B.B.A., M.B.A.
	Business Education	B.B.A., M.A.Ed.
	Economics and Finance	B.B.A.
	Office Management	A.S., B.B.A.
Education	Administration and Supervision	Ed.D., Ed.S., M.A.Ed., M.Ed.
	Adult Education	M.A.Ed., M.Ed.
	Curriculum and Instruction	Ed.D., Ed.S.
	Education	B.S.
	Educational Psychology and Guidance	Ed.D.
	Elementary Education	B.S., M.A.Ed., M.Ed.
	Guidance and Counseling	M.S., M.Ed.
	Health Education	B.S.
	Health and Physical Education	B.S., M.A.Ed., M.Ed.
	Psychology	B.A., B.S., M.Ed., M.S.
	Reading	M.A.Ed., M.Ed.
	Recreation	B.S., M.S.
	Secondary School Instruction	M.A.Ed., M.Ed.
	Special Education	M.A.Ed., M.Ed.
Engineering and Technology	Architectural Engineering	B.S.
	Civil Engineering	B.S.
	Electrical Engineering	B.S.
	Engineering	B.S., M.E.
	Engineering Management	C1
	Fire Science	A.S., C1
	Industrial Arts and Technology	B.S.
	Industrial Education	M.A.Ed., M.Ed.
	Mechanical Engineering	B.S.
Nursing	Nursing	A.S., B.S.N.

STUDENT INFORMATION

This section includes information on the following:

—ADMISSIONS

—FEES

—FINANCIAL AID

—PERSONNEL SERVICES

—ACADEMIC INFORMATION

ADMISSION TO THE UNIVERSITY

Undergraduate Admission

All inquiries about admission, applications for admission, and transcripts of credit should be addressed to the Dean of Admissions and Records, Tennessee State University, 3500 John Merritt Blvd., Nashville, TN 37203

Admission to Freshmen

Applicants for admission to the freshman class should submit their application materials as early as possible in their senior year of high school.

Applicants should request high schools to send transcripts including all semesters of high school credits, except the final semester credits, as soon as grades are available. Applicants are requested to furnish supplementary records immediately following graduation from high school.

First-time Freshmen
General Requirements

1. All students will be required to submit an application for admission and a $5.00 non-refundable processing fee for admission.
2. Any student desiring to be admitted without any conditions must have submitted an application, an application fee, and all documents (transcripts) at least 45 days prior to the semester of intent.

I. Regular Admissions

A. In-State Students

For regular admission, an applicant must attain a minimum composite of 12 on the ACT or SAT equivalents, or have a minimum grade point average of 2.00 on the high school record (4.00 system), must pass the Tennessee Proficiency Examination and must possess the following:

Year	GPA or	ACT
1985	2.00	12
1986	2.00	12
1987	2.00	14

B. Out-of-State Students

For regular admission, first time out-of-state freshmen must attain a minimum composite of 16 on the ACT or SAT equivalents, or have a minimum grade point average of 2.50 on the high school record (4.00 system).

Note 1: ACT or SAT scores are required of all students under 21 years of age for counseling and placement purposes.
Note 2: Students' residency classifications for fee-paying purposes determine whether they are considered under the in-state or out-of-state admissions requirements. Children of graduates are admitted under the same requirements as in-state students even though they may be required to pay out-of-state tuition. Each applicant should provide documentation to the Director of Admissions.

II. Regulated Admission

A. Applicants who do not possess the acceptable grade point average or ACT/SAT equivalent and are graduates of approved private or public high schools may be permitted to enroll in a regulated program of study.

B. Applicants admitted under regulated status must complete courses specified by advisors with grades "C" or better. Such specified courses must be completed in the first two semesters and first summer of enrollment in order for the student to be continued in the University. Upon completion of these requirements, the Regulated Admission Status will be removed.

C. Such regulated admissions must have the approval of the Dean of Admissions and Records in consultation with the Vice President for Academic Affairs and the President of the University. The number of students permitted to enroll in this category will not exceed five percent (5%) of the total number of first-time freshmen admitted in any given term, or 100 students whichever is greater.

III. Admission Based on High School Graduation

A. Students seeking admission based upon high school graduation from an approved private or public school must submit a high school transcript indicating date of graduation and completion of necessary units as stipulated by academic departments. Any student who is deficient will be required to remove the deficiencies.

B. Applicants, twenty-one years of age and over will be admitted with high school transcripts. Such applicants will be encouraged but not required to take the ACT.

IV. Admission Based on GED Test

Any student desiring admission based on the General Education Development Test must be at least 18, present a copy of the GED equivalency high school diploma and submit a minimum composite score of 45. A high school transcript will be requested. Such applicants must also take the ACT and make the minimum composite score required of high school graduates. Students failing to achieve these ACT scores may be admitted under the regulated program.

Required Testing

Any or all students may be required to take one or more tests designed to measure general education achievement and achievement in major areas as a pre-requisite to graduation, for the purpose of evaluation of academic programs. Unless otherwise provided for any individual program, no minimum score or level or achievement is required for graduation. Participation in testing may be required of all students, of students in selected programs, and of students selected on a sample basis.

Early Admission

Students who wish to begin college at the end of their junior years may qualify under the following conditions:

1. be at least 16 years of age;
2. have completed the junior year of high school with a minimum of 14 high school units;
3. have a 3.2 grade point average on all work taken during grades 9, 10, and 11;
4. have a minimum ACT composite score of 21;
5. be recommended for participation in the program by either the high school principal or the guidance counselor.

Re-Admission—TSU Students

1. Students who leave the University voluntarily and who do not enroll for courses during one or more regular semesters must contact the Office of Admissions and Records to request an update of their admission file. Summer is not considered a regular semester in determining absence from the University.

2. Students who return to TSU after attending other colleges or universities must submit an application for readmission and a transcript from all institutions attended since leaving TSU. Applicants in this category need a grade point average equal to TSU RETENTION STANDARDS WHEN all courses attempted at all colleges are combined.

3. Re-enrollees who wish to attend TSU after being suspended should follow items 1 and 2 above as well as the following:

   a. Students who receive their first suspension at the end of the Fall Semester may not register at TSU until the following Summer.

   b. Students receiving their first suspension at the end of the Spring Semester will not be eligible to re-enroll until the following Spring Semester.

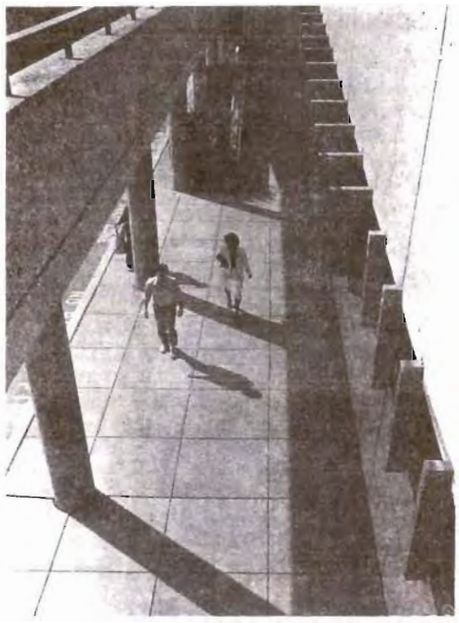
   c. Students receiving their first suspension at the end of the Summer Session will not be eligible to re-enroll until the following Spring Semester.

   d. Students who attend another accredited institution during their suspension from TSU and raise their cumulative GPA to meet TSU retention standards will be allowed to re-enroll at TSU.

4. In determining retention and re-enrollment, Summer I and Summer II grades will be calculated as one term.

Application Information

Any student withholding application information or giving false information will not be eligible for admission and will be denied continuation of studies at the University.



Transfer Students

All students seeking advanced standing must submit official transcripts of all college credit earned. A student will be considered a transfer student if any college work has been taken at another institution.

To qualify for admission by transfer from a college or university in the State of Tennessee, a student must meet the following grade point average requirements:

HOURS ATTEMPTED	REQUIRED GPA
0-14	No minimum GPA
15 to 29	Not less than a 1.4 cumulative average
30 to 50	Not less than a 1.7 cumulative average
51 to 67	Not less than a 1.9 cumulative average
Above 67 hours	Not less than a 2.0 cumulative average

To qualify for admission by transfer from an out-of-state college or university, a student must have, as a minimum, an overall 2.00 grade point average. Credits earned by students who are Tennessee residents attending public colleges and universities in Tennessee will be accepted toward degree programs on the same basis as work taken on the campus of Tennessee State University. All other students seeking advanced standing will be admitted to Tennessee State University provided thay meet the minimum requirement of a 2.00 grade point average. All transfer grades will be used in computing the average required for admission. Students transferring from a junior or community college must complete a minimum of 60 hours credit for the bachelor's degree at TSU. Furthermore, any student dismissed from a college or university for academic reasons must be eligible to re-enter that institution prior to acceptance at TSU. Credit earned at other accredited colleges and universities will be assigned by the Office of Admissions and Records once the student enrolls at TSU. The University does not grant upper division credit (300-400 level courses) for lower division work transferred from community or junior colleges. In addition, no upper division credit will be granted for any lower division credit transferred from any other accredited university or college; any exceptions to this particular provision must be approved by the Office of Admissions and Records and the appropriate department head. The Office of Admissions and Records will provide all transfer students an equivalency evaluation of all transfer credit during the student's first semester of enrollment at the University. Specific questions regarding transfer credit should be addressed to the Office of Admissions and Records and the appropriate department head.

Transient Students

A transient student is one who is regularly enrolled in another college or university and who desires admission for a limited period, usually one semester. The transient student is required to submit a regular application for admission and to furnish a letter of good standing from the college or university in which he/she is enrolled. The transient student who wishes to become a regular student must file an appropriate application and meet the same requirements for admission as a transfer student.

Admission with Advanced Standing from Accredited Institutions

Students who have attended other accredited colleges or universities may apply for admission to Tennessee State University with advanced standing by fulfilling the following requirements:

1. File an official transcript of records from all high schools, colleges or universities previously attended, whether or not the applicant wishes to receive credit for such work.
2. Present a letter of honorable exit from the last institution attended.

Admission with Advanced Standing from Non-Accredited Institutions

Students who desire to enter Tennessee State University from non-accredited colleges may register under the following stipulations:

1. Present an official transcript showing a grade point average of 2.00.
2. Credit for work done prior to entering Tennessee State University will be granted as:
   a. Full credit if work at Tennessee State University during the first semester as a full-time student is 3.00 or above.
   b. Three-fourths credit if work at Tennessee State University is below 3.00 but not less than 2.50.
   c. Half credit if work at Tennessee State University is below 2.50 but not less than 2.00.
   d. No credit if work at Tennessee State University is below 2.00.

Since the Fall of 1974 Tennessee State University has been operating under the semester system. All transfer credits from institutions not on the semester system will be converted to semester credits. Cumulative averages are computed on the basis of A equals 4 quality points for each credit hour.

The fees charged per semester hour will be the same as other undergraduate courses.

Adult Special Student

This category is typically designed to serve the interests of an adult who does not wish to pursue a degree at the present, but who wishes to receive academic credit. An individual may be admitted subject to the following provisions:

1. must hold a high school diploma or the equivalent;
2. may complete a maximum of 36 semester hours credit at TSU in this category. After receiving 36 hours, the applicant, to continue enrolling at TSU, must apply for regular classification and must meet transfer admission requirements.
3. The applicant who is not eligible for regular admission to TSU will also be denied admission to this category for the same period of time.

Special Student (Audit)

Any person who is over 18 years of age and who wishes to take a course but receive no credit (audit) may do so by applying at the Admissions Office. Please note: Regular registration fees will be charged for auditing courses.

60-Year/Disabled (Audit) Student

Applicants 60 years old or older or permanently and totally disabled (T.C.A., Section 49-3251) and domiciled in Tennessee are required to pay the $5.00 application fee but are not required to pay registration fees if they audit courses. Proof of age or disability is required (proof of disability is required annually). Registration is on a space-available basis. Regular registration fees will be charged for credit courses.

64-Year/Disabled Credit Student

Persons 65 years of age or older or permanently and totally disabled persons (T.C.A., Section 49-3251) who are domiciled in Tennessee may register for classes on a space available basis for credit, paying a minimum registration fee. The cost is one-half the semester hour rate up to a maximum of $75.00. An application and automobile registration fee of $5.00 each are also required. The applicant must be a high school graduate or the equivalent, and the applicant must submit proof of age or disability (proof of disability is required annually).

International Students

International students with superior scholastic records are considered for admission as freshmen and as transfer students. An applicant whose native language is not English is required to submit a test score of 500, as the minimum acceptance level of performance on the Test of English as a Foreign Language, (TOEFL).

Students who wish to take the test should write directly to TOEFL, Educational Testing Service, Princeton, New Jersey 08540. The application, complete official scholastic records, and TOEFL score must be in the Office of Admission at least 60 days before the beginning of the semester in which admission is desired. If complete documents are not on file by this deadline, the application will be considered for the next scheduled registration period. The application must be accompanied by a nonrefundable fee of $5.00.

International applicants must indicate the availability of sufficient funds to meet all costs while studying at the University. For more information contact: International Student advisor, Tennessee State University, Nashville, TN 37203.

Cross-Town Enrollment in the Air Force Reserve Officers Training Corps

Educational Institutions within Nashville and the surrounding area having a Cross-town Agreement with Tennessee State University may allow their students to enroll in the university's AFROTC Program. These students are eligible to receive all benefits, privileges, and scholarships as fully enrolled TSU students. At present, Vanderbilt University, Middle Tennessee State University, Fisk University, David Lipscomb College, Western Kentucky, Trevecca Nazarene College, and Aquinas Junior College have such agreements with the University.

RESIDENCY CLASSIFICATION FOR FEE-PAYING AND ADMISSION PURPOSES

The Admissions Office is charged with the determination of a student's residency for fee-paying purposes and as the basis for some University admission requirements. Classification is determined by information submitted on the admission application and/or application for re-classification. Notification in writing is made soon after the student applies for re-classification. All decisions are based on regulations established by the Tennessee State Board of Regents, with the intent that all Tennessee public institutions of higher education apply uniform classification rules. Should a student be denied in-state classification, the student has the right of appeal. The appeal steps are:

1. Appeals Committee
2. Vice President for Academic Affairs
3. President of the University
4. Tennessee State Board of Regents

ADVANCED STANDING

Students may earn college credit for acceptable scores on the College Level Examination Program (CLEP), the Foreign Language Tests and the Advanced Placement Examinations (AP) of the College Entrance Examination Board, and the American College Testing Program (ACT). Students eligible to take such examinations at TSU must be accepted for admission, currently enrolled, or former students. Examinations

are administered by the Testing Center in the Learning Resource Center or at the Downtown Campus. Additional information can be obtained by calling (615) 320-3420.

All credit-by-examination scores are submitted to the office of the dean, Admissions and Records. The test results are evaluated and recorded on a student's transcript if credit is earned. Semester hours of credit toward graduation are earned on the basis of these tests, but no grades or quality points are given. These credits will not affect a student's academic average. A student may receive no more than 33 semester hours credit by means of special examinations, correspondence, and experiences in the Armed Services. The applicant must not have received credit in the TSU course for which credit is recommended.

College Level Examination Program (CLEP)
Students may earn college credit for scores equal to or greater than the 50th percentile for the following examinations administered by the College Level Examination Program:

Academic credit attained through CLEP Subject Area Examinations will be given to TSU students provided:

1. Scores are attained as shown in the following table.
2. CLEP credit does not duplicate any college credit counted for admission.

Credit earned through CLEP will be entered on the student's permanent record but will not be computed in the grade point average. A maximum of 44 semester hours may be gained through a combination of College Level Examinations and examinations for credit. These examinations may not be taken to repeat course work or to remove a grade of "F" or "I".

For specific information regarding Fees, Examination Titles, Required Scores, Credit Course(s) and Semester Hours, please contact the School of Continuing Education, Extension and Public Service at (615) 251-1354.

University Course Title and Number	University Policy	CLEP Subject Exam Title	Required Minimum Score
Accounting 211, 212	6 hours credit	Introductory Accounting	53
Business Administration 101	3 hours credit	Introduction to Business Administration	50
Chemistry 131, 132, and labs	8 hours credit	General Chemistry	50
Economics 211U	3 hours credit	Macroeconomics	51
Economics 212U	3 hours credit	Microeconomics	51
English 211D, 212D	6 hours credit	English Literature	48
Marketing 326	3 hours credit	Introductory Marketing	50
Math 111U	3 hours credit	College Algebra	55
Math 261, 262	8 hours credit	Calculus with Elementary Functions	51
Microbiology 240	2 hours credit	Microbiology	53
Psychology 201, 202	6 hours credit	General Psychology	55
Psychology 312	3 hours credit	Tests and Measurements	50
Psychology 373	3 hours credit	Educational Psychology	50
Sociology 211U	3 hours credit	Introductory Sociology	46

Credit by Special Examination (Undergraduate)
Any student admitted to the University who receives departmental approval is eligible to receive credit by special examination for certain TSU courses. Competence gained through study and/or experience may provide background for students who wish to challenge such examinations. Credit by special examination may be given for undergraduate courses listed in the catalog with the exception of

1. courses described as directed research or directed independent study;
2. any courses from which student has been exempted by placement examination;
3. courses not approved by the department.

A fee of $10.00 will be charged for each semester hour of credit.

Students seeking credit by special examination should, on forms provided by the Office of Admissions and Records, request approval from the chairman of the department in which the course is offered.

The method for designing, administering, and evaluating the special examination will be determined by the department. The examination shall be comparable in scope and difficulty to a comprehensive final examination in that course. No student will be allowed to repeat a special examination in a given course within one year.

The student will receive credit, to be recorded as P (Pass) on the student's transcript upon passing the examination with a minimum equivalent grade of C.

REGISTRATION PROCEDURES

Registration

Any person who anticipates registering as a Tennessee State University student should be sure that the University requirements for admission have been met. Official enrollment is achieved by properly registering in each course, having a photograph made for identification card, and paying of all fees.

Normally, all students register for courses during the days on which registration is scheduled. Detailed instructions are made available by the Dean of Admissions and Records as to time, places, and procedure for registration.

A late registration period is provided for those who are unable to register during the regular registration days. However, students who register late are required to pay a late registration fee and often find it difficult to secure a satisfactory schedule of classes. The late registration fee is $10. No student may register late for (or add) a course which has met for the equivalent of 150 minutes. If a student does register late for (or add) a course, he will be responsible for all material covered from the first class meeting and must at the discretion of the instructor, be responsible for any make-up work or tests.

Registration Procedures

Detailed procedures for registration are given each semester as a part of the schedule of classes.

The following must be observed prior to registration to avoid delay:

1. Freshmen and transfers must be accepted for admission prior to registration.
2. All students are expected to register at their scheduled time for registration. No one will be allowed to register earlier than the scheduled time.

Each student must observe registration procedures as specified at that time. A student is not officially enrolled until he has completed all of the requirements of registration including the payment of fees. Registration after the regular registration dates may be completed by presenting an acceptable reason for the delay and by paying of a late registration fee.

3. Former students must settle all prior accounts in the Business Office before re-enrolling.

The following must be observed during the registration period:

1. All freshmen must complete the testing program.
2. All students must have a conference with a faculty advisor to arrange an approved schedule of classes.
3. All students must pay fees in full on the day they register. Students who do not pay will be purged.
4. Upon completion of payrnent of all fees, freshmen and transfer students must have I.D. picture made and register automobiles. All others must have their I.D. validated and register automobiles.

ACADEMIC INFORMATION

ACADEMIC STANDARDS

Retention Standards and Academic Probation

The minimum grade point average required by the University for awarding the baccalaureate or associate degree is 2.00 for all credit work taken by the student as part of an approved program of study. The GPA is computed by dividing the total number of hours attempted into the total number of quality points earned (see Grading System) except for credit hours in courses for which the student received a "W" (see Adjusting Class Loads). Also, a repeated course is counted as attempted one time only (the last grade earned will be used to calculate the GPA). Any enrolled student who meets the minimum academic requirements is in good academic standing at the University.

Probationary status will be incurred by the student who in any term fails to meet the standards listed below:

0-14 hours attempted—No minimum GPA
15-29 hours attempted—Not less than a 1.4 cumulative average
30-50 hours attempted—Not less than a 1.7 cumulative average
51-67 hours attempted—Not less than a 1.9 cumulative average
above 67 hours attempted—Not less than a 2.0 cumulative average

ACADEMIC INFORMATION

At the end of the next term of enrollment, a student on academic probation who has failed to attain either the above cumulative standard or a 2.0 GPA for that term will be suspended. When readmitted, the student enters the University with probationary status. Another suspension at the end of the term of readmission may be avoided by achieving the minimum cumulative average according to the above standards. Moreover, a student on academic probation will not be suspended at the end of any term during which a term average of 2.00 has been earned.

A student who believes that extenuating circumstances contributed to his/her suspension may appeal the case to the University's Review Committee on Suspension and Readmission. To appeal, the student must explain those circumstances in a letter submitted to the Office of Admissions and Records immediately after receiving notification of suspension.

Class Attendance

Students are expected to attend regularly all courses in which they are enrolled for credit and to complete all required work in such courses. Irregular attendance or any substantial number of unexcused absences may weigh adversely in the consideration of grades or any petition for a special academic privilege such as make-up examination.

All excuses for absences must be secured through the Office of the Vice President for Student Affairs. In addition, the student should inform each teacher as to the cause of his absence.

Regular Monday, Wednesday, and Friday classes during the academic year begin on the hour and end 10 minutes prior to the hour. Regular Tuesday and Thursday classes are scheduled for 75 minute periods and are separated by 10 minute intervals. Some classes meet for periods of time that vary from these patterns. These are designated in the published semester schedules. Punctuality in attending classes is expected of all students. Official registration is required before classes are attended.

CLASS AUDITORS

Regularly enrolled students may enter classes as auditors with the approval of the major adviser and the teacher of the course. The regular registration procedure is followed in registering for a class to be audited.

Persons other than regularly enrolled students may be permitted to audit class only with the approval of the teacher of the course. Such persons shall follow the regular registration procedure.

Auditors are not under obligation of regular attendance, class preparation, recitation, or examination; nor do they receive credit. The student should notify the computer terminal operator at the course entry station of any intention to audit a course or courses.

Class Loads

Normal and Minimum Class Loads

The normal class load for a full-time undergraduate student is 15 to 18 credit hours per semester, and the minimum class load is 12.0 credit hours per semester. One semester hour credit of required physical education (P.E. 11-94 series or one semester hour credit of aerospace studies at the 100 or 200 level) may be added to the normal load.

A regular student is expected to carry the full curricular load officially designated for the given semester of his classification. However, the class load may be reduced because of poor scholarship, because the student must work or upon the advice of the Dean of the School in which the student is registered.

Freshmen who score less than 15 on the ACT and have a high school GPA of less than 2.00 are encouraged to enroll in no more than 15 credit hours for the first semester of enrollment.

Probationary Student Class Loads

A student who incurs scholastic probation in any semester (see scholarship standards) will be allowed to carry a maximum of 15 semester hours.

MAXIMUM CLASS LOADS

Freshman may not elect hours in excess of their full curricular load. Sophomores, juniors, and seniors whose cumulative grade-point averages are 3.00 or above may register for as many as three credit hours in excess of the normal curricular load—up to a total of 21 credit hours.

Seniors whose grade-point averages are 2.00 or above may register for as many as three credit hours in excess of their full curricular load up to a total of 21 credit hours.

In all cases, the student may apply to his School Dean who may approve request for such increases in class loads. The School Dean must notify the Admissions Office in writing of each case approved.

CLASSIFICATION OF STUDENTS

All students of the University must be classified in one of the following categories:

Freshmen: Those who have completed less than 30 semester hours.
Sophomores: Those who have completed 30 or more semester hours but less than 60 semester hours.
Juniors: Those who have completed 60 or more semester hours but less than 90 semester hours.
Seniors: Those who have completed 90 semester hours or more.
Specials: (a) Those who meet entrance requirements and who wish to pursue particular studies but not to qualify for a bachelor's degree. Such students may be admitted with the permission of the Dean of Admissions and Records. (b) Those who are twenty-one years of age and who have not completed four years of high school work may enroll in such courses as they are prepared to take up to a maximum of 36 semester hours.

English Proficiency Examination:

During the second semester of the freshmen year, all students must take an examination to determine their proficiency in English.

Those students who do not demonstrate satisfactory performance on the test will be required to enroll in English 201U, Advanced Composition, and to earn a minimum grade of "C" in this course. Former UTN students who had reached junior/senior standing by the time of merger (July 1, 1979) are exempted from this requirement.

Examinations

Late Final Examinations: Students are expected to take all examinations according to the schedule except in very unusual circumstances, such as incapacitating ill health. If a student does absent himself from final examination without having first secured the written permission of his school dean, he must confer as soon thereafter as possible with his school dean concerning the reasons for having missed the examination(s). If after conferring with the teacher of the course, the Dean is satisfied that unusual, justifying circumstances prevailed, the student is given permission to take a late examination.

EXAMINATION FOR CREDIT

Ordinarily, credit may not be obtained except by pursuing a course in the regular manner. Examinations for course credit are permitted only in cases when there is substantial evidence that the student has already covered the content of the course. The competencies, skills and/or information may have been acquired, for example, through a similar course taken at another school for which credit has not been accepted by Tennessee State University; through job experiences; or other activities. The examination shall be comparable in scope to the regular examination for the course. Such an examination can only be taken once for each course.

Examination for course credit may not be used for:
a. research or independent study courses.
b. any course work from which the student has been exempted by placement examination or which was accepted for admission purposes.
c. repeating of courses.
d. removal of deficiency grades.

A form with supporting evidence of competency or skill for each examination is presented by the student to the Department Head of the subject matter area. Special forms for such examinations may be secured from the Office of Admissions and Records. If the request is approved, the Department Head and School Dean sign the form which the student then presents to the Business Office with a payment of $15.00, the required fee for each such examination. The student submits the form and receipt to the teacher designated to administer the examination. If the request is denied by the Department Head and/or the Dean of the School in whose area the course is offered, the Department Head retains the form and forwards copies to the student's major advisor, Department Head and School Dean.

The teacher who administers the examination submits a copy of the examination and the form with the results recorded on it to the Department Head. The remaining copies of the form are distributed by the teacher as follows: one to the Office of Admissions and Records; one to the student's Department Head; and one to the Student's school dean.

Upon successfully completing the examination with an equivalent grade of "C" or better, "EP" will be recorded on the student's transcript. Otherwise "EF" will be reported and recorded. Neither "EP" nor "EF" will be used in computing the grade point average.

A maximum of thirty-three (33) or one-fourth of the total number of hours in a program may be earned through credit by examination. It is recommended that a student attempt no more than two examinations during a regular semester and one during a summer term. The examination must be completed and the recorded results must be received by the Office of Admissions and Records according to the following schedule:

Regular Semester—prior to the end of the 9th week of classes.
Summer Sessions I & II—Prior to the end of the 3rd week of classes.

Credit by examination: A student may earn semester hours of credit in certain introductory departmental courses, through tests offered in the College-Level Examination Program (CLEP). Information about the tests and permission to take them can be obtained from the University Testing Center.

POLICY ON EXCESSIVE ABSENCES

Students are expected to attend classes regularly. Instructors will keep an accurate record of class attendance and be able to report, on official request, the number of absences of any student in class. At any time from the beginning of classes (2nd week for Summer I and II) an instructor may report a student for unsatisfactory attendance. Reporting a student is at the discretion of the individual instructor with the understanding that the "excessive" absences is defined as no less than one more than the number of times a class meets per week. Any student reported for excessive absence from class will be barred from further attendance in that class until he is formally readmitted by the instructor.

Instructors will report promptly any excessive absences to the Registrar using the form provided by the Office of Admissions and Records. Any such reports must arrive in the office of Admissions and Records no later than 5:00 p.m. on the last day of the 7th week of classes for regular semesters (2nd week of classes for Summer I and II). (Excessive absences after the 7th week should also be reported promptly.) Admissions and Records will notify the student by mail of the fact that he has been reported for excessive absence and the student may withdraw from the course officially or formally apply to the instructor for readmission to the class, or accept a mandatory grade of "F" for the course.

Regulations regarding grades of "I", "D", and "F"

Removal of "I" grades: "Incomplete" is a temporary grade which must be removed from the undergraduate student's permanent record within one calendar year from the end of the term in which the "I" grade was awarded. If all requirements of a course in which the "I" was awarded are not met within two consecutive terms, the grade of "I" will be changed to "NC" (no credit) by the Office of Admissions and Records.

Grading System

Grades	Quality Points Per Semester Hour	Description
"A" or "H"	4.0	Excellent, work of exceptional quality which indicates the highest level of attainment in a course.
"B" or "P"	3.0	Good, work above average which indicates a high level of achievement.
"C"	2.0	Work of average quality representing substantial fulfillment of the minimum essentials of a course.
"D"	1.0	Poor, representing passing work but below the standards of graduation quality.
"EP"	0.0	Represents the successful completion of examination for credit with an equivalent grade of "C" or better.
"F"	0.0	Failure, representing unacceptable performance in credit course.
"I"	0.0	Represents incomplete work of passing quality and is given when the student has missed an examination or some small part of the required course work.
"NC"	0.0	Recorded by the Office of Admissions and Records when the "I" grade is not removed within one (1) calendar year.
*"H" and P		Used only in Colloquial courses in the Honor's Program
"NG"	0.0	Given only to Special Services students for unsatisfactory performance in a credit level course.
"S"	0.0	Represents satisfactory performance in a non-credit course.
"U"	0.0	Given for unsatisfactory performance in a non-credit course.
"W"	0.0	Represents official withdrawal from a course or the University.
"X" (Audit)	0.0	Given by a faculty member only in instances when the student has registered and attended a course for audit rather than for credit.

The student is responsible for initiating the necessary steps to remove the deficiency grade:

1. Inquire in the Office of Admissions and Records regarding the course in which the grade of "I" has been awarded.
2. Pay to the Bursar's Office the fee of $5.00 (applicable only to undergraduate courses).
3. Secure from the Office of Admissions and Records the replacement grade card.
4. Take the replacement grade card to the teacher of the course in which the "I" was earned.
5. The replacement grade must be filed in the Office of Admissions and Records in person by the teacher of the course after it has been properly completed (name of student, grade awarded, credit hours which the course carries, title of the course, department head's signature, and the instructor's signature).

WITHDRAWING FROM A COURSE

The proper forms for withdrawing from a class will be provided by the Office of Admissions and Records. Withdrawal is official only after the form has been completed, and submitted to the Office of Admissions and Records. A student may receive a grade of "W" if he withdraws according to the following schedule:

Regular Semester—prior to the end of the 9th week of classes.
Summer Sessions I & II— prior to the end of the 3rd week of classes.

After the above deadlines, the student must be assigned a grade of "F". Withdrawal from the University must be documented by the student and approved by the Vice President for Student Affairs, e.g., health problems, or other circumstances beyond the student's control.

REPEATING OF COURSES

Students may repeat courses in which their final grades are C or lower subject to the following:

1. For the purpose of increasing mastery in a course where such is necessary for successful performance in a subsequent course, or
2. For the purpose of increasing the quality point average,
3. No course may be repeated more than twice except upon the advice of the major advisor and with approval of the dean of the school in which the student is pursuing a major. If permission to repeat a course more than twice is granted, the grade in the third and subsequent attempts is used in calculating the quality point average.
4. Students may be permitted to repeat a course in which a grade of B or higher was earned only with the approval of the chief academic officer.
5. Veterans receiving educational assistance benefits may not repeat courses previously passed and receive financial assistance for such.

SUBSTITUTION OF COURSES

Requests to substitute courses required in the curriculum are presented to the student's advisor. The request must meet the following conditions:

Conditions for Course Substitution:

1. All courses being considered for substitution must meet the university's requirements for transfer credit.
2. The student must have a minimum of *C* in the course to be used for substitution.
3. The following credit may *not* be used for course substitution:
   CLEP
   Proficiency
   Correspondence Course
   Developmental Course
4. Student may not seek substitution for a course he/she has failed.
5. The faculty advisor, department head of the discipline for the substitution course, and the dean of the school in which the student is enrolled, must approve the request. In cases of university requirements, the Registrar has final approval. In cases of program requirement only, the academic dean has final approval.
6. Student has taken an equivalent course at TSU or another recognized institution but this course has been equated on the TSU transfer evaluation.
7. Student has transferred in credit by TSU procedures, and has met the course content requirement, but has a credit deficiency.
8. Since some university degree requirements may be the same as some specialized program requirements, the policies and procedures recommended would apply to both situations.
9. Substitution is *not* to be confused with *waiver*. Substitution is an option to meeting program requirements, while waiver implies exemption.

Satisfactory Progress Requirements

The University's position with respect to satisfactory progress and the so called "perpetual student" is as follows. The "perpetual student" is herein defined as one who has been dropped from the University for academic reasons, who remains out of school for the suspended period, and who re-enrolls at the University after the suspension period on a repeated basis, while at the same time not making significant progress toward the completion of a degree or certificate requirement during the periods of enrollment.

For the baccalaureate degree the University's definition of satisfactory progress provides for special consideration for what are felt to be "marginal" students or slow starters. The institution deems such students to be making "satisfactory progress" if they complete a normal four year undergraduate course of study (without changing programs) in five academic years. Students seeking the associate degree will be considered to be making satisfactory progress if they complete a normal two year course of study (without changing programs) in three years.

Probationary status will be incurred by the associate degree student who in any term fails to meet the standards listed below:

0-14 hours attempted—No minimum GPA
15-29 hours attempted—Not less than a 1.4 cumulative average
30-40 hours attempted—Not less than a 1.7 cumulative average
40-50 hours attempted—Not less than a 1.9 cumulative average
above 50 hours attempted—Not less than a 2.0 cumulative average

The University, however, remains committed to its role of academic excellence, of recruiting and teaching academically superior students, while at the same time developing educational programs, techniques, devices, and expertise to train and educate the "marginal" student or slow starter.

To be in compliance with the satisfactory progress requirements of the Higher Education Amendments of 1976, and thereby establish or maintain eligibility to receive Title IV funds (BEOG, SEOG, NDSL, CWS, GSL, SSIG) at Tennessee State University, a student:

- —must meet the minimum academic standards set by the University with respect to good standing. (See catalog)
- —must be proceeding toward fulfilling the degree or certificate requirements.
- —must not have been dropped from University for academic reasons for more than two times. A student who has been dropped from the University for a third time, for academic reasons will not be eligible to receive Title IV funds until he or she achieves a cumulative point average or semester grade point average of 2.0 on a four point scale.
- —if on probation for academic reasons, and allowed to enroll in the University for a succeeding semester, must during that semester raise his/her cumulative average above probation status as defined in this catalog, or make at least a 2.0 average on a four point scale.

POLICY CONCERNING STUDENT ACCESS TO EDUCATION RECORDS

Definitions

Education Records. Education Records are defined as those records, files, documents, and other materials which (1) contain information directly related to a student; and (2) are maintained by Tennessee State University or by a person acting for the University. "Records" means information recorded in any medium, including, but not limited to the following: handwriting, print, tapes, film, microfilm, and microfiche. Education records do not include (1) personal notes, (2) records available only to law enforcement personnel, (3) employment records, (4) medical and psychiatric records (these are accessible by the student's physician).

Student. A student is any person who is or has been enrolled at Tennessee State University. An applicant who does not enroll or who is declared ineligible has no inherent right to inspect his file. Wherever "student" is used in reference to personal rights, an eligible parent of a dependent student has similar rights.

This "eligible" parent is one who has satisfied Section 52 of the Internal Revenue Code of 1954 and who presents such proof to the custodian of the Education Records. Normally this proof will be written affirmation by the student and the parent declaring that the student is a dependent for Federal Income Tax purposes.

Directory Information. Directory information is defined as: "the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous education agency or institution attended by the student." At the time a student registers for courses, the student may notify the Office of Admissions and Records (this must be done in writing) that directory information for that student should not be released. This notification is effective only for the one semester for which the student is then registering.

Access. To have access to an Education Record is to be allowed to see the original record. This implies the right to obtain copies of that record.

Release of Personally Identifiable Student Education Records. Tennessee State University shall not permit access to, or the release of, any information in the education records of any student that is personally identifiable, other than Directory Information, without the written consent of the student, to any other than the following:

1. TSU officials and staff who have legitimate educational interest;
2. Officials of other schools in which the student seeks admission;
3. Appropriate persons in connection with a student's application for, or receipt of, financial aid;
4. Federal or State officials as defined in paragraph 99.37 of the regulations concerning this law;
5. State and local officials authorized by State statute;
6. Organizations conducting studies for, or on the behalf of TSU for the purpose assisting in accomplishing the University's stated goals, when such information will be used only by such organizations and subsequently destroyed when no longer needed for the intended purpose;
7. Accrediting organizations to carry out their functions;
8. Parents of a dependent student as defined in section 152 of the Internal Revenue Code of 1954 (Written consent may be allowed from either of these Revenue Code of 1954 (Written consent may be allowed from either of these separated or divorced parents subject to any agreement between the parents or court order. In the case of a student whose legal guardian is an institution, a party independent of the institution, appointed under State and local law to give parental consent, may be allowed to do so.);
9. In compliance with judicial order or subpoena, provided that the student is notified in advance of the compliance; or
10. Appropriate persons in connection with an emergency if such knowledge is necessary to protect the health or safety of a student or other persons.

NOTE: With the exception of TSU officials and staff, who have been determined by the University to have legitimate educational interest, all individuals and agencies who have requested or obtained access to a student's record will be noted in a record which is kept with each student's Education Record. A request must be in writing stating the purpose of the request. This record will also indicate specifically the legitimate interest that the persons or agency had in obtaining the information.

PROCEDURES FOR ACCESSING EDUCATION RECORDS

The student requests the custodian to allow him to inspect the Education Record. The student may ask for an explanation and/or a copy of the Education Record. (The price of copies shall not exceed the cost of duplicating the record). After consultation with the custodian, errors may be corrected at that time by the custodian. If there is a disagreement between the student and the custodian after exhausting reasonable means of reconciliation with the custodian, may submit a request for a formal hearing. The request, and the formal challenge to the content of the records, must be presented in writing to the chairman of the University Appeals Committee. The chairman shall call a meeting of the committee or place this meeting no later than forty-five days after receipt of the written appeal and challenge. The committee will allow the student to present evidence to substantiate his appeal and shall render a written decision to the student within forty-five days after the meeting. NOTE: This procedure does not provide for a hearing to contest an academic grade.

RIGHTS OF ACCESS DOES NOT INCLUDE

1. Financial records of parents or any information therein;
2. Confidential letters and statements of recommendation which were placed in the education records of a student prior to January 1, 1975;
3. Records to which access has been waived by a student. (This applies only if a student, upon request, is notified of the names of all persons making confidential recommendations and if such recommendations are used solely for the purpose they were intended.)

DESTRUCTION OF EDUCATION RECORDS

Education records may be destroyed except that a student shall be granted access prior to the destruction if such is requested.

INFORMING STUDENTS

TSU shall inform its students of its policy governing "Privacy Rights of Students Education Records" by publishing the policy in the University Bulletins.

HONORS

Dean's List

To be eligible for the Dean's List a student must have (1) a minimum cumulative grade point average of 2.00 (C); (2) must have achieved a grade point average of not less than 3.00 (B) for a given semester; and (3) must have carried not less than 12 semester hours of work during the semester.

The Dean's List will be published following the close of the semester.

DEGREES WITH HONORS

The Degree of Bachelor of Science or Bachelor of Arts with honors is awarded with distinction, with high distinction or highest distinction and University Scholar. To be graduated with distinction, the student must earn an average of at least 3.25. To be graduated with high distinction, the student's average must be not less than 3.50. To be graduated with highest distinction and University Scholar, the student's average must be not less than 3.75.

Students who have participated in the Honors Program will, upon achieveing an average of at least 3.25 and meeting other requirements of the Program, be graduated with UNIVERSITY HONORS.

To be eligible for honors, a student must have been in residence for not less than three semesters, and must qualify as a suitable representative of Tennessee State University.

Candidates for honors must qualify one semester prior to graduation.

UNIVERSITY REQUIREMENTS FOR A BACHELOR'S DEGREE

A bachelor's degree is conferred on a student who satisfactorily completes a curriculum in one of the departments. The candidates for a bachelor's degree must satisfactorily complete each of the general requirements of the University as listed below.

1. The minimum University requirement for a bachelor's degree is 132 semester hours with a minimum cumulative average of "C" (2.00).
2. A minimum of 60 semester hours must be completed at the 300 and 400 level of courses.
3. A minimum of 24 semester hours must be offered for a major with a minimum of 10 hours on the 300 and 400 level.
4. A minimum of 18 semester hours is required for a minor. (See minor curriculum for required courses.)
5. Four semesters of required activity courses in Physical Education (P.E. 11-50, or P.E. 91-94, or AFROTC 100-200 level) or marching band.*
6. A transfer student must spend at least one academic year in residence at the University and earn while in residence not less than 30 semester hours of credit with a minimum average of "C" (2.00).
7. Twelve semester hours in English (must include Eng. 101-102).
8. Four semester hours in Mathematics.
9. Nine semester hours of social science, including six semester hours of American History. Students who do not present a year of American History on their high school transcripts are required by Tennessee Law to meet this requirement during the freshman year. (One semester of Tennessee History, 341 or 342 may be substituted for this requirement.)
10. Four semester hours in humanities (Art, Foreign Language, Drama, Speech, Music, Philosophy) courses from two fields.
11. Six semester hours in natural science (biological sciences or physical sciences).
12. English Proficiency demonstrated by test score or performance in English 201U (Problems in Composition). The English Proficiency Examination is administered to all Freshmen at the end of the second semester. The proficiency requirement should be met by the end of the sophomore year. Juniors *and seniors (except* transfer students) who have not met the requirements must do so by enrolling in and successfully passing English 201U. Transfer students who have not met a comparable proficiency requirement elsewhere must take the proficiency test during the first semester of residence at this institution.
13. A Senior Project.
14. Candidates for the bachelor's degree must earn in residence a minimum of 24 of the last 30 semester hours offered for the degree.

*These courses must be completed satisfactorily during freshman and sophomore years. For students below age 25 at the time of *initial enrollment*, completion of four credits in health related areas may be established as an alternate means of fulfilling the TSU requirements of four credits in physical education. Approval of alternate courses should be obtained in writing from HPER Department. For students age 25 or older at the time of initial enrollment, the four credits in physical education will be removed from the list of degree requirements. Thus, the minimum credits required for a baccalaureate degree for this latter group of students are 128 semester hours. contact HPER Department for specifics.

Veterans may elect to obtain credit for the physical education activity courses on the basis of their military training. Two semester hours may be credited as "individually Adapted Physical Education" for each of the first two years of military service. To obtain this credit the veteran must apply in the Office of Admissions and Records.

GENERAL EDUCATION CORE FOR THE BACHELOR OF ARTS DEGREE

English 101U, 102U	6 semester hours
Literature (Any Eng 211 and 212)	6 semester hours
Foreign language (1-6 semesters)	6-12 semester hours
Social Science (must include 6 sem. hrs. of American History)	9 semester hours
Natural Science	6 semester hours
Mathematics	3 semester hours
Philosophy, Music, Art, Drama or Speech (combination of any two fields)	4 semester hours
Physical Education Activity courses*	4 semester hours

*For students below age 25 at the time of initial enrollment, completion of four credits in health or related areas may be established as an alternate means of fulfilling the TSU requirement of four credits in physical education. For students age 25 or older at the time of initial enrollment, the four credits in physical education should be removed from the list of degree requirements. Thus, the minimum credits required for a baccalaureate degree for this latter group of students would be 128 semester hours.

MODERN FOREIGN LANGUAGE REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE

The foreign language (French, German, or Spanish) requirement may be satisfied as follows:

a. Students who present no (0) units of a foreign language in high school when they enter the University are to take four (4) semesters of work in one foreign language, beginning with the freshman course in that language.
b. Students who present two (2) units of a foreign language in high school and who desire to continue to work in the same language may satisfy the language requirement pursuing two (2) semesters in that language, beginning with the sophomore course of that language.

PROFICIENCY TEST IN FRENCH, GERMAN, SPANISH

Students who enter the University for the first time and who present two or

more high school units in a foreign language may take a proficiency test in that language. A student's proficiency in a given language may alter the number of semester hours required to satisfy the language requirements.

GENERAL EDUCATION CORE FOR THE BACHELOR OF SCIENCE DEGREE

English 101U, 102U	6 semester hours
Literature (any Eng 211 and 212)	6 semester hours
Social Sciences (must include 6 sem. hrs. of American Hist)	9 semester hours
Natural Sciences	8 semester hours
Mathematics	3 semester hours
Philosophy, Music, Art, Drama or Speech (combination of any two fields).	4 semester hours
Physical Education Activity courses*	4 semester hours

*Subject to approved exceptions and exemptions.

GENERAL INFORMATION ON THE TEACHER EDUCATION PROGRAM

An organizational unit with the title, Council on Teacher Education, is the coordinating body for the teacher education program. Its principal objectives are:

1. To help provide and perpetuate an instructional climate favorable to healthy growth of a teacher education program.
2. To develop and administer teacher education policies which will offer reasonable assurance that only persons of professional promise are prepared and recommended for entry into the teaching profession.

The Council develops policies and ways for implementing them relating to admission, retention, counseling, records, curricula, and standards for completion of a program in teacher education, and recommends the policies and ways for implementing them to the Vice President for Academic Affairs and the President of the University.

The Council is composed of the following members:

1. Dean of the School of Education, Chairperson
2. Dean of the Graduate School (Ex-officio)
3. One member elected by the School of Agriculture and Home Economics (two years; may be re-elected)
4. One member elected by the School of Engineering and Technology (two years; may be re-elected)
5. Three members elected by the School of Arts and Sciences (two years; may be re-elected)
6. Three members elected by the School of Education (two years; may be re-elected; two undergraduate faculty members, one graduate faculty member)
7. One member elected by the School of Business (two years; may be re-elected)
8. Director of Pre-Service Field Experience (Ex-officio)
9. Two practitioners (principal and teacher, two years)
10. Two students (one each graduate and undergraduate, one year).

The office of the Director of Teacher Education approves all students who apply for candidacy to the teacher education program and secures a record of each applicant showing that the applicant has met standards for candidacy to teacher education as required by the policies of the Council. The Director informs the departmental representative for each teacher education curriculum concerning the students approved for the teacher education program.

The departmental teacher education representatives inform the Director of Teacher Education through their respective Deans of any students in their departments who are maintaining the teacher education program's retention standards. He will notify the students who are not meeting the retention requirments that they have one semester in which to remove the deficiencies. Students who do not remove their deficiencies and meet the retention standards during the semester of probation are subject to be dropped from the teacher program.

TEACHER EDUCATION ADMISSION AND RETENTION REQUIREMENTS

ADMISSION

1. Each student who desires to be a candidate for admission to the Teacher Education Program will make application to the Director of Teacher Education in the second semester of the sophomore year.
2. Each student will submit documentation that she/he has:
   a. completed *at least 50 semester hours* of course work, including: 1) ENG 101, 102, 2) PSY 242, 3) EDCI 201 and 4) an appropriate sequence of freshman mathematics and freshman science;
   b. earned *a grade of "C" or better in each* of the following courses: ENG 101, 102, PSY 242, EDCI 201;
   c. maintained *a "C" average* in all freshman level mathematics and science courses;
   d. earned *a 2.50 GPA* on a 4 point scale over all previous college work.
3. Each student will provide official records that indicate she/he has:
   a. made an acceptable score on the University's English Proficiency test;
   b. performed satisfactorily on the speech screening test;
   c. earned acceptable scores on the Pre-Professional Skills Test (P-PST);
   d. received three positive recommendations on the Character and Personality Rating Scale from University professors;
   e. received a positive recommendation from her/his interviewing committee.

Students who have not been admitted to the Teacher Education Program and students who do not have a permanent or provisional certificate will not be permitted to enroll in the following courses without special permission from the Director of Teacher Education: EDCI 301, 387, EDRD 491, PSY 312 and all method courses.

RETENTION

To remain in the Teacher Education program the student must:

1. Maintain a cumulative grade point average of no less than 2.50.
2. Apply for student teaching through the teacher education curricular heads to the Director of Teacher Education in the first semester of the senior year (minimum of 90 semester hours). The application should include documentation that the student has:
   (a) met Teacher Education requirements to date.
   (b) completed the prescribed prerequisite professional education courses and ¾ of the prescribed courses in his/her major area of specialization with a grade of "C" or better in all method courses.
   (c) passed a physical examination showing that he/she is free of communicable diseases.
3. Exhibit personal, social and emotional characteristics essential to becoming an effective teacher.
4. All students are required to carry a minimum of 16 semester hours, seven (7) in method courses, and nine (9) in student teaching during the semester in which they do student teaching.

NOTE: Students who are awarded a grade C or D in student teaching may graduate from the University, but will not be recommended for certification.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN TEACHER EDUCATION PROGRAM

Minimum Semester Hours

General Education Core
At least ⅓ of the curriculum must consist of general liberal studies.
Communication 6
English 101-102

Humanities 10
Literature (6 sem. hrs.)
Art, Music, Drama, Speech, Philosophy (4 sem. hrs.)

Social Studies 9
History 201-202 (6 sem. hrs.)
Geography, Economics, Sociology, Political Science or Anthropology (3 sem. hrs.)

Natural Sciences and Mathematics.....10
Biological Science, Physical Science, or a combination of these, (6 sem. hrs.)
Mathematics (4 sem. hrs.)

Health, Physical Education, Personal 6-7
Education, and Home and Family Living
Physical Education activity courses (4 sem. hrs.)
Health, Personal Development or Home and Family Living (2-3 sem. hrs.)

PROFESSIONAL EDUCATION CORE

A. Elementary Majors

		Semester Hours
EDCI 201	History and Foundations of Education	3
EDCI 301	School Organization, Management and Community Relations	3
EDCI	Classroom Management	3
EDCI 321	Methods and Materials in Mathematics	3
EDCI 387	Curriculum Development	3
EDSE 465	Introduction to Special Education	3
PSY 242	Human Growth and Learning	3
PSY 312	Measurement, Evaluation and Guidance for Classroom Teachers	3

SEMESTER BLOCK

First Half

EDCI 322	Methods and Materials in Language Arts and Social Studies	3
EDRD 324	Teaching of Reading in the Elementary School	3
EDCI 472	Student Teaching Orientation	0

Second Half

Education 472	Directed Teaching	9
	TOTAL	39

B. Secondary Majors

Education

EDCI 201	History and Foundations of Education	3
EDCI 301	School Organization, Management and Community Relations	3
EDCI 387	Curriculum Development	3
EDSE 465	Introduction to Special Education	3

PSY 242	Human Growth and Learning	
PSY 312	Measurement, Evaluation and Guidance for Classroom Teachers	3

SEMESTER BLOCK

First Half

Education 371	Methods and Materials in Secondary Education	3
EDRD 491	Reading and Study in the Secondary School	3
EDCI 472	Student Teaching Orientation	0

Second Half

EDCI 472S	Directed Teaching	9
	TOTAL	30

SECOND BACHELOR'S DEGREE

A student who holds a bachelor's degree may receive a second bachelor's degree from the University satisfying the following requirements:

1. Meet all requirements for both degrees.
2. Complete at least thirty semester hours beyond the first bachelor's degree.
3. Attend the University for at least two semesters beyond the minimum time required for the first bachelor's degree.

GRADUATE CREDIT

Students who are classified as seniors and enrolled in the last semester of the senior year may be allowed to take a minimum of six graduate semester hours upon approval by the Dean of the Graduate School.

ARMY OR NAVAL ROTC SCHOLARSHIPS

These scholarships are available to Tennessee State University students in the respective ROTC Programs administered through Vanderbilt University. Information and applications for these scholarships can be obtained from the Tennessee State University Office of Veterans Affairs.

INFORMATION FOR VETERANS, DEPENDENT CHILDREN AND WAR ORPHANS

A veteran who has served continuously on active duty for a period of at least 181 days, any part of which was after January 31, 1955 and who was discharged or released under conditions other than dishonorable, is eligible for training under the Veterans Readjustment Act of 1966. The sons and daughters of deceased veterans and the sons and daughters of living veterans who have disabilities which are considered to be total and permanent in nature are eligible for training under the War Orphans Educational Act. Applications for benefits under these Acts may be secured from the Veterans Administration Office nearest the applicant. For further information, write to:

Office of Veterans Affairs
Tennessee State University
Nashville, Tennessee 37203

THE DIVISION OF STUDENT AFFAIRS

PURPOSE

The Division of Student Affairs at Tennessee State University has been established by the institution for the purpose of carrying out three principal objectives.

1. To provide programs and services in support of academics as the principal mission of the University.
2. To enhance the intellectual, cultural and social environment of the campus for the total development of students at the University.
3. The development and administration of various processes in the formulation of University policies to enhance the quality of student participation and student life at the University.

The University recognizes the diverse and varied educational objective of its students and the need to offer programs and services designed to assist students in their decision-making and formulation of academic and co-curricular objectives. Tennessee State University, through its division of Student Affairs, seeks to assist students in enhancing the effective use of the varied opportunities made available to them through the University experience.

ORGANIZATION

To carry out its major objectives the Division of Student Affairs at the University consists of the following major areas:

Vice President for Student Affairs
Associate Vice President and Dean of Student Services
Assistant Vice President and Dean of Students
Director of Residence Life and Associate Dean of Students
Director of Financial Aid
Director of Student Development Services

The Director of these units and programs constitute the Council on Student Affairs which is administratively responsible to the Office of the Vice President for Student Affairs. The Vice President for Student Affairs reports directly to the President of the University. In addition to these offices and programs, there are standing committees assisting the University in policy development and administration. These include the Student Faculty Advisory Committee, Committee on Scholarships and Awards, Financial Aid Committee and Faculty Advisory Committee on Sororities and Fraternities.

The University is committed to the concept of student involvement and input in the formulation and development of University policies, programs and activities. In addition to student participation in the committee at the University, there is an active Student Government Association at Tennessee State University. Organizations specially relating to this function include the Student Union Board of Governors, Student General Assembly, Student Publications Board, Pan-Hellenic Council and many diverse and varied academic and non-academic clubs and organizations.

LIVING ACCOMMODATIONS ON CAMPUS

The University provides six residence halls on campus, three for men and three for women. These residence halls are designed to provide personal, social and intellectual companionship for the student. Each resident is held responsible for knowing and abiding by the rules and regulations for residence hall living.

All the residence halls are staffed with a Residence Director and Student Resident Assistants. Some residence halls have an Assistant Residence Director. The staff is responsible for the operation of the hall under the supervision of the Director of Residence Life. Telephone service is available in each student room.

ROOM AND BOARD

Students who live in residence halls are expected to take their meals in the University Cafeteria. Charges for room and board are made on a semester basis and are payable at the beginning of each semester. A charge will be made for the replacement of a meal card in the event it is lost, misplaced or stolen during the semester.

HOUSING DEPOSIT

A $50.00 deposit is required of all students who apply for University housing. This deposit serves as a combination reservation/key/damage/room clearance deposit. This deposit reserves the room until the last day of regular registration. It also serves as a deposit to cover any room damages which may occur during the period of occupancy. In case such damage exceeds the deposit, the resident will be billed for the additional amount.

The $50.00 will be *forfeited* if the resident fails to cancel the contract in writing with the Housing Office fourteen (14) days *prior* to the first official day of registration. The deposit is also forfeited if the resident fails to fulfill the contract (i.e., does not register for classes, etc.).

FOOD SERVICE

The University provides food service for students. Three well-balanced meals are served each day, Monday through Friday, and two meals are served on Saturday and Sunday. The University Cafeteria is located in the Joseph A. Payne Student Union Center and seats 1000 students. There is a Coffee Shop on the ground floor of the Union.

RESIDENCE HALLS FOR MEN

Lena B. Watson residence Hall for freshmen men—a six-story, air conditioned structure containing 158 student rooms, an apartment for the Residence Director, a lounge, a recreation study area, laundry and trunk storage room.

Henry Allen Boyd Hall for sophomore and junior men—a seven story air conditioned structure containing 178 student rooms, an apartment for the Residence Director, a lounge, recreation-study area and trunk-storage room.

Merl R. Eppse Hall for upperclassmen and graduate students—a six-story, air conditioned structure containing 138 student rooms, an apartment for the Residence Director, a lounge, recreation-study area, laundry and trunk-storage room.

RESIDENCE HALLS FOR WOMEN

Harriett Hodgkins Hale Hall is the newest residence hall for women. It houses upperclass and graduate women. It is a six-story air conditioned structure with elevator and telephone

services. Each room is semi-private; the building is equipped with lounges, a beauty salon, laundry room, trunk-storage room and an apartment for the Residence Director.

Edna Rose Hankal Hall is the oldest residence hall for women. It houses sophomore women. It is a three-story brick structure, equipped with a formal lounge, beauty salon areas, trunk storage room, laundry and an apartment for the Residence Director.

Mary Wilson Hall is an air conditioned, six-story building that houses 525 freshmen women. This residence hall is equiped with a beauty salon and a lounge on the first floor. There are laundry rooms on each floor and an apartment for the Residence Director.

STUDENT DEVELOPMENT SERVICES

The Student Development Services component, of the Division of Student Affairs, is a unit which works to provide supportive services to students, faculty, staff and others within the community as they pursue academic, vocational, personal and interpersonal goals. These services are geared towards helping people increase self understanding and come to a realization of their strengths and present shortcomings as plans are made to reach meaningful accomplishments. These services are available to each student at both the Main and Downtown Campuses. Student Development Services consists of: Special Programs (Upward Bound and Special Services), The University Testing Center and The University Counseling Center.

Special Programs

Upward Bound and Special Services Projects at Tennessee State University are federally funded pre-college and college programs designed to provide cultural enrichment and supportive developmental services to a target population of students; to assist them in developing creative thinking, effective expression, good study habits and positive attitudes towards learning. The projects assist students in developing goals and skills necessary to enter and to achieve success in postsecondary training programs and in institutions of higher learning. Special Services also provide tutorial assistance to students.

Location: 1015-35th Avenue, North
Main Campus
Telephone 320-3476

THE UNIVERSITY TESTING CENTER

The staff administers and scores a wide range of standardized tests including, advanced placement, undergraduate admissions, graduate admissions, proficiency examinations, high school equivalency examinations and some special aptitude tests. These services are provided for TSU students, staff and faculty and to the general public.

Location: Learning Resource Center
Second Floor
Main Campus
Telephone 320-3405 or
320-3406

THE UNIVERSITY COUNSELING CENTER

Services which assist students in decision-making processes and the development and refinement of intraperson, interpersonal and social relations are offered to students. Professional counselors are available to meet with students on either an individual or small group basis and students should feel free to visit the Counseling Center on a voluntary basis, without referral. Confidentiality is maintained and appointment can be made in person or by telephone.

Counseling Services for Handicapped students are designed to assist them in functioning within the university setting and to enable their full participation in the academic, cultural and social activities at TSU. This service also functions to identify and aid in the removal of physical barriers which prevent free and open access to university facilities. A Vocational Rehabilitation Counselor is available to provide able to provide individualized services in the area of orientation, mobility, admissions, registration, parking, housing and campus activities.

The Orientation Activities for new students are presented at the beginning of the fall and spring semesters. These activities help to introduce students to the University: administration, faculty, staff and other students, departmental programs of study, buildings, and campus life in general.

Location: Queen Washington Health Center
Second Floor
Main Campus
Telephone 320-3626 or
320-3627

Downtown Campus
Third Floor - Room 346
Telephone - 251-1561

STUDENT ACTIVITIES

A well balanced program of activities is sponsored by the University, student organizations, and The Student Union Board of Governors, These activities are coordinated by the Dean of Students and include Athletic Contests, Convocations, Concerts, Recitals, Lyceum Series, programs of a religious nature, lectures, art exhibits, tournaments, movie series, jazz, and popular music artists in concert.

Admission to all campus activities is by a valid Tennessee State University Identification Card.

Participation. Participation in organizations may serve to develop special talents and skills in music, dramatics, writing and religious expression or to develop an appreciation and capacity for leadership, cooperation and fellowship.

In making a choice of organizations, the student should consider his interests, health, scholarship, finances, and home relations.

Freshmen are urged to limit their participation in organizations and other extra-curricular activities particularly during the first semester when numerous academic, social and other adjustments have to be made.

INTERCOLLEGIATE ATHLETICS

The University recognizes the need for a well-rounded program of athletics for all students. In this regard, Tennessee State University competes on an intercollegiate basis in football, basketball (men and women), baseball, swimming (men and women), golf (men and women), track and field and cross country (men and women), tennis (men and women).

The University is a member of the National Collegiate Athletic Association, has no conference affiliation and remains an independent institution.

THE STUDENT HANDBOOK

The Student Handbook is a means of facilitating communication among the members of the University. It serves as a source of necessary and useful information which will help the student understand his privileges, rights, and responsibilities pertaining to student affairs. The Handbook contributes to the high level of cooperative and constructive relationships between students and various departments of the University.

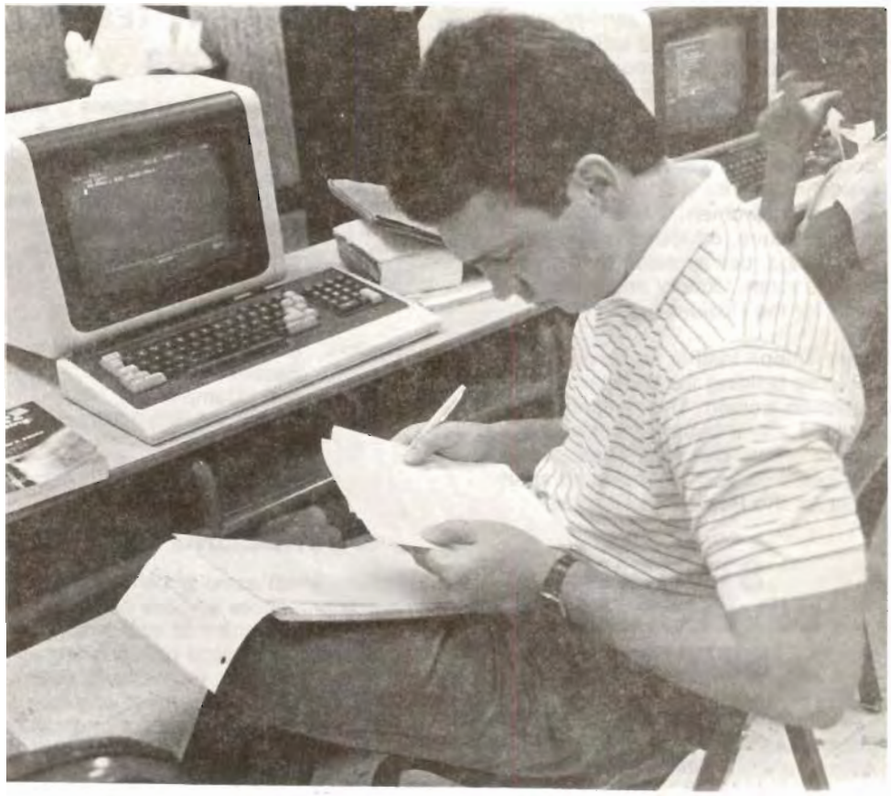
CAREER DEVELOPMENT CENTER

The Career Development Center provides the means for students to enter the world of work, assist students in exploring the scope and variety of career alternatives in their efforts to seek self-fulfillment and to contribute to the well-being of society. It also insures that students at the university have sufficient career and employment information to understand the implication of their educational program decisions.

The Career Development Center assists seniors, alumni and special students in securing positions for which they are qualified. Career counseling services are offered via a computerized career/decision/making program entitled System of Interactive and Guidance Information (SIGI) and interviews are arranged between prospective employees and employers. Students are also assisted in obtaining part-time, summer and cooperative education employment and internships.

The Career Development Center maintains graduates' placement credentials including recommendations and ratings for a period of five (5) years. If you wish your credentials retained for a longer period of time, please submit your request in writing to the Director of Career Development. These records serve as the source of information which is frequently requested from the University. Mailing forms, including scholastic achievements, background, work experience, faculty recommendations, and other pertinent information are compiled and sent to a prospective employer at the request of the graduate, a faculty member, or the employer.

Upon the completion of 90 semester hours, graduating seniors are required to register with the Career Development Center located in room 220 of the Student Union. The services of the Career Development Center are free to employers, students and alumni of the University.



Cooperative Education Program in institutions of higher education is that kind of career education that provides an opportunity for full-time students to alternate periods of academic study with periods of off-campus employment. This program is open to majors in all disciplines at the University commencing at the sophomore level.

The Cooperative Education Program brings business, industry, and government into direct contact with students and educators. It provides for the institution of higher education a more effective utilization of its facilities and extends academic resources beyond the campus. It provides for the employee a sound, economical source of skilled manpower. The Cooperative Education Program is a component of the Career Development Center.

The purpose of The Job Location and Development Program (JLD) is to provide every student who desires to work a reasonable opportunity to find employment. The program is designed to encourage the development and expansion of off-campus part-time, temporary full-time, summer employment and internship opportunities for all students enrolled in TSU.

INTERNATIONAL STUDENT SERVICES

The International Student Services program at Tennessee State University provides technical assistance to all foreign students in connection with their status in the United States and their needed communication with the United States Immigration Service and their various Embassies. Students are assisted with all official communications to their respective home government, including clearance for foreign currency exchange. In addition, foreign students may utilize the advisor function of the program to assist them in their cultural assimilation into the life style they experience in the United States and to assist them with other needs they may have peculiar to their status.

CHILD CARE CENTER

The Child Care Center was established in an effort to provide convenient, dependable and professional child care for students, staff and faculty on the Downtown Campus. The program currently operates during the evening hours, Monday through Thursday. Children three years of age and older are eligible for enrollment.

There is a small charge for each class period a child spends at the Center. A sliding fee scale is applied for parents who have more than one child enrolled. Parents are billed every four weeks throughout the semester.

Parents interested in the service are invited to contact the Office of Student Services, Room 346, Tenth and Charlotte Building.

EVENING SUPERVISION

Because of the unique role and scope of the Downtown Campus, an evening supervisor is on duty at all times during which regularly scheduled classes are in session. The evening supervisor is present to answer inquiries about student services, to handle all emergency situations, and to make operational decisions in the evening for the entire University.

STUDENT HEALTH SERVICES

The Student Health Service is maintained to safeguard the health of students and of the general University community. The Queen E. Washington Health Service Building is located on the northern section of the campus west of Hankal Hall and has facilities for complete examination and limited treatment.

No charges will be made for first aid and drugs used in simple treatment.

All cases of illness must be reported to the Head Resident of the Residence or the nurse on duty at the Health Center.

Students suffering from illness requiring hospitalization will be hospitalized at one of the local hospitals at their own expense. The Administration and staff from Student Affairs shall immediately notify parent or guardian.

CLINIC HOURS

Regular clinic hours for medical aid are from 8:00 a.m. to 6:00 p.m. daily, Monday thru Friday.

During these hours, students requiring health services are examined, advised on health problems and may receive medical care by one of the University Physicians.

POLICY ON I.D. CARDS

The T.S.U. Identification Card is your official University identification throughout your entire enrollment. This card is your means of identification in connection with library privileges, athletic events and any other University functions or services to which you may be entitled as a University student.

This card is permanent and is to be carried at all times and is to be presented to secure services and to authenticate privileges at any University facility.

"THERE WILL BE A CHARGE OF $10.00 (TEN DOLLARS) FOR ANY LOST OR MUTILATED CARDS"

Lending this card to anyone or failure to present it when requested by University officials is a violation of University regulations and subjects the holder to disciplinary action.

GENERAL FEE INFORMATION

Tennessee State University reserves the right to increase the charges listed herein or to add new fees whenever such increases or additions become necessary.

The listing of any fee or incidental charges in this catalog does in no way constitute a contract between the University and the student. As a condition of registration, each student must pay the appropriate fee(s) in effect at the time he registers.

PAYMENT OF FEES

All fees must be paid at registration. An exception to this occurs when a student's fees are sponsored by a University approved agency or organization. Scholarship students should check with their sponsors to ascertain that proper authorization has been forwarded to the Office of the Bursar prior to the date of registration. The Bursar's Office will not contact sponsors on behalf of a student during registration.

All money orders and cashier checks must include the student's social security number, be made payable to Tennessee State University, and sent to the Vice President for Business Affairs, Tennessee State University, 3500 John A. Merritt Boulevard, Nashville, Tennessee 37203.

SENDING OF MONIES THROUGH THE MAIL

The University assumes no responsibility for monies lost through the mail. Students are advised not to send cash and all monies should be sent to the Vice President for Business Affairs, Tennessee State University, 3500 John A. Merritt Boulevard, Nashville, Tennessee 37203.

SPECIAL FEES

All fees listed on this sheet are quoted on a semester basis. Fees listed for 1985-87 supersede all previous publications of fees. FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Add/Drop (per form)	$5.00
Application Fee (non-refundable)	5.00
Auto Restricted Parking Registration	
(academic year)	30.00
(summer)	10.00
Returned Check Charge	10.00
Child Care (Downtown Campus: First Child)	1.00/hr.
($25/hr. each additional child)	
Class Audit same as for credit	
Conference-600 (per semester)	25.00
Credit by Examination (per course)	15.00

TENNESSEE STATE UNIVERSITY
LIBRARY

Dissertation Copyright	20.00
Dissertation Microfilming	40.00
Duplicate I.D. Card	10.00
Graduation Fee	25.00
Graduate Comprehensive Exam	15.00
Graduate Oral Exam	15.00
Graduate Record Examination	15.00
Incomplete Project Writing (after 3 semester hours)	15.00
Icomplete Thesis Writing (after 4 semester hours)	25.00
Late Registration	10.00
Meal Card Replacement	15.00
Master's Thesis Binding	35.00
Music Instrument Lessons (per course)	15.00
Nursing Lab Fee	10.00
Organ Lessons (per course)	30.00
property Damage Fee	Actual
Room Deposit	40.00
Tests, ACT	8.00
Tests, GED	10.00
Voice Lessons (per course)	15.00
Dormitory Key Deposit	10.00
New Student Orientation	20.00
Early Learning Center	
Full Day	595.00
Half-day With Lunch	382.50
Half-day Without Lunch	297.50

INCIDENTAL NON-REFUNDABLE FEE SCHEDULE

APPLICATION FEE—$5.00

This is a one-time fee paid by an individual upon applying for admission to the University. This fee is not required of a graduate student if there already is an application for undergraduate school on record, or if application is being made for readmission to the University. A money order or certified check for $5.00 payable to Tennessee State University must accompany each application.

DUPLICATE I.D.—$10.00

The University issues each student an identification card which certifies that he/she is enrolled as a student in the University. There is no charge for the original card. A charge of $10 is required for its replacement. This identification card bears the student's photograph and is required for registration, all financial transactions, library privileges, and other identification purposes.

MOTOR VEHICLE REGISTRATION—$10.00 AND $5.00

Any person who operates and parks an automobile on campus must register the automobile with the Security Office and pay for an official permit. The fees are $10 for the academic year and $5 for the summer semester. This fee is non-refundable.

RESTRICTED PARKING REGISTRATION—$30.00 AND $10.00

Persons wishing to park an automobile on a restricted parking lot may purchase a restricted parking permit. The fee is $30 for the academic year and $10 for the summer semester. This fee is non-refundable.

GRADUATION FEE—$25.00

Each candidate for a degree must pay this graduation fee to cover the cost of cap and gown rental, and other incidentals involved with graduation. This fee must be paid thirty days before graduation.

RETURNED CHECK CHARGE—$10.00 PER CHECK

All checks given the University are expected to clear the bank upon which they are drawn. If a check is returned, all fees are considered unpaid and the $10 service charge is assessed on *each check*. Check writing privileges are revoked for any individual who has checks returned by a bank.

CHANGE OF COURSE OR SECTION FEE—$5.00 PER FORM

Any student who adds or drops a course or section will be charged this fee. If the change is caused by the institution, there is no charge.

LIBRARY FINES

All fines imposed by the University Library become a receivable to the University, and must be paid at the Library.

AUDITING FEE

Persons other than regularly enrolled students may be permitted to audit classes only with the approval of the instructor of the course. Such persons must follow the regular registration procedures and pay fees equivalent to those required as if the course is to be taken for credit.

TRAFFIC FINES

All fines imposed by the University for traffic violations are receivables to the University and must be paid at the Office of the Bursar.

LATE REGISTRATION—$10.00

Students who do not complete registration during officially announced registration periods will be charged $10.00, as a Late Registration Fee.

FINANCIAL REGULATIONS

No student will be allowed to register, obtain diploma, degree or transcript until all accounts are settled. A student will not be officially enrolled until all fees are paid through the Office of the Bursar, or library fines paid at the Library.

REFUND PROCEDURES

I. The refund policy for maintenance fees, out-of-state tuition and debt service is outlined below:
   A. 100% of fees will be refunded for classes cancelled by the University.
   B. 100% of fees will be refunded for drops or withdrawals prior to official registration.
   C. 100% of fees will be refunded in case of death of the student.
   D. No refund will be made during the registration period. Refunds during the period between the last day of registration and the first day of classes are at the 75% level.
      1. 75% of fees will be refunded for drops or withdrawals from the time of enrollment through the (14) fourteenth calendar (including weekends) day of classes.
      2. 25% of fees will be refunded following expiration of the 75% period, for a period of time extending 25% of the time period covered by the term.
      3. No refund will be made after the end of the 25% period.

Tennessee State University
Fees
1985-86

Undergraduate Tennessee Students

Hours	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12/more
Maintenance Fee	$43.00	86.00	129.00	172.00	215.00	258.00	301.00	344.00	387.00	430.00	441.00	441.00
Debt Service Fee	3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	35.00
Student Government	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	$47.00	93.00	139.00	185.00	231.00	277.00	323.00	369.00	415.00	461.00	475.00	477.00

Undergraduate Out-of-State Students

Hours	1 hr.	2 hrs.	3hrs.	4 hrs.	5 hrs.	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12/more
MaintenaNce Fee	$43.00	86.00	129.00	172.00	215.00	258.00	301.00	344.00	387.00	430.00	441.00	441.00
Tuition	94.00	188.00	282.00	376.00	470.00	564.00	658.00	752.00	846.00	940.00	1034.00	1074.00
Debt Service Fee	3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	35.00
Student Government	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	141.00	281.00	421.00	561.00	701.00	841.00	981.00	1121.00	1261.00	1401.00	1509.00	1551.00

Room—Watson, Boyd, Eppse, and Wilson Hall $490.00
Hankal 454.00
Hale 509.00
Board 449.00

Freshman Orientation Fee $20.00
Foreign Student Fee 25.00

"ALL FEES SUBJECT TO CHANGE"

Tennessee State University
Fees
1985-86

Graduate Tennessee Students

Hours	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12/more
Maintenance Fee	58.00	116.00	174.00	232.00	290.00	348.00	406.00	464.00	522.00	579.00	579.00	579.00
Debt Service Fee	3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	35.00
Student Government	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	62.00	123.00	184.00	245.00	306.00	367.00	428.00	489.00	550.00	610.00	613.00	615.00

Graduate Out-of-State Students

Hours	1 hrs.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12/more
Maintenance Fee	58.00	116.00	174.00	232.00	290.00	348.00	406.00	464.00	522.00	579.00	579.00	579.00
Tuition	94.00	188.00	282.00	376.00	470.00	564.00	658.00	752.00	846.00	940.00	1034.00	1074.00
Debt Service Fee	3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	35.00
Student Government	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	156.00	311.00	466.00	621.00	776.00	931.00	1086.00	1241.00	1396.00	1550.00	1647.00	1689.00

Room—Watson, Boyd, Eppse, and Wilson Hall $490.00
Hankal 454.00
Hale 509.00
Board 449.00

"ALL FEES SUBJECT TO CHANGE"

E. For summer sessions, the 75% refund period and the 25% refund period will extend a length of time which is the same proportion of the terms as the 75% and 25% periods are of the regular terms.

II. The refund policy for residence hall rent and board after registration is outlined below:
   A. Refund will be prorated on weekly basis when a student is forced to withdraw from a residence hall (a week is to consist of at least 3 days).
      1. Because of personal medical reasons confirmed in writing by a licensed physician.
      2. At the request of the University for other than disciplinary reasons.
   B. 100% of fees will be refunded in case of death of the student.
   C. Withdrawals for other reasons will be subject to the same 75%/25% amounts and time periods as maintenance fees.

III. Refund of Residence Hall Reservation and Breakage Deposits. Full deposit will be refunded if:
   A. The University is notified a minimum of (14) fourteen calendar days prior to the first official day of registration.
   B. The student is prevented from entering the University because of medical reasons confirmed in writing by a licensed physician.
   C. Residence hall space is not available
   D. 100% of fees will be refunded in the case of death of the student.

APPEALS PROCEDURES FOR FEES AND REFUNDS

A student may appeal the assessment application calculation or interpretation of any University fee, charge, deposit or refund, or any University action connected with fees or changes. Questions should be discussed with personnel in the Bursar's Office. If a student is not satisfied with the resolution of the problem offered by the Bursar's Office, a written appeal can be made to the office of the Vice-President of Academic Affairs; her determination may be further appealed to the President of the University, whose decision will be final.

COMPUTER RESOURCES

Computer resources of the University are available to employees, faculty, and staff upon following certain prescribed procedures established by the University. All users of Tennessee State University computer equipment will comply with the University's Code of Computer Resource Use at all times. Non-compliance with the Code of Computer Resource Use may incur disciplinary action by the University as well as subject the user to prosecution under applicable statutes of the State and/or federal government.

FINANCIAL AID

Tennessee State University has a broadly based financial aid program. Therefore, an applicant may apply for and receive aid from one or more programs at the same time. Since the University cannot supply funds to cover the financial needs of all its students, students are urged to investigate and seek aid from sources outside the University. Fair and equal consideration is given all applicants without regard to race, color, sex, handicap condition, or religious beliefs in keeping with program regulations.

We use the College Scholarship Service as our major clearinghouse for need determination. All students who want to be considered for aid are requested to complete an Application for Financial Aid and a Financial Aid Form (FAF) each year, according to instructions given on both forms. (We also accept the Family Financial Statement of ACT.) Undergraduate students should also apply for a Pell Grant by checking the appropriate item "yes" on the FAF or FFS forms. Tennessee undergraduate students should also apply for the Tennessee Student Assistance Corporation (TSAC) grant.

The Financial Aid Form and the Application for Fiancial Aid may be obtained at the local high school guidance counselor's office. These forms are also available in the Financial Aid Office at the University and can be received through the mail upon request.

All students are required to submit a processed Student Aid Report (SAR) to the Financial Aid Office in order to receive a complete award package. Students who do not submit the completed SAR will receive a partial award taking into consideration the student's expected Pell Grant.

ELIGIBILITY REQUIREMENTS FOR TITLE IV PROGRAMS

A student must:

—meet program eligibility requirements.
—be enrolled or accepted for enrollment in a degree certificate seeking program except for GSL and PLUS and except when seeking transfer credits toward same.
—comply with educational purpose/ selective service requirements.
—be maintaining satisfactory progress or show evidence of ability to do same.

The student who seeks aid, as well as all other students, is expected to estimate his/her expenses for the year. These expenses would include: tuition and/or fees, room and board, books, transportation, laundry and cleaning, recreation and personal expenses.

Tennessee State University believes that there should be no economic or racial barriers to higher education. Therefore, the aim of the financial aid program is to provide adequate financial assistance for deserving students who show capability of maintaining satisfactory progress in their course of study.

CRITERIA FOR CONTINUED ELIGIBILITY FOR TITLE IV PROGRAMS

To continue to be eligible to participate in title IV programs, a student must continue to meet satisfactory progress standard and to satisfy all other institutional and program requirements. Additionally, a student must continue to follow the application process each year.

CRITERIA FOR RE-ESTABLISHING ELIGIBLITY FOR TITLE IV PROGRAMS

A student who has been dropped from financial aid for failing to maintain satisfactory progress may re-establish eligility for title IV program funds by achieving satisfactory progress while paying school expenses without benefit of title IV funds.

The sources of aid are:

College Work Study Program—A part-time employment program that is jointly funded by the federal government and the University.
College Work Aid Program—Provides part-time employment on campus from University funds.

Supplemental Educational Opportunity Grant Program—Provides gift grants which are federally funded.
National Direct Student Loan Program—Provides low interest loans to eligible students and is federally funded.
Pell Grant Program—Provides gift grants to eligible students and is federally funded.
Nursing Student Loan Program—Provides low interest loans to eligible nursing students and is federally funded.
Minority Scholarship Program—Provides gift grants to eligible students and is institutionally funded.
Academic Work Scholarship Program—Provides employment of an educational nature and is awarded to Tennessee high school graduates who graduate in the top quartile of their graduating class.
Guaraneed Student Loan Program—Enables students to borrow directly from banks, credit unions, savings and loan associations, and other participating lenders who are willing to make educational loans. Further details may be obtained by making inquiry in the Financial Aid Office.
Departmental and University Scholarships Program—Provides scholarships from business and industry through the different departments of the University. The scholarship program is administered through the scholarship committee.
Tennessee Student Assistance Award—Provides a non-repayable grant to assist undergraduate students in financing a post-secondary education.
Teacher Loan/Scholarship Program—Provides loan/scholarships of up to $1,500 for eligible residents of Tennessee.
PLUS—Enables independent student or parents of dependent students to borrow directly from banks, credit unions, savings and loan associations or other lending institutions. This program was designed especially for students ineligible for the GSL program. Further details may be obtained by inquiring in the Financial Aid Office.

SATISFACTORY PROGRESS STANDARD (REVISED)

Standard of Satisfactory Progress

In an effort to comply with subpart B, section 668.16(e) of the "Code of Federal Regulations," the University has developed the following revised Standard of Satisfactory Progress for students (graduate and undergraduate) to maintain or re-establish eligiblity to receive Title IV student financial aid funds. The effective date of this regulation is January 1, 1984. However, all students are being placed in a mitigating circumstance category until July 1, 1984, or designated date due to lateness of receipt of the regulation and the inability to give students and the University proper notice and time to comply with and full implement the regulation by January 1, 1984. Therefore, for the period January 1, 1984, through June 30, 1984, a student's satisfactory progress will be measured according to our old standard.

With the initiation of this policy a mitigating circumstance criteria is being provided for a transitional phase-in for students who in the past were making satisfactory progress based on our old standard but who would be terminated from eligiblity under our new standard. Such students will be given one year to achieve satisfactory progress based on our new standard. However, their maximum years eligibility as a full-time student will be six years the same as for all other students.

For satisfactory progress purposes, all transfer students will be considered eligible to receive financial aid, and will be handled in one of the following ways:

—If their academic history and/or transfer record is relatively insignificant, they may be given the full six year maximum to complete their undergraduate degree, or
—If their academic history and/or transfer record is substantial so as to clearly document that they have completed two years of college, for instance, and have therefore met junior status at the University, they will be given a maximum of only four additional academic years or increments to complete their undergraduate degree as a full-time student.

668.16(e)(3)(i), p. 3, correction/clarification/addendum. A student is expected to maintain the GPA as outlined in the catalog based on the number of hours attempted and to pass the minimum number of hours and GPA as indicated in the progression chart (p. 6) at the end of each increment level is making satisfactory progress. A student who earns the minimum number of hours but whose GPA is less than the expected minimum by not more than .2 of a point will be placed on satisfactory progress. Also a student who earns the minimum GPA but who fails to obtain the minimum expected number of hours by not more than two semester hours will be placed on satisfactory progress probation and will be considered to be maintaining satisfactory progress. In each of these two categories the student will be given one academic year to meet the stated cumulative GPA and hours as shown in the progression chart.

A student who earns the minimum hours but falls below the expeced minimum GPA by more than .2 of a point or who earns the minimum GPA but falls below the minimum hours by more than two semester hours because of mitigating circumstances, may appeal to the committee to continue to receive financial aid. If the committee determines such student had a mitigating circumstance, he/she will be considered to be making satisfactory progress. During that year he/she must raise his/her GPA and total hours earned to the required level as shown in the chart.

A student who has not maintained satisfactory progress can re-establish eligibility by obtaining the minimum hours and GPA required for his/her increment level.

668.16(e)(3)(iv), p. 5, paragraph 4-5. Special services students will be required to meet the same requirements as other students; however, their GPA will be determined based on the agreement between the University and the U. S. Department of Education.

668.16(e)(3)(i) and 668.16(e)(3)(ii)(C). Progress is to be measured on the basis of the number of hours completed or expected to be completed and the GPA as indicated in the chart, both of which can be measured against the standard. The increment used to measure progress is one academic year (three semesters).

Even though all students will be given one academic year (fall, spring, and summer semesters) to comply with or achieve our satisfactory progress standard, their progress will be measured at the end of the spring and/or summer semesters to get students who enter the University at different times on the same measuring schedule. A student who attends the fall and spring semesters and is not in compliance with our policy at the end of the spring semester must use

PROGRESSION CHART

UNDERGRADUATE

	INCREMENT (Year)	EXPECTED HOURS	MINIMUM GPA
Full-time	1st	22	1.4
	2nd	44	1.7
	3rd	66	1.9
	4th	88	2.0
	5th	110	2.0
	6th	132	2.0
¾-time	1st	17	1.4
	2nd	34	1.4
	3rd	51	1.7
	4th	68	1.9
	5th	85	1.9
	6th	102	2.0
	7th	119	2.0
	8th	132	2.0
½-time	1st	11	1.4
	2nd	22	1.4
	3rd	33	1.7
	4th	44	1.7
	5th	55	1.9
	6th	66	1.9
	7th	77	2.0
	8th	88	2.0
	9th	99	2.0
	10th	110	2.0
	11th	121	2.0
	12th	132	2.0

GRADUATE

Full-time	1st	15	3.0
	2nd	30	3.0
¾-time	1st	11	3.0
	2nd	22	3.0
	3rd	30	3.0
½-time	1st	8	3.0
	2nd	16	3.0
	3rd	24	3.0
	4th	32	3.0

PROGRESSION CHART

Increment	Expected Minimum Hours	& GPA
1st	22 hours	1.4
2nd	44 hours	1.7
3rd	66 hours	1.9
4th	88 hours	2.0
5th	110 hours	2.0
6th	132 hours	2.0

summer school to achieve compliance. If such student does not attend summer school, he/she will be considered to have used a full academic year's eligiblity (three semesters). Such student will not be eligible for Title IV aid for the upcoming fall semester.

668.16(e)(3)(ii). The maximum time given a full-time undergraduate student to complete a four year course of study is six years; for a three-quarter time student nine years; for a one-half time student 12 years with a minimum 2.00 average on a 4.00 scale. Eligible students who matriculate at less than a one-half time level will be treated in accordance with their level of matriculation.

668.16(e)(3)(ii)(B). Most departments at the University require the completion of 132 semester hours for a student to graduate. Accordingly, a full-time student is required to complete a minimum of 22 hours each academic year or an average of 22 semester hours for all years attended. A three-quarter time student is required to complete at least 17 hours each academic year or an average of 17 hours for all years attended. A one-half time student is required to complete at least 11 semester hours each year or an average of 11 semester hours for all years attended. An eligible student who matriculates at less than a one-half time level will be treated according to his/her matriculation level.

668.16(e)(3)(iv). Drops, withdrawals, incompletes, and/or repeats will not affect a student's eligibility if he/she completes the minimum hours each year or the average hours for all years (based on the student's level of matriculation). A student's maximum time allowed to complete his/her degree is six years including all non-credit remedial courses taken.

A student who withdraws from all courses after the drop period will forfeit that semester. The student's entire undergraduate academic history at TSU is to be considered in the six year determination. Academic history for purposes of this document is defined as all records covering the period since Fall 1979. A mitigating circumstance is being given to academic history prior to Fall 1979 due to the University's inability to produce accurate data beyond that period, and because of the USDE's five year retention requirement.

A student who does not complete his/her course of study during the required period because classes were not offered or did not make, will not be given additional time or eligibility.

Any student who has not obtained a certain number of hours at a point and, therefore, cannot complete his/her course of study in six years will be denied additional Title IV funds.

Graduate Students

Most departments at the University require the completion of at least 30 semester hours to receive a master's degree.

A full-time graduate student will be given two years to receive a master's degree. Accordingly, a full-time graduate student is required to complete a minimum of 15 hours each academic year or an average of 15 semester hours for all years attended.

A three-fourth time graduate student is required to complete at least 1 semester hours each academic year or an average of 11 hours for all years attended.

A one-half time graduate student is required to complete at least 8 semester hours or an averge of 8 hours for all years attended. An eligible graduate student who matriculates at less than a one-half time level will be treated according to his/her matriculation level.

Most departments at the University require the completion of at least 33 semester hours to receive the specialist degree. A full-time graduate student will be expected to progress toward the specialist degree at the same rate as required for the master's degree.

Most departments at the University require the completion of at least 60 semester hours to receive the doctoral degree. A full-time doctoral student will be expected to progress toward the doctoral degree at the same rate as required for the master's degree.

All graduate students are expected to maintain a minimum GPA of 3.0. When a student has completed 9 or more graduate hours with a GPA less than 3.0, he/she will be given probationary status but will remain religible to receive Title IV aid. Probationary status must be removed by raising his/her cumulative GPA to 3.0 or better during the next 9 hours of graduate work to maintain eligibility.

REFUND POLICY/TITLE IV PROGRAMS

The University's overall refund policy is determined by the Board of Regents.

When a student who has been awarded and/or received Title IV funds withdraws, drops out, is expelled, etc. during the refund period, the following action is to be taken:

1. A determination is to be made (by the Business Office) based on the institution's refund policy as to the percent or amount of money the student owes the University for services received for the period and the percent or amount of money that is to be refunded to the student.
2. The Financial Aid Office decides the portion of the refund to be returned to the Title IV program account by applying the formula outlined in Section 668.21 and in compliance with 668.21 (c)(1)(iv).
3. Refunds to Title IV and Nursing program accounts are made in the following order: to the NDSL/NSL, to the SEOG, NSS, to TSAC/Pell Grant and then to GSL/PLUS if the student received an award from these programs.

When developing this policy consideration was given to the educational and economic background of our students together with our high loan default rate.

REPAYMENT OF CASH DISBURSEMENTS TO TITLE IV AND NURSING PROGRAMS

When a student who has been awarded and/or received Title IV funds, withdraws, drops out, is expelled, etc. during the refund period who has received a cash disbursement, the following action is to be taken:

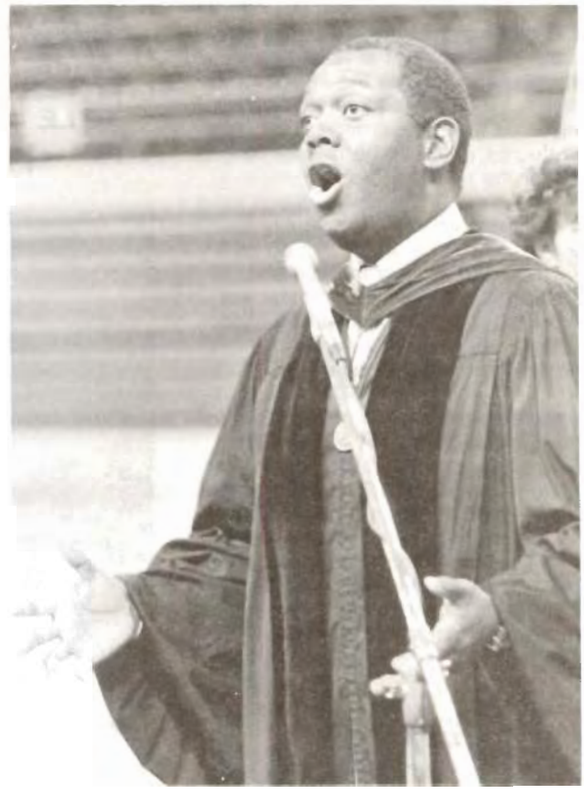
1. A determination is to be made as to whether the student owes a repayment of a portion of those funds (668.21) by considering the amount of cash disbursed to the student versus the non-institutional cost incurred by the student during this period.
2. If it is determined that the student has received an overpayment from Title IV and/or Nursing Programs, the Financial Aid Office determines the amount to be repaid to Title IV and Nursing Program accounts based on the formula in 668.21(c)(5).
3. Repayments to Title IV and Nursing program accounts are made in the following order: to the NDSL/NSL, to the SEOG, NSS, to TSAC/Pell Grant and then to GSL/PLUS if the student received an award from these programs.

FOR STUDENTS WHO ONLY RECEIVE GSL AND/OR PLUS LOANS

The portion of the refund to be returned to the lender is determined by applying the formula outlined in 177.610(b)(2).

Federal Register (9/17/79) and in compliance with 177.607 and 608.

Such refunds are to be returned to the lender within 40 days of the student's withdrawal or approved leave of absence from school or receipt of the check, whichever is later.



ACADEMICS

This section includes information on the following:

—THE UNIVERSITY COLLEGE

—SCHOOL OF AGRICULTURE AND HOME ECONOMICS

—SCHOOL OF ALLIED HEALTH PROFESSIONS

—SCHOOL OF ARTS AND SCIENCES

—SCHOOL OF BUSINESS

—SCHOOL OF EDUCATION

—SCHOOL OF ENGINEERING AND TECHNOLOGY

—SCHOOL OF NURSING

—AEROSPACE STUDIES

—CONTINUING EDUCATION

—THE GRADUATE SCHOOL

—UNIVERSITY PERSONNEL AND FACULTY

THE UNIVERSITY COLLEGE

Tyree Miller, Acting Dean
Timothy Quain, Assistant to the Dean

The University College supports the mission of the University by providing for the needs of its diverse study body: the academically gifted (honors) students, the regular students, the older students entering college for the first time, the persons in the work force who have specific job-related reasons for entering or re-entering college, and the students with special needs. Through the harmonious and effective working of the key components of the University, the University College program provides the opportunity for all entering students to complete the general education requirements and to explore their career goals before deciding upon a major.

GOALS

To support the mission of the University, the University College has established these goals:

1. The University College will offer entering students a program that will serve the needs of students seeking the baccalaureate degree and those seeking certification.
2. The University College will provide orientation for students in the University with respect to their adjustment to collegiate life, including academic, personal, and career objectives.
3. The University College will provide a comprehensive and effective advisement system to aid students in a systematic progression through the general education curriculum.
4. The University College will provide students a mechanism through which they can develop, improve, and enhance academic skills basic to the learning experience.

ADMISSION TO UNIVERSITY COLLEGE

Before students are admitted to University College, they must complete the University admissions criteria for admission to Tennessee State University (see the **Undergraduate Catalog,** p. 12).

Freshmen and all other students entering the University for the first time who have been accepted for admission are invited to participate in a pre-registration program. Announcements giving dates and complete information regarding the pre-registration program are sent to these students.

PRE-REGISTRATION

The pre-registration program is divided into three parts: orientation, advisement, and registration. During pre-registration, students complete the testing program, have conferences with faculty advisers to arrange an approved schedule, and register for classes.

CURRICULUM

The University College curriculum consists of general education course requirements and suggested electives for the completion of the first one-and-a-half years of a four-year baccalaureate degree-granting program. It includes all State Board of Regents and University general education requirements for graduation from the four-year baccalaureate degree programs. The curriculum assures a student of the minimum number of semester hours of general education courses required toward a degree or certification and represents all disciplies deemed essential to an educated person.

The curriculum is non-specialized and is designed to allow the student opportunity to explore various curricula, career fields, and occupations before declaring a major. However, students who enter the University College with a decided major interest and who have met all requirements for admission to the University as well as all requirements for admission to the freshman year of the major interest area may enroll in 100 and 200-level courses that have been pre-selected by the department or the school which offers the major. The number of courses selected in the major interest area must not impede the student's progress toward completion of the general education course requirements before the end of the sophomore year.

Students enrolled in the University College must complete a minimum of thirty-seven (37) semester hours credit for the baccalaureate degree. In addition, they must accumulate a 2.0 grade-point average in the University College before admission to a degree-granting school. (See the General Education Courses for baccalaureate degree programs.)

PLACEMENT

All first-time freshman students under the age of twenty-one (21) are required to submit their American College Test (ACT) or Scholastic Aptitude Test (SAT) scores as a condition for admission. By policy of the State Board of Regents, all students, regardless of the ACT (or SAT) score, are required to take the SBR Writing Assessment. Students whose ACT composite scores are 15 and below are required to take the placement test specified for use in all Board of Regents institutions. On the basis of the placement test results, students will be placed in appropriate remedial/developmental courses and/or laboratories before being allowed to enroll in degree-credit courses unless the results of the placement test exempt the student from such placement. A student whose ACT composite score is 16 or above (or the SAT equivalent) is exempt from the placement testing. However, if during the first two weeks of classes, an instructor has well documented evidence that a student is deficient in one or more of the basic skills or academic competencies, the instructor may refer the student to the Coordinator of Developmental Studies for assessment and placement, using the form provided by the Coordinator's office. If placement test scores so indicate, the student may be administratively withdrawn, upon proper notification, from courses which require the skills in which he/she is deficient.

A student 21 years of age or older is not required to submit an ACT or SAT score as a condition for admission. However, a student 21 years of age or older who does not submit a recent ACT composite score of 16 or above (or the SAT equivalent) will be required to take the placement assessment. All other placement policies and procedures stated above for the student under 21 years of age apply to the student who is 21 or older.

INTERNATIONAL STUDENTS

International students whose native language is not English must demonstrate proficiency in English and in reading

1. by submitting an acceptable score on the Test of English as a Foreign Language (TOEFL) prior to their admission to the University,

2. by demonstrating their ability to write a composition in American standard English, and
3. by demonstrating their ability to comprehend a reading sample of selected subject matter from the general education curriculum or by successful performance on selected reading tests.

International students who do not perform at the acceptable level must enroll in ENGLISH 001. This course will improve these students' mastery of American standard English as a second language in the areas of speaking, reading, and writing skills necessary for their collegiate success. Upon successful completion of ENG 001, the student must enroll in ENG 101 and follow the sequence.

International students whose transcripts do not show successful completion of courses in American History comparable to one unit of American History on the high school transcripts of American students must complete the American History requirement before the end of the sophomore year.

CREDIT AND STUDENT-PLACEMENT BY EXAMINATION

For policies governing the administration of Credit by Examination, see the **Undergraduate Catalog,** p. 14.

1. The College Level Examination Program (CLEP) is a national system of credit by examination. Credit earned through CLEP in the areas of Arts and Sciences, Business, and Education will be entered on the students' permanent records but will not be computed in the grade-point average. Academic credit earned through CLEP Subject Area Examinations will be given to University College students provided
   a. scores attained are equal to at least a grade of C;
   b. CLEP credit does not duplicate any college credit previously counted for admission, recorded on the students' record, or computed in the student's grade-point average.

   For a complete listing of CLEP tests accepted by the University, see the **Undergraduate Catalog,** p. 15.
2. Departmental Course Examinations for Credit are granted in cases where there is evidence to support that the student has already covered the content or mastered the skills of the course. The knowledge may have been acquired
   a. through a similar course taken at another institution for which credit has not been allowed at Tennessee State University;
   b. through employment in a situation that used the information and skill covered in the course;
   c. through other verifiable experiences.

   The student follows the University policy by making an application for taking examinations for credit.

ORIENTATION

All entering freshmen enrolled in twelve or more hours must enroll in UCOR 100U, Orientation, a one-hour course. The course introduces the student to University policies, exposes the student to career and occupational trends, and provides for students with decided major interest areas to participate in departmental activities. Special students and students twenty-one or older are exempted from UCOR 100U but may choose to attend.

In subsequent semesters during the freshman and sophomore years, students must enroll in UCOR 110U, University College Forum, until they exit University College and are admitted to a degree program.

ADVISEMENT

Each orientation class is assigned a teacher/adviser who is responsible for guiding these students through the freshman and sophomore years. The teacher/adviser works closely with the Dean of University College, the University College coordinators and directors, and the staff of the University College Advisement Center. Students in the Honors Program are advised by the University College and the Director of the Honors Program. University College students on the Downtown Campus are advised by the staff of the Downtown Campus University College Advisement Center. Students with a decided major interest area (premajor) who meet both the University admission requirements and the admissions requirements for the degree-granting program are advised by the University College and by the department which offers the coursework for the major.

The main emphasis of the advisement component in the University College is to guide students in acceptance of and competent performance in academic matters.

TESTING

To measure student progress in the general education courses, testing will be an integral part of the course structure. Pre and post tests will be administered. Tests for admission to degree-granting programs may also be required.

TRANSFER FROM UNIVERSITY COLLEGE TO A DEGREE-GRANTING PROGRAM

In order to be eligible to transfer from University College to a degree-granting program, students must meet the following requirements:

1. Complete or satisfy the minimum requirements outlined in the core curriculum of approximately 37 hours.
2. Achieve a minimum cumulative grade-point average of 2.0 or C.
3. Meet satisfactorily the University proficiency requirements in English, mathematics, and reading.
4. Attain an acceptable score on examinations required for exit into the degree-granting program of the desired major.
5. Attain the grade-point average required for the degree-granting program.
6. Demonstrate a second-year level proficiency in a foreign language by test score or by completing 12 hours in one foreign language (requirement for Bachelor of Arts degree candidates).
7. Identify his/her prospective major and degree option prior to enrolling in the third semester.
8. Satisfy the requirements for admission to a degree-granting program. (Certain programs have special pre-admission requirements; the student should check the appropriate program in the **Undergraduate Catalog.**)
9. Be accepted by the department in which the degree is offered.

THE GENERAL EDUCATION COURSES

FOR THE BACHELOR OF ARTS DEGREE	Required Sem. Hrs.
Orientation [2]	1
English	6
ENG 101U (3)	
ENG 102U, 102H (3)	
ENG 103U, 103H	
Literature	6
ENG 211, 211H (3)	
ENG 212, 212H (3)	
Foreign Languages	6-12
French 101U (3)	
French 102U (3)	
French 201U (3)	
French 202U (3)	
German 101U (3)	
German 102U (3)	
German 201U (3)	
German 202U (3)	
Spanish 101U (3)	
Spanish 102U (3)	
Spanish 201U (3)	
Spanish 202U (3)	
Humanities	4
Art 133U, 133H (2)	
Modern Foreign Languages	
French 100A (2)	
French 100B (2)	
German 100A (2)	
German 100B (2)	
Spanish 100A (2)	
Spanish 100B (2)	
Music 131U (2)	
Phil 201U (3)	
Phil 202U (3)	
Phil 250U (3)	
Thea 120U, 120H (2)	
Mathematics	3
(Prerequisites: 2 units of high school algebra or 1 unit of algebra and 1 unit of geometry)	
MATH 111U, 111H (3)	
MATH 112U, 112H (3)	
MATH 113U (3)	
MATH 161U (3)	
MATH 162U (3)	
MATH 163U (4)	
MATH 164U (4)	
Natural Sciences	6-8
Biology 111U, 111H (4)	
Biology 112U, 112H (4)	
CHEM 121U, 121H (3); 121L, 121LH (1)	
CHEM 122U, 122H (3); 122L, 122LH (1)	
Science 121U, 121H (3)	
Science 122U, 122H (3)	
Physical Education Activity[4]	4
PE 11U (1)	
PE 12U (1)	
PE - Any two-digit number (1)	
PE - Any two digit number (1) or AERO	
Health 151U (2)	
Social Sciences	9
History 201U, 201H (3)	
History 202U, 202H (3)	
Social Science Elective	
Anthropology 230U (3)	
Economics 211U (3)	
Geography 171U (3)	
GPA 221U, 221H (3)	
Sociology 211U, 211H (3)	

FOR THE BACHELOR OF SCIENCE DEGREE	Required Sem. Hrs.
Orientation[2]	1
English	6
ENG 101U (3)	
ENG 102U, 102H (3)	
ENG 103U, 103H	
Literature	6
ENG 211, 211H (3)	
ENG 212, 212H (3)	
Foreign Languages	0
Humanities	4
Art 133U, 133H (2)	
Modern Foreign Languages	
French 100A (2)	
French 100B (2)	
German 100A (2)	
German 100B (2)	
Spanish 100A (2)	
Spanish 100B (2)	
Music 131U (2)	
Phil 201U (3)	
Phil 202U (3)	
Phil 250U (3)	
Thea 120U, 120H (2)	
Mathematics	3
(Prerequisites: 2 units of high school algebra or 1 unit of algebra and 1 unit of geometry)	
MATH 111U, 111H (3)	
MATH 112U, 112H (3)	
MATH 113U (3)	
MATH 161U (3)	
MATH 162U (3)	
MATH 163U (4)	
MATH 164U (4)	
Natural Sciences	6-8
Biology 111U, 111H (4)	
Biology 112U, 112H (4)	
CHEM 121U, 121H (3); 121L, 121LH (1)	
CHEM 122U, 122H (3); 122L, 122LH (1)	
Science 121U, 121H (3)	
Science 122U, 122H (3)	
Physical Education Activity[4]	4
PE 11U (1)	
PE 12U (1)	
PE - Any two-digit number (1)	
PE - Any two-digit number (1) or AERO	
Health 151U (2)	
Social Sciences	9
History 201U, 201H (3)	
History 202U, 202H (3)	
Social Science Elective	
Anthropology 230U (3)	
Economics 211 (3)	
Geography 171U (3)	
GPA 221U, 221H (3)	
Sociology 211U, 211H (3)	

[2]Special students, part-time students, and students twenty-one or older are exempt from the orientation requirement.

[3]Course numbers followed by the letter "H" are for Honors Students only.

[4]For students age 25 and older at the time of initial enrollment, the four credits of physical education should be removed from the list of degree requirements.

[5]Students who do not present a year of American History on their high school transcripts are required by Tennessee Law to meet this requirement the freshman year.

COURSE DESCRIPTIONS

ORIENTATION

UCOR 100U Orientation. (1) Required of all entering freshmen and new students. Designed to aid the adjustment of freshmen and new students to the college community and to all facets of university life, including academic adjustment, effective study habits and basic study skills, co-curricular activities, student support services, and varied life styles.

UCOR 110U University College Forum. (0) Required orientation and advisement sessions for University College students during semesters in which they are not enrolled in UCOR 100U.

ENGLISH

Gloria C. Johnson, Coordinator
Monetha R. Reaves, Writing Clinic Director

ENG 001U English Composition for Foreign Students. (0) An introduction to the formal aspects of written English in preparation for English 101U. The course presupposes training in the English language.

ENG 098U Basic English Skills. (3) Development of language skills, with concentration on understanding sentences and paragraphs, spelling, and vocabulary improvement. Some students will work on individualized modules in the Writing Clinic. Not offered for degree credit. Students who have previously passed English 099U or English 101U may not earn grade points in this course.

ENG 099U Basic Composition. (3) Reading and writing sentences, paragraphs, and short essays; studies in sentence structure and grammar. Some students will work on individualized modules in the Writing Clinic. Not offered for degree credit. Students who have previously passed English 101U may not earn grade points in this course.

ENG 098U and 099U carry institutional credity only. Grades earned in these courses (with the exceptions noted above) will be computed into the student's grade point average, but none of the courses earns hours toward a degree. These courses are available only to students who entered the University prior to the Fall Semester, 1985. After the 1985-86 academic year, they will no longer be offered.

ENG 101U Freshman English Composition I. (3) An introduction to the fundamentals of written composition through intensive study of the paragraph and short essay, plus a review of grammar and mechanics. Attendance in the Writing Clinic is mandatory for all students enrolled in English 101U. Required of all students

whose ACT English scores are 16 or below. Those students with ACT English scores of 17 or above who enroll in English 101U will not receive credit for the course.

ENG 102U Freshman English Composition II. (3) An introduction to the fundamentals of written composition through the study of expository essays, as well as an introduction to the reading and critical analysis of essays. Special attention is paid to locating, organizing, and using library source materials in the short documened paper. (This is the first course for students whose ACT English score is 17 or above; the second course for students who have completed English 101U.) Those students who do not demonstrate satisfactory performance in the use of grammar and mechanics in written composition are required to attend the Writing Clinic.

ENG 103U Freshman English Composition III. (3) An introduction to more advanced techniques of composition through the study and writing of expository and argumentative essays. Emphasis is placed on developing critical reasoning skills and locating and incorporating evidence in the preparation and writing of an extended research paper. Prerequisite: successful completion of English 102U. (This is the second course for students whose ACT English score is 17 or above.)

ENG 102HU-103HU Honors Freshman English Composition. (3-3) An honors course designed for students able to work at advanced levels. Class enrollment is restricted to students in the Honors Program.

ENG 201U Problems in Composition. (3) Attention to materials that will help the student overcome his specific problems in written expression. Some students will work on individualized materials in the Writing Clinic. Required of all students who score beneath the cut-off point on the English Proficiency Examination (see Index).

ENG 211U-212U Sophomore Literature. (3-3). A study of literary works with a variety of foci and perspectives. Students who have writing difficulties will enroll in the Writing Clinic. All of the following 211-212 courses satisfy the sophomore literature requirement of the general education core. A student may take any combination of 211 and 212 courses provided one course is a 211 and the other a 212. Prerequisite: successful completion of English 101U and 102U.

ENG 211AU-212AU World Literature. (3-3) A survey of world literature from the beginnings of the Far East and Middle East until the present time. The first semester treats literature through the Renaissance, and the second treats the Renaissance to the present.

ENG 211BU-212BU Literature Genres. (3-3) An approach of literature from the point of view of the genre, or type of work to be studied. The first semester takes up the short story and the novel, the second poetry and drama.

ENG 211CU-212CU Black Arts and Literature. (3-3) A study of the contributions of Black artists and writers to world culture, especially American culture. The first semester treats oral traditions, poetry and drama; the second semester stresses fiction and non-fiction.

ENG 211DU-212DU English Literature. (3-3) A survey of English literature from its origins until the present. The first semester concludes with the end of the eighteenth century, and the second semester covers the period since 1800. Required of English majors, but open to all students.

ENG 211HU-212HU Honors World Literature. (3-3) An analytical reading of selected poetry, prose, and drama from the nations of the world. The subject matters of both semesters is arranged chronologically, with that of the first ranging from the Ancient Chinese through the Renaissance; and that of the second, from the Age of Classicism and Reason to the twentieth century. Limited to students in the Honors Program.

ENG 211U-212U American Literature. (3-3) A survey of the American literature from the first European settlements to the present time. The first semester covers from the beginning to the Civil War, and the second covers the period since the Civil War.

HUMANITIES AND HEALTH, PHYSICAL EDUCATION AND RECREATION

Geraldine Pletcher, Coordinator

ART 133U Art Appreciation. (2) A course for all students interested in understanding the visual arts in everyday experiences. An introductory survey of the visual arts dealing with fundamental and historical fragmentations of Eastern and Western civilization—ending with modern art.

ART 133HU Honors Art Appreciation. (2) A more comprehensive survey of the art from prehistoric to modern times. Emphasis on comparing these periods historically as well as stylistically.

FR 100AU Conversational French, (2) Basic Elements of French; vocabulary and structures for every day use.

FR 100BU Conversational French. (2) Basic elements of French; vocabulary and structures for every day use.

FR 101U-102U Elementary French. (3-3) The development of the ability to understand, speak, write, and read French. Laboratory work is an integral part of the course.

FR 201U-202U Intermediate French. (3-3) Grammar review and further development of the ability to understand, speak, write, and read French, reinforced with laboratory work. Prerequisites: FR 101U-102U or the equivalent.

GER 100AU Conversational German. (2) Basic elements of German; vocabulary and structures for every day use.

GER 100BU Conversational German. (2) Basic elements of German; vocabulary and structures for every day use.

GER 101U-102U Elementary German. (3-3) Aims to develop the ability to speak, understand, write, and read simple German. A functional vocabulary is built up and the essentials of grammar are stressed. Laboratory work is included in this course. It is supplemented with graded reading.

GER 201U-202U Intermediate German. (3-3) Consists of intensive and extensive reading of graded German works (literary and scientific). Fluency and accuracy of comprehension are the primary objectives. Prerequisites: GER 101U-102U or the equivalent.

MUS 131U Music Appreciation. (2) Emphasis on the development of the student's appreciation for the finest musical literature, and a constant extension of the listening repertoire. Only that history which will serve to make what he hears more meaningful to him is included. Three lectures.

PHIL 201U Introduction to Philosophy—Contemporary Moral Issues. (3) This course addresses many of today's most controversial and pressing issues—including abortions, preferential hiring, sex, animal rights, starvation, punishment, violence and pacifism, law and morality, and civil disobedience.

PHIL 202U Introduction to Philosophy—Enduring Problems. (3) The justification of significance of religious beliefs; knowledge and truth; materialism and human nature; free-will and determination. Includes historical and recent sources on the perennial issues in philosophy.

PHIL 250U Logic and Critical Thinking. (3) This course aims to help students think critically and rationally. Emphasis is placed on informal fallacies in ordinary life, e.g., politics, editorials, advertising, and on methods for determining the structure and validity of arguments.

SPN 100AU Conversational Spanish. (2) Basic elements of Spanish; vocabulary and structures for every day use.

SPN 100BU Conversational Spanish. (2) Basic elements of Spanish; vocabulary and structures for every day use.

SPN 101U-102U Elementary Spanish. (3-3). The development of the ability to understand, speak, write, and read Spanish. Laboratory is an integral part of this course.

SPN 201U-202U Intermediate Spanish. (3-3) Grammar review and further development of the ability to understand, speak, write, and read Spanish, reinforced with laboratory work. Prerequisites: SPN 101U-102U or the equivalent.

THEA 120U Appreciation of Drama. (2) Introduction to dramatic principles through the study of major periods and representative plays from the Greek period to the present.

THEA 120H Honors Appreciation of Drama. (2) Honors section of THEA 120U.

HEALTH AND PHYSICAL FITNESS

(Twenty-five years or older, exempted from PE. Reduces required hours by 4.)

HEA 151U Personal Hygiene. (2) Emphasis is placed on health through a consideration of various conditions which affect health. It includes a comprehensive coverage of important trends on major health areas such as those involving the psychological or adjustive processes, those of a psychological or biological nature, and it addresses itself to the issues of health services and the environment in which we live.

PE 11U Team Games and Conditioning. (1) Required of freshmen.

PE 12U Elementary Swimming. (1) Required of freshmen.

PE 15U Modern Dance. (1) Designed to give an introduction to modern dance techniques and elementary composition.

PE 16U Badminton. (1) An elective course designed to develop skill in badminton.

PE 17U Volleyball. (1) An elective course in which volleyball is taught.

PE 18U Soccer. (1) An elective course in which the basic elements of soccer are taught.

PE 19U Handball. (1) An elective course in handball elements.

PE 20U Golf. (1) An elective course in which the basics of golf are taught.

PE 21U Bowling. (1) An elective course designed to teach elementary bowling.

PE 22U Shuffleboard. (1) An elective course in which shuffleboard is taught.

PE 23U Speedball. (1) An active elective in which speedball is taught.

PE 24U Basketball. (1) An elective concerned with teaching basketball skills.

PE 25U Folk and Square Dance. (1) An elective course for folk and square dance skills.

PE 26U Softball. (1) An elective course in which softball is taught and played.

PE 27U Tennis. (1) An elective course for the teaching of basic tennis.

PE 28U Social Dance. (1) An elective course exploring different types of social dance.

PE 29U Touch Football. (1) An elective presenting the modified form of football.

PE 30U Weight Training. (1) A course designed to teach the rudiments of movement using weights.

PE 31U Racquetball. (1) An activity designed to teach racquetball.

PE 32U Beginning Yoga. (2) An elective course designed to teach the Yoga Postures.

PE 33U Wrestling. (1) A course designed to teach the skills of wrestling.

PE 34U Archery. (1) An elective course in which basic skills of archery are taught.

PE 36U Stunts and Tumbling. (1) A course for the teaching of the basic tumbling skills.

PE 43U Track and Field. (1) An elective course for the teaching of the elements of selected track and field activities.

PE 44U Karate. (1) An elective, the study of basic movements of Oriental Martial art. Theory and practice of the mental and physical discipline related to the activity. To be taught as a sport, and for self defense.

PE 50U Scuba Diving. (2) Course designed to teach safety, theory, and practice of scuba diving.

PE 91U, 92U, 93U, 94U Adapted Physical Education. (1-1-1-1) Elective for those students who have some type of physical condition that requires limited physical activity.

MATHEMATICS AND COMPUTER LITERACY

Jeanetta Williams, Mathematics Laboratory Director

CS 100U Computer Literacy. (3) A computer literacy course for students not enrolled in technical courses. Emphasizes the influence of computers on modern life and introduces students to the fundamentals of programming in BASIC. Prerequisites: one year of high school mathematics (some knowledge of the typewriter keyboard helpful). Two lecture hours and one laboratory hour per week.

(Mathematics prerequisites: Two units of high school algebra or 1 unit of algebra and 1 unit of geometry, or the equivalent.

MATH 100U Fundamentals of Algebra I. (3) Fundamental operations on real numbers, linear equations and inequalities, graphing and linear systems, exponents and polynomials, factoring. This course cannot be used to satisfy the mathematics/science general education requirement. One hour per week of Math Lab attendance is required and three classroom lecture hours.

MATH 101U Fundamentals of Algebra II. (3) Rational expressions, roots and radicals, quadratic equations, lines, functions, ratios and proportion. This course cannot be used to satisfy the mathematics/science general education requirement. Three classroom lecture hours and one hour per week of Math Lab attendance are required. Prerequisites: Successful completion of 1 year of high school algebra or its equivalent.

MATH 102U Geometry. (3) Lines, triangles, circles, polygons, congruent and similar triangles, parallelism, area, coordinate geometry, geometric proofs. Three lecture hours per week are required. Prerequisites: The successful completion of one year of high school algebra or the equivalent. May not be counted toward degree requirements.

MATH 100U, 101U and 102U are available only to students who entered the University prior to the Fall Semester, 1985. After the 1985-86 academic year, they will no longer be offered.

MATH 111U Introduction to College Math I. (3) This course will provide the student with a diverse foundation in the following topical categories: graphs, relations, functions, inequalities, polynomials, exponents, and radicals. Prerequisites: The successful completion of two years of high school algebra or the equivalent or one hour of high school algebra and one year of geometry or the equivalent. Three lectures per week.

MATH 112U Introduction to College Math II. (3) This course will provide the student with a diverse foundation in the following topical categories: mathematics of finance, matricies, linear programming, probability and computers. Prerequisite: The successful completion of MATH 111U or the equivalent. Three lectures per week.

MATH 113U Basic Calculus. (3) This course provides the student with the various techniques needed to apply the ideas of differential and integral calculus to situations in economics, business and social science. The emphasis will be on applications. Prerequisites: The successful completion of MATH 111U. Three lectures per week.

MATH 161U Precalculus Mathematics I. (3) This course provides the student with the foundation necessary to enter the calculus sequence. The topics included are the study of polynomial and rational functions, exponential and logarithmic functions and matrices. Prerequisite: The successful completion of two years of high school algebra or the equivalent; or one year of high school algebra and one year of geometry or the equivalent. Three lectures per week.

MATH 162U Precalculus Mathematics II. (3) This course provides a foundation for calculus and analytic geometry. The analytic aspects of trigonometry are emphasized. Other topics included are sequence and series and conic sections. Prerequisite: MATH 161U or its equivalent. Three lectures per week.

MATH 163U Calculus with Analytical Geometry I. (4) Topics studied include functions, graphs, limits, derivatives with applications, the definite integral with applications and algebraic functions. Prerequisite: The successful completion of MATH 162U or its equivalent. Four lectures per week.

MATH 164U Calculus with Analytical Geometry II. (4) Topics studied include derivatives and integrals of trigonometric functions, techniques of integration, an introduction to infinite series and differential equations. Prerequisite: The successful completion of MATH 163U or its equivalent.

NATURAL SCIENCE

Lauree Lane, Coordinator

BIO 111U-112U Principles of Animal Biology. (4-4) This course is designed to provide a sound understanding of structure function and life characteristics of animals. Two (2) one-hour lectures and two (2) two-hour laboratory sessions per week.

BIO 111HU-112HU Honors Animal Biology. (4-4) A course designed for students of exceptional caliber. Emphasis placed on individual critical and original thinking based on recent research findings dealing with animal biologic principles. As such the student will be expected to do extensive reading of literature, make special reports, and participate in guided discussions. Laboratory problems are so designed as to challenge the ingenuity and creativity of the student. Lecture: 2 credits; Laboratory: 2 credits per semester.

CHEM 121U-122U and 121LU-122LU Introduction to Chemical Principles. (3-3 + 1-1) Lectures deal with the basic theories of chemistry, atomic structure, kinetic theory, chemical stoichiometry, the chemical bond, oxidation-reduction solutions, chemical equilibrium. Laboratory during the second semester is devoted to qualitative analysis including cation and anion analysis. A good mathematical background is necessary.

CHEM 121HU-122HU and 121LH-122LH Honors Chemistry. (3-3 + 1-1) Lectures deal with the basic theories of chemistry, atomic structure, kinetic theory, chemical stoichiometry, the chemical bond, oxidation-reduction, solutions, and chemical equilibrium. Examples may be taken from all fields of chemistry and its applications. Laboratory during the second semester is devoted to analysis, including quantitative anion and cation analysis, with an introduction to quantitative analysis. A good mathematical background is necessary.

SCI 121U-122U Introduction to Biophysical Science. (3-3) An interdisciplinary course involving the principles of chemistry, physics, and biology designed to integrate the applicable areas as they are related to the living organism. Two (2) one-hour lectures and one (1) two-hour laboratory period per week.

SCI 121HU-122HU Honors Introduction to Biophysical Science. (3-3) An interdisciplinary course involving the principles of mathematics, chemistry, physics, and biology. The objective of the course is to integrate the applicable areas as they are related to living organisms. Two (2) one-hour lectures and one (1) two-hour laboratory period per week.

READING

Elnora O. Roane, Reading Center Director

EDRD 100U College Reading-Study Skills. (3) This course is designed to enable students to retain information that they read and to use that information in a functional way. Particular emphasis is given to vocabulary development, study skills, and activities to improve test-taking skills. Diagnostic and evaluative assessments are administered to determine strengths and weaknesses of each student, and appropriate instructional activities are planned.

EDRD 102U College Reading Comprehension. (3) This course is designed to improve skills in flexibility, comprehension, and studying textbooks of various courses. Particular emphasis will be placed on techniques that will improve retention rate and refine study skills when reading textual materials. Diagnostic and evaluative assessments are administered to determine strengths and weaknesses of each student, and appropriate instructional activities are planned.

EDRD 100U and 102U are available only to students who entered the University prior to the Fall Semester, 1985. After the 1985-86 academic year, they will no longer be offered.

SOCIAL SCIENCE

Juanita Gaston, Coordinator

ANTH 230U Introduction to Cultural Anthropology. (3) The nature of culture and society. Concepts and theories in terms of social structure, social organization, ecology, change, and the role of the individual.

EC 211U Principles of Economics I. (3) Methodology of economics, fundamentals of macroeconomics, fiscal policy, and fundamentals of monetary policy. Prerequisite: MATH 111U.

GEOG 171U World Regional Geography. (3) Study of geographic regions of the world. Regional surveys include a special consideration of the physical character of the land, resources, economics, and cultures.

GPA 221U American National Government. (3) An introductory course which deals with the foundation, organization, and principles of national government. Attention is focused on the relations of the citizens to the government and the rights, duties, and obligations of citizens. Prerequisite to all upper division courses in the GPA Department.

GPA 221HU Honors American National Government. (3) This is an introductory course which deals with the foundation, organization, principles, and behavior of the national government. Attention is also focused on the relations of citizens to the government, and on the rights, obligations, and political behavior of Americans. Topics covered include institutional descriptions; public opinion; political participational recruitment; interest groups; parties; legislative, judicial and executive behavior; public policy, and democratic theory. There are no prerequisites.

HIST 201U 202U American History. (3-3) This course is a study of the development of cultural, economic, and political institutions in America from pre-Columbian times to the present. History 201U covers the period from pre-Columbian times to 1877. History 202U covers the period from 1877 to present. Required of all University graduates and should be taken in sequence.

HIST 201HU-202HU Honors American History. (3-3) An intensive and extensive study of American history, pre-Columbian times to present. Reserved for gifted, high potential, high academic ranked students. Should be taken in sequence.

SOC 211U Introduction to Sociology. (3) Introduction to sociology as a scientific discipline. Subject matter includes sociological concepts, sociological processes, and social institutions. Prerequisite to all other courses in the Sociology Department.

SOC 211HU Honors Introduction to Sociology. (3) This course presents to students a comprehensive study of social thought, concepts, and social change. Students are expected to analyze and interpret man in society and in culture. The course is designed to give the student a basic understanding of himself in relation to others.

DEPARTMENTAL COURSES THAT SATISFY GENERAL EDUCATION REQUIREMENTS FOR SPECIFIC PROGRAMS

PSY 201 General Psychology. (3) The basic course in introductory psychology for non-majors and majors. Designed to give the student the fundamental concepts of human behavior in the different areas of psychology. Course is prerequisite for all advanced courses in psychology; it is required for all students majoring in psychology.

PSY 242 Human Development and Learning. (3) Designed to give the student an understanding of the child as a growing organism, of how behavior is acquired, an introduction to learning theory and its classroom application, and to give the student training in the application of psychological principles to various functions of the school. Required in the Professional Education Core. Field experience required.

PSY 301 Psychology of Adjustment. (3) Designed to help the student gain a better self-understanding with emphasis on personal and interpersonal growth, forming better life-giving relationships, maintaining self-esteem and confidence and coping with everyday stress. Sharing and disclosure activities will be encouraged.

PHY 221-222 and 221L-222L General Physics. (3-3 + 1-1) Mechanics; Heat, Sound and Light; Electricity and Magnetism; and Modern Physics. The course is intended for students with majors in engineering, mathematics, or a physical science. Prerequisite: MATH 164U (or taken concurrently). These courses must be taken in sequence. General Physical Laboratory. One two-hour laboratory per week designed to be taken concurrently with PHY 221-222.

MCB 250 General Bacteriology. (4) Consideration of identification, culture, sterilization, and disinfectant procedures employed in studying certain microorganisms. Open to majors in Home Economics, Health and Physical Education. Prerequisites: Biology 111U or Chemistry 121U, 122U. Lecture: 2 credits; Laboratory: 2 credits.

SPCH 230 Business and Professional Speech Communication. (3) Designed specifically for the student with neither a major nor a minor in the field of speech. Emphasis is placed on the following speech situations: business interviews, conferences, reports, and similar types of business conversations.

ZOO 201-202 Human Anatomy and Physiology. (4-4) The fundamentals of the structure, function, and organization of the organ-system of man. These courses should be taken in sequence. Lecture: 2 credits; Laboratory: 2 credits.

MATH 211-212 Structure of the Number System. (3-3) Set theory, relations, functions, inverses, order properties, systems of numeration, rational and irrational numbers, elementary number theory, mathematical systems, algorithms for the fundamental operations on whole numbers, integers, fractions, decimals, percent, ratio and proportion, equations, problem solving, measurement in the metric system, elements of algebra, plane and solid geometry, elementary statistics. [MATH 211 is required of elementary education majors in the sophomore year.]

DEVELOPMENTAL STUDIES PROGRAM

Dr. Fannie Cathey, Coordinator

The Tennessee State Board of Regents Academic Assessment and Placement Program (AAPP) is designed to help students succeed in their college studies. The AAPP will provide students and their academic advisers with important information about their individual skills, about their preparation for the program and degree that they wish to pursue, and about their special educational needs. This information will assist academic advisers in placing students in the courses and sections most suited to their preparation and needs. In short, the AAPP is students' first step toward success in achieving their educational goals.

The Regents of the State University and Community College System require that, beginning in Fall, 1985, all freshman students seeking regular admission to a technical institute, community college, or university within the State Board of Regents System (SBR) must participate in the AAPP as a condition of enrollment:

- —all freshman applicants for regular admission who are twenty (20) years of age or younger must submit an official ACT or SAT score as part of the application for admission;
- —all freshman applicants for regular admission who have not taken the ACT will be required to do so at their own expense prior to enrollment;
- —all freshman applicants for regular admission who are twenty-one (21) years of age or older must take the special AAPP test prior to registering for courses;
- —all freshman applicants for regular admission who are twenty (20) years of age or younger and who have a composite ACT score of 15 or less must take the special AAPP test prior to registering for courses;
- —all students who after enrollment are found to be deficient in one or more basic academic skills must be referred for further academic assessment and placement.

The AAPP test has four (4) components designed to measure the student's readiness for college-level courses. The four components are Writing, Reading Comprehension, Mathematics, and Logical Relationships.

A student who does not qualify by assessment but who wishes to enroll in remedial and developmental courses may do so only with the approval of the Coordinator of Developmental Studies. However, any student may voluntarily enroll in any of the developmental studies laboratories without administrative approval.

ACADEMIC SUPPORT SERVICES

In addition to the remedial and developmental courses, the Developmental Studies Program provides academic support services. On the Main Campus, these services include the Writing Clinic, the Modularized Laboratories of the Reading Center, the Mathematics Laboratory, and the Computer Laboratory. On the Downtown campus, similar services are provided in the Interdisciplinary Learning Center.

OPEN ENTRY AND OPEN EXIT

The Developmental Studies Program at Tennessee State University provides students the opportunity for early completion of remedial and developmental courses and for early entry into these courses for students who have completed prior courses in the sequence. For details, the student should consult the course instructor or the Coordinator of the Developmental Studies Program.

GENERAL POLICIES

The following general policies are applicable to students enrolled in the Developmental Studies Program. Additional policies are stated in the Student Handbook for the Program.

Class Attendance
Class attendance in remedial and developmental studies level I courses is mandatory. For monitoring, each student must secure an excused-absence form from the Vice President for Student Affairs' office and have it stamped by the Coordinator of Developmental Studies before presenting it to the instructor of the course. Students who have excused absences must arrange with the course instructor to make up class and laboratory work immediately. This information becomes a part of the students' file and the teacher/advisers' reports on the progress of their advisees.

DROP AND WITHDRAWAL

Students may not drop remedial or developmental courses or laboratories. The courses and laboratories are components in the holistic approach to acquiring the skills and competencies designated by the program.

Students may not withdraw from a remedial or developmental studies course or laboratory. The only approved withdrawal is an administrative withdrawal which requires the student to withdraw from the University. Students who withdraw from the University must re-enroll in the same course or laboratory upon readmission to the University.

READMISSION AFTER TWO FAILURES TO MEET THE EXIT CRITERIA

A student who twice attempts a remedial or developmental studies level I course and fails to meet the minimum standards for progression will be suspended for a minimum of one term. A suspended student may apply for readmission through the Office of Admissions and Records. In order to be readmitted, the suspended student must have the recommendation of his/her teacher/adviser and the Coordinator of Developmental Studies.

A student who believes that extenuating circumstances contributed to his/her suspension may appeal the case to the University's Review Committee on Suspension and Readmission. To appeal the suspension, the student must do the following:

1. Explain the circumstances in a letter submitted to the Office of Admissions and Records within two weeks after receiving the notification of the suspension.

2. Obtain two letters of recommendation: one from his/her teacher/adviser or the Director of Placement and Evaluation and one from the Coordinator of Developmental Studies.

Grading
Only grades of A, B, C, and F will be used for classwork, tests, laboratory work, and final grades in the Developmental Studies Program. A student will be judged to have achieved minimum competency if he/she achieves a score of 70 percent on exit criteria, which will be equivalent to a grade of C. Some preparatory courses and laboratory assignments may require the grade of B to achieve mastery before permitting the student to take the exit examination.

CREDIT HOURS EARNED

All credit hours earned in courses preceded by the course prefix RS (RSEN, RSMA, RSSK, RSRD, etc.) or DS (DSEN, DSMA, DSRD, etc.) and numbered less than 100 will be an addition to the hours required for graduation.

TRANSFER OF REMEDIAL AND DEVELOPMENTAL CREDIT

Remedial and developmental work successfully completed at another System institution (and shown on the student's transcript) will be accepted as equivalent to TSU courses and/or laboratories which cover the same skills and competencies as the courses or laboratories at the other institution. A student who transfers remedial or developmental work from another institution may, however, be referred to the Coordinator of Developmental Studies by a classroom instructor if the student demonstrates deficiency or weakness in a college-level program; forms for referral are available from the Coordinator's office. If it is determined that the referred student is in need of coursework or laboratory assistance, the student will be required to enroll in the appropriate course or laboratory. The student, however, will not be required to enroll in a course if he/she has taken an equivalent course at another institution.

COURSE DESCRIPTIONS

REMEDIAL STUDIES

RSEN 071 English Fundamentals. (4) Development of language skills, with concentration on such matters as spelling, grammar, punctuation, and vocabulary, leading to writing proper sentences and brief paragraphs by the end of the semester. Students will spend three hours per week in the classroom and one hour per week in mandatory Writing Clinic.

RSMA 071 Essential Mathematics. (4) An instensive study of the fundamental operations of addition, subtraction, multiplication, and division with natural numbers, integers, decimals, and rationals, leading to computation with reasonable accuracy using these number systems upon completion of the course. A student who enrolls in the course will spend three hours per week in the class and one hour in the laboratory.

RSRD 079 Reading and Comprehension Skills. (4) The course develops basic reading and comprehension skills, with emphasis on dictionary usage, structural and contextual analysis and interpretation, details, sequence, main ideas, drawing conclusions, relationships, and fact or opinion, leading to improvement of the student's college-level vocabulary, and his ability to read for specific purposes. Pre and post testing. Students will spend three hours per week in the classroom and one hour per week in the laboratory.

RSSK 071 Content Area Study Systems. (3) The course is designed to provide an integrated system of instruction, application, and assessment in eight major study skills essential for success in college-level coursework. Emphasis will be placed upon the skills, surveying textbooks and textbook chapters; reading and marking textbook chapters; using maps, diagrams, graphs, and tables; taking notes from reading assignments and from lectures; taking tests; and using the library. Improvement of study skills strategies with emphasis on study scheduling and methods, effective time management, and goal setting will be stressed.

RSAD 071 Academic Advisement and Counseling. (0) Large group, small group, and individual advisement and counseling sessions. Required of all students enrolled in remedial studies classes.

DEVELOPMENTAL STUDIES LEVEL I

DSEN 081 Basic English Skills. (3) Writing sentences, paragraphs, and short essays, with attention to grammar, spelling, punctuation, vocabulary and similar matters as needed. Readings in current events and popular literature will provide the basis for written assignments. Students will spend three hours per week in the classroom and one hour in the Writing Clinic, where they will receive both group and individualized instruction, including computer-assisted instruction.

DSMA 081 Foundations of Mathematics. (3) This course is designed to develop mathematics competencies prerequisite for studying college algebra. Emphasis will be placed on methods and procedures for performing with reasonable accuracy the computations of elementary algebraic expression. The ability to select and to use appropriate approaches in solving problems that arise in everyday life and as a tool for thinking logically and reasoning critically in decision-making will be emphasized.

DSRD 081 Experiences in Guided Reading and Problem-Solving Strategies. (3) This course is designed as an experience in reception and processing of ideas in the evaluation, application, and retention of textual materials; and to provide experiences in refining self-monitoring learning strategies, applying high-level reasoning skills to identify, formulate, and solve problems. Emphasis will be placed upon methods and procedures for use with interdisciplinary textbooks designed to provide a link across the disciplines for effective work in all fields of college study.

DSAD 081 Academic Advisement and Counseling. (0) Large group, small group, and individual advisement and counseling sessions. Required of all students enrolled in developmental studies level I classes.

THE SCHOOL OF AGRICULTURE AND HOME ECONOMICS

Roland Norman, Ph.D. Dean

GENERAL STATEMENT

The School of Agriculture and Home Economics is one of the seven Schools of Tennessee State University which is a full fledged land-grant institution situated in Nashville, Tennessee. The School therefore seeks to carry out the University's mandates in instruction, research and public service. Instruction is achieved through four academic departments, Animal Science, Home Economics, Plant Science and Rural Development. Research is federally funded and is administered through the Cooperative Agricultural Research Program (CARP). Public service is carried out by the Cooperative Extension Service which works in collaboration with the University of Tennessee's Extension Service.

The School recognizes the value of well organized academic, research and extension programs in agriculture and home economics to meet the challenges of a changing American society. As such, it devotes itself to the discovery and dissemination of knowledge which is essential to the development, conservation, allocation, and use of human and natural resources. The programs of study through the School are geared toward providing high quality training to students in their chosen areas of concentration and preparing them for various career opportunities or for further studies leading to advanced degrees.

THE GOALS OF THE SCHOOL

1. To maintain a high standard of instruction in agriculture and home economics.
2. To encourage faculty and students to engage in research which advances knowledge in the areas where the various academic departments are concerned.
3. To continue ecitizens of the State by disseminating knowledge and providing a broad variety of educational services to the public.
4. To identify and develop the talents of all students who have potentials to do college work and who are enrolled in its various disciplines.
5. To provide an intellectual atmosphere which stimulates students and faculty to apply knowledge and skills toward the improvement of humanity and society.

The School is housed in the W.W. Lawson Hall Agriculture Building and the Walter S. Davis Home Economics Building which are located in the eastern section of the campus.

ACADEMIC DEPARTMENTS

Department of Animal Science, Food Technology and Pre-Veterinary Medicine

- Animal Science
  - Pre-Veterinary Medicine Option
  - Food Technology Option

Home Economics Education

- Home Economics
  - Child Development and Family Relationships
  - Clothing and Textiles
  - Fashion Merchandising
  - Food and Nutrition
  - Food Service Management
- Early Childhood Education

Plant Science

- Agronomy Option
- Horticulture Option

Rural Development

- Rural Economics & Community Resource Development Option
- Agricultural Education Option

DEPARTMENT OF ANIMAL SCIENCE, FOOD TECHNOLOGY AND PRE-VETERINARY MEDICINE

C. L. Fenderson, Ph.D., Head

The Department of Animal Science, Food Technology and Pre-Veterinary Medicine offers a major leading to the degree of Bachelor of Science in Animal Science in one of three concentrations: (1) Animal Science which deals with food animal production and management, (2) Food Technology which deals with the chemical, physical, and biological nature of food and methods of maintaining quality, (3) Pre-Veterinary medicine which prepares students for Schools of Veterinary Medicine. To satisfy the requirements for the degree without teacher certification, the student must complete a minimum of 24 credit hours in the major field with a minimum of 10 hours in 300 and 400 level courses. A student is eligible for graduation when 132 semester hours have been completed with a minimum cumulative grade point average of 2.0. A student who desires to minor in Animal Science must complete a minimum of 18 semester hours in the Department. Work leading to the degree of Master of Science is also offered.

Career opportunities are available in Production/Management, Agribusiness, Food Processing and Marketing, Agriservices, Communication, Research and Education. Employment opportunities are available in State Government, U.S. Department of Agriculture, and private enterprises in the following areas: Meat Inspection, Meat Processing, Sales, Veterinary Medicine, Ranching, Meat Packing, Biochemistry, Peace Corps, Poultry Production, Processing and Marketing, Livestock Inspection, Animal Nutrition, Dairy, Plant Management,

Marketing, Industrial Research, Milk Processing, Feed Manufacturing, etc.

CURRICULUM IN ANIMAL SCIENCE

FRESHMAN YEAR	Credit Fall	Hours Spring
UC 100U; Humanities	1	2
Eng 101; 102	3	3
Math 111; 112	3	3
AS 101; 202	3	3
PE/ROTC	1	1
Hist 201; 202	3	3
AS 201; FT 120	3	3
	17	18

SOPHOMORE YEAR	Credit Fall	Hours Spring
PE/ROTC	1	1
Eng 211; 212	3	3
AGR 102; CS 100U	3	3
Humanities; Soc Sci	2	3
Chem 121; 122	3	3
Chem Lab 121; 122	1	1
Elec	3	3
	16	17

JUNIOR YEAR	Credit Fall	Hours Spring
Chem 360; AS 301	4	3
AS 321; FT 375	3	3
AS 304; 322	3	3
RD 301; 302	3	3
AGR 400; 401	3	3
ELEC (300 or 400)		3
	16	18

SENIOR YEAR	Credit Fall	Hours Spring
AS 311; RD 311	3	3
AS 401; FT 402	3	3
AS 421; 422	1	1
BCHM 341; AS 303	4	3
AS 403; 450	3	3
AS 424; 451	3	3
	17	16

CURRICULUM IN FOOD TECHNOLOGY

FRESHMAN YEAR	Credit Fall	Hours Spring
UC 100U; Humanities	1	2
Eng 101; 102	3	3
Math 111; 112	3	3
AS 101; 202	3	3
PE/ROTC	1	1
Hist 201; 202	3	3
AS 201; FT 120	3	3
	17	18

SOPHOMORE YEAR	Credit Fall	Hours Spring
PE/ROTC	1	1
Eng 211, 212	3	3
ELEC; RD 311	3	3
Agr 102; CS 100U	3	3
Humanities	2	
Chem 121; 122	3	3
Chem 121L; 122L	1	1
Soc Sci		3
	16	17

JUNIOR YEAR	Credit Fall	Hours Spring
Chem 311; 312	4	4
FT 301; 402	3	3
MCRB 240; Ft 303	4	3
NTR 411; Fds 321	3	3
FT 375; 325	3	4
	17	17

SENIOR YEAR	Credit Fall	Hours Spring
AS 424; FT 405	3	3
BCHM 341; 342	4	4
AS 421; 422	1	1
FDS 352; AS 450	3	3
RD 301; 302	3	3
AGR (300 or 400)	3	3
	17	17

CURRICULUM IN PRE-VETERINARY MEDICINE

FRESHMAN YEAR	Credit Fall	Hours Spring
UC 100U	1	
Eng 101; 102	3	3
Math 111; 113	3	3
AS 101; 202	3	3
PE/ROTC	1	1
Biol 111; 112	4	4
AS 201; FT 120	3	3
	18	17

SOPHOMORE YEAR	Credit Fall	Hours Spring
Humanities	2	
PE/ROTC	1	1
Eng 211; 212	3	3
Hist 201; 202	3	3
AGR 102; MCRB 240	3	4
Humanities	2	
Chem 121; 122	3	3
Social Science		3
	17	17

JUNIOR YEAR	Credit Fall	Hours Spring
Chem 311; 312	4	4
AS 321; FT 375	3	3
AS 313; 322	3	3
AS 301; AS 304	3	3
Phy 211; 212	4	4
	17	17

SENIOR YEAR	Credit Fall	Hours Spring
AS 311; 451	3	3
Zoo 430	4	
AS 424; FT 402	3	3
AS 421; 422	1	1
BCHM 341; 342	4	4
AS 450; RD 301	3	3
AS 403		3
	18	17

COURSE DESCRIPTIONS

ANIMAL SCIENCE (AS)

AS (101). Introduction to Animal Science. (3) Devoted to the adaptation of the different classes of farm livestock to varying farm conditions and to the relationship of each class to the other in different farm plans. A careful study of correct type of livestock in relationship to economical production and market demands. Two lectures and one laboratory period.

AS (201). Introduction to Poultry Science. (3) The principles and practices underlying reproduction and growth of the domestic fowl; also the study of breeds, varieties, and types of poultry. Required of all majors in Agriculture. Two lectures and one laboratory period.

AS (202). Incubation and Hatchery Management. (3) Designed to give the environmental factors affecting incubation, embryo development, operation of incubators, and hatchery management. Required of all majors in agriculture. Two lectures and one laboratory period.

AS (211). Introduction to the Care and Riding Light Horses (3) Designed for men and women in the University who are interested in horseback riding. Elementary principles of feeding, housing, training and riding light horses given; the proper care and adjustment of riding equipment also stressed. One lecture and two laboratory periods.

AS (301). Animal and Plant Genetics. (3) A study of the fundamental laws of heredity and their relation to plants and animals. Two lectures and one laboratory period.

AS (304) Anatomy and Physiology of Domestic Animals. (3) Review of the structure and function of body systems of domestic livestock. Relationships to animal management practices and animal health considerations emphasized. Two lectures and one laboratory period.

AS (311). Feed and Ration Formulation. (3) A study of the basic principles of feeding farm animals, feeding standards, balanced rations, composition and nutritive value of feeds. Two lectures and one laboratory period.

AS (313). Animal Health and Disease Prevention. (3) A study of the causes, symptoms, and treatment of general diseases and parasites of livestock and poultry with special emphasis on prevention of health problems. Two lectures and one laboratory period.

AS (322). Swine Production and Management. (3) A study of the breeding, management, feeding and marketing of swine. Emphasis placed on both pure bred and commercial production. Two lectures and one laboratory period.

AS (322). Beef Production and Management. (3) History, Development, and distribution of breeds; sources of cattle and carcass beef, production and distribution in cattle feeding, commercial and pure bred breeding herds. Two lectures and one laboratory period.

AS (403). Dairy Production and Management. (3) A study of general farm operation, adaptation of the herd to available facilities, factors affecting production, balancing rations for dairy cattle, disease control, principles of modern dairy cattle breeding, arrangement and development of dairy farm buildings. Prerequisite Animal Science 311. Two lectures and one laboratory period.

AS (404). Poultry Disease Prevention and Sanitation. (3) Designed to give the major principles underlying sanitation and disease prevention as applied to poultry farm. Two lectures and one laboratory period.

AS (421-22). Seminar. (1-1) Devoted to discussions of current literature and problems in animal husbandry. Required of seniors majoring in the department. One hour credit each semester. One lecture.

AS 424) Animal Nutrition. (3) Study of nutrients: their classification, properties and functions; their digestion, absorption and cellular metabolism; their requirements and deficiency symptoms. Prerequisites: Animal Science 101 and 311 one semester of organic chemistry.

AS (450). Senior Project. (3) Required of all Animal Science majors.

AS (451). Physiology or Reproduction. (3) Fundamental principles of the physiology of reproduction with primary emphasis on farm animals. Anatomy of the male and female reproductive tracts; hormones, estrus and estrus cycle; fertility and sterility, and manipulation of the reproductive process.

FOOD TECHNOLOGY (FT) An option in Food Technology for the B.S. Degree major in Animal Science is available.

FT (120). Introduction to Food Science and Technology. (3) Techniques of procurement, processing, packaging, preservation and distribution of foods. Mechanization and automation of food handling processes. Nutrient components and organoleptic properties of foods. Regulation of the food industry. Two lectures and one laboratory period.

FT (301). Processing Milk and Milk Products. (3) A study of the procurement, processing and sale of milk and the bacteriological, chemical, and physical aspects of market milk processing, prerequisite: Chemistry 121-122. Two lectures and one laboratory period.

FT (303. Processing Poultry Products. (3) A detailed study of grades and classes of market poultry and eggs; methods of processing, storage, preservation and problems in plant operations. Two lectures and one laboratory period.

FT (325). Food Microbiology. (4) Microorganisms associated with food products. Classes of microorganisms. Factors that influence growth of spoilage organisms. Food hazards and quality assurance. Effects of preservation techniques on foodborne organisms. Microbiology of fermented food products. Two lectures and two laboratory periods.

FT (375). Laboratory Instrumentation. (3) Introduction to procedures and techniques commonly utilized in analysis of biological materials. Includes spectroscopy, gas and column chromotography, electrophoresis etc.

FT (402). Science of Meat. (3) Composition, physical, chemical and nutritional properties of meat and meat products. Biochemical alterations of meat during aging, curing, processing, and storage.

FT (405). Food Chemistry. (3) Function of food. Food constituents-proteins, lipids, carbohydrates, minerals and trace elements, vitamins, enzymes. Effects of processing, storage and preparation. Two lectures and one laboratory period.

DEPARTMENT OF HOME ECONOMICS

Hazel O. Jackson, Ph.D., Head

GENERAL STATEMENT

The purpose of the undergraduate program in the Department of Home Economics is to provide, through the facilities in the Department and the University, both a liberal and specialized education in which the interests and well-being of individuals, family members, and consumers are significant. The program of liberal studies is based on the natural and social sciences, the humanities, and the arts and is designed toward an understanding of individual's and families and their relationship to the environment. Specialized studies provide an understanding of individuals and families and their relationship to the environment. Specialized studies provide an understanding of individuals needs and interests specifically with regard to nutrition, food, health, clothing, textiles, housing, management of resources, care and guidance of children, interpersonal relationships, and family relationships, with emphasis on breadth of knowledge and its application to the solution of contemporary human problems. Home economics provides education required for successful professional work performance in an ever increasing variety of positions made possible in a society characterized by rapid technological and sociological change.

THE GOALS

The Department of Home Economics seeks to prepare men and women for (1) leadership roles in professional fields, (2) graduate and professional specialization, (3) teaching on all levels (nursery school/kindergarten to graduate), (4) careers in business area, (5) consumer competence, (6) community services, (7) civic responsibility, (8) aesthetic appreciation, (9) social understanding, (10) wholesome family and interpersonal relations, and (11) an improved quality of life.

In keeping with the purposes of higher education the departmental program is based on its commitment to excellence in instruction, research, and public service.

The Department of Home Economics is accredited by the American Home Economics Association.

STUDENT ORGANIZATIONS

The student member section of the American Home Economics Association (AHEA-SMS) is a professional organization, open to all students majoring in home economics, regardless of concentration interest. Membership is expected of all students. Other professional organizations within the department include the Dietetics Club, open and expected of Food and Nutrition majors, the Tennessee Association of Young Children (Student Membership Section), the Clothing and Textiles Club, and the Beta Sigma Chapter of Kappa Omicron Phi, National Honor Society in Home Economics. Kappa Omicron Phi is open to departmental majors who achieve scholastically and meet membership requirements.

DEGREE REQUIREMENTS

A candidate for the Bachelor of Science degree in Home Economics must complete the minimum University requirements for graduation with a 2.0 or better quality point cumulative average as outlined in the University catalog. The minimum requirements include general studies and general home economics components designed to prepare students in the areas of behavioral and humanistic studies, natural sciences, communications, and the areas of specialization. The components provide an awareness of the political, social, and economic forces on individuals and families.

Degree candidates in areas of teacher certification must meet requirements designed for teacher education as outlined in the University catalog.

Departmental students who qualify for participation in the University Honors

Program are encouraged to seek entrance to the program. Participants in the Honors Program will be graduated with University Honors if all requirements are met. Minimum requirements are listed in the University catalog.

CURRICULA

The Home Economics Department offers degree programs at the Undergraduate level in the following areas:

- Home Economics Education
- Home Economics, with options or concentrations in:
  - Child Development and Family Relationships
  - Clothing and Textiles
  - Fashion Merchandising
  - Food and Nutrition (Dietetics)
  - Food Service Management
  - Early Childhood Education

All curricular programs include general and professional studies to provide depth, breadth, and quality in the preparation of home economists. Concepts included in the over-all programs meet the following four criteria: (1) universality, (2) relevance to today and the future, (3) continuity, and (4) adaptability. There is a common body of knowledge or core derived from the general studies component and from specific courses in home economics which is also relevant to each of the areas of specialization. The concepts common to all programs include some understanding of: (1) the family in society, (2) human growth and development in relation to nutrition, (3) human development and its relation to the family, (4) management of human and material resources, (5) aesthetic qualities in the environment, (6) the influence of science, technology, and consumer economics upon families and family members, and (7) the philosophical base of home economics and the relation of its specialities to the field as a whole.

The common discipline includes professional abilities to: (1) identify needs, values, and problems of individuals, families, and groups of families in various levels of society; (2) recognize unique contribution of home economics to these needs and also contributions of other related professions; (3) seek out the specific knowledge and resources appropriate to the solution of individuals or family problems; (4) use the most effective means of applying knowledge brought to bear, and application of such knowledge, in order to improve the professional performance.

A variety of program possibilities can be explored by students within the department and with other programs.

Home Economics Education

Opportunities are virtually unlimited for the person who combines home economics and education. The comprehensive-generalist background of the home economics educator, including emphasis on human development and management of resources, provides versatility and opens career options. Not only do home economics education graduates follow the traditional teaching roles in public and private schools, vocational schools, and in specialized adult education programs, they also have preferred competencies for many positions in business, industry, cooperative extension, state, and federal government.

The curriculum in home economics meets the requirements set up by the Tennessee Board of Vocational Education for teaching home economics and is designed to qualify graduates to teach vocational home economics under the requirements of the National Vocational Education Acts. Majors must meet admission and retention requirements for Teacher Education.

Career choices: 4-H Leader, Extension Home Economist, educational representative, home service advisor for utility company, free lance home economist, educational writer, educational representative, consumer educator, energy specialist, curriculum specialist, VISTA worker, Peace Corps volunteer, community aid home economist, consumer and homemaking program in middle schools, teacher in adult, junior high and high schools.

CURRICULUM FOR HOME ECONOMICS EDUCATION (Bachelor of Science Degree with Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
UCOR 100U	1	
ENG 101-102	3	3
HIST 201-202	3	3
MATH 111, CS 100U	3	3
PE or AFROTC	1	1
HEED 101, RA 201	1	3
CLT 111, FDS 111	3	4
ART 133 or MUS 131	2	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
HEED 312, ZOO 201	3	4
CLT 211, PSY 242	3	3
CHEM 121, NTR 211	4	3
EDCI 201, *Soc Sci Elective	3	3
PE or AFROTC	1	1
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
ECCD 351, EDCI 301	3	3
CLT 321, Psy 312	3	3
HEED 387, *HEED Elective	3	3
NTR 411 or NTR 311, ECCD 465	3	3
HMgt 321, EDSE 465	3	3
RA 323, SPCH 220	2	3
	17	18

SENIOR YEAR	Credit Hours Fall	Spring
HMgt 433, EDRD 491	3	3
ECCD 463, HEED 371	3	3
HEED 450, HEED 472	3	9
*Electives	6	
	15	15

*See University requirements for bachelor's degree: Teacher Education Admission and Retention Requirements.

CURRICULUM FOR OCCUPATIONAL HOME ECONOMICS ENDORSEMENT

Home Economics Education majors who desire to teach in either Food Management, Clothing Management or Care and Guidance of Children programs in high school or vocational schools may elect from three endorsements:

Occupational Endorsements (select one) 13-14

Option I

Food Management, Production, and Service 14
HEED 443 or 543 3
HEED 460 2
FDS 313-412 6
FDS 452 3

Option II

Clothing Management, Production, and Service 14
HEED 443 or 543 3
HEED 459 2
CLT 401 or CLT 403 3
CLT Elective 3
CLT 322 3

Option III

Care and Guidance of Children 13
HEED 443 or 543 3
HEED 458 2
ECCD 332 2
ECCD 452-460 6

HOME ECONOMICS (Child Development and Family Relationships Concentration)

A major in home economics with concentration in Child Development and Family Relationships prepares graduates (1) to work with children in nursery schools, day care centers, and other institutions concerned with children; (2) to serve as Child Development and Family Relationships specialists at state and local levels, directors of programs for children in

religious institutions, and additional focus offers academic and practical experiences centered around the developmental tasks of young children. Students desiring teacher certification in public school kindergartens and elementary schools will take additional education courses to meet certification requirements.

CURRICULUM FOR CHILD DEVELOPMENT AND FAMILY RELATIONSHIPS
(Bachelor of Science Degree with or without Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
UCOR 100U, ART 133	1	2
ENG 101-102	3	3
MUS 131		2
PE 11 or 12 or AFROTC	1	1
MATH 111, HEED 101	3	1
SCI 121-122	3	3
ECCD 101, CS 100U	3	3
HIST 201-202	3	3
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
RA 201		3
PE or AFROTC	1	1
ZOO 201, NTR 211	4	3
EDCI 201, PSY 242	3	3
ECCD 201-332	3	2
CLT 111, SPEECH 220	3	3
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
HMgt 321 or HMgt 433	3	
ECCD 351-353	3	2
ECCD 352-433	3	3
NTR 433, ECCD 460	2	3
EDCI 301, SOC 211	3	3
PSY 311 or 312*		3
**Elective (300-400 level)	3	4
	17	18

SENIOR YEAR	Credit Hours Fall	Spring
ECCD 461-462	3	3
ECCD 463, HEED 450	3	3
ECCD 464-466	3	9
**Electives	7	
	16	15

*Elect Psy 312 rather than 311, elect ECCD 465.

Students with a concentration in Child Development and Family Relationships who desire certification should elect a minor in Home Economics Education.

**Electives should be chosen with approval of major advisor.

Child Development with Home Economics Education Minor*

Courses Required	Credit Hours
HEED 312	3
HEED 387	3
HEED 371	3
HEED 472	9
EDSE 465	3
EDRD 491	3
FDS 111-223	3-3
CLT 211-321	3-3

*For teaching home economics at the secondary level.

Family Life Specialists Minor—Emphasis on Social Work

A major in Child Development and Family Relationships coupled with a minor in Social Welfare increases a student's marketability for employment with social service institutions at the local, state, and national levels. The minor is designed to prepare students to work with families in crises; to work with the aged; and to help students apply effective techniques for treating individual problems.

Courses Required	Credit Hours
SW 320	2
SW 330	3
SW 340	3
SW 350	3
SW 350L	1
Gerontology 472	3
Gerontology 210	3

Administration and Supervision Minor for Day Care Directors, Early Childhood Education Administrators, Program Coordinators, Lead Teachers

Students interested in pursuing one of the above professions will select 18 hours of business management courses in the field of studies for young children.

Courses Required

MG 215 Basic Computer Science
MG 315 Computer Programming—COBOL
MG 301 Management-Organization Theory and Behavior
MG 320 Small Business Management
MG 403 Personnel Administration
MG 409 Human Resource Planning/Evaluation
MG 411 Operative Supervision
ECCD 452 Planning and Administering Day Care Programs
ECCD 453/553 Workshops
Industry programs for young people. Planning buildings and grounds for young children. (Workshop topics will change based on trend and interest. Offered according to need.)
ECCD 465 Parenting: Practical Steps to Childrearing

HOME ECONOMICS (Clothing and Textiles)

A major in home economics with concentration in Clothing and Textiles opens many possibilities to students who wish to use clothing in a general sense for their personal and family development, to those who have a well-defined vocational aim, and to those who anticipate graduate study.

Specific careers open to the graduate may include (1) clothing specialist, (2) free lance dressmaker, (3) designer, and (4) consumer representative.

CURRICULUM FOR CLOTHING AND TEXTILES
(Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring
UCOR 100U	1	
ENG 101-102	3	3
CLT 112-111	3	3
MATH 111-112	3	3
HEED 101, ART 133	1	2
RA 201, FDS 111	3	4
PE 11-12 or AFROTC	1	1
HIST 201-202	3	3
	18	19

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
CLT 203, SP 210 or 220	3	3
MG 215, GPA 221 or Soc Sci	3	3
FR 101, 102 or 201-202	4	4
CHM 121-122	4	4
PE or AFROTC	1	1
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
RA 301, *CLT 300	3	3
ECCD 351, CLT 302	3	3
HMgt 321, MK 301	3	3
PHIL 201 or THEA 401		3
ENG 301, NTR 312	3	3
Elective	3	
	15	15

SENIOR YEAR	Credit Hours Fall	Spring
CLT 321-403	3	3
HEED 450	3	
RA 323-421	2	3
ECCD 463, HMgt 322	3	3
MK 425	3	
Electives	3	6
	17	15

*All Clothing and Textiles students must demonstrate elementary level clothing construction competencies before taking the more advanced course CLT 300. These competencies may be demonstrated either through a passing score on the Elementary Clothing Comprehensive examination given each Fall in the

department or the student may elect to take the course CLT 211.

HOME ECONOMICS (Fashion Merchandising)

The program in Fashion Merchandising is planned for students interested in careers in the marketing of textiles and clothing products by retailers and manufacturers within the framework of sound business practices.

The program provides for related work experience while pursuing the B.S. degree.

Objectives

1. To prepare students to select, with discernment and sensitivity, fashion items for themselves and for others.
2. To present specialized information on job opportunities in retailing.
3. To prepare students to enter the field of retailing with confidence based on strong academic and practical preparation.

Opportunities for employment in Clothing and Textiles may be grouped into three broad categories as (1) manufacturing, (2) merchandising, and (3) consumer services, including teaching. The level at which any individual student may enter the field depends on other factors not included in the curriculum. A student's prior work experience and academic competence tend to be related to the level of entry in the job market.

Specific careers open to the graduate may include (1) Assistant Buyer, (2) Assistant to the Buyer, (3) Department Manager, (4) Assistant to the Manager, (5) Consumer Representative, (6) Clothing Specialist.

CURRICULUM FOR FASHION MERCHANDISING (Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
CLT 111-112	3	3
MATH 111-112	3	3
ART 133, HEED 101	2	1
UCOR 100U, RA 201	1	3
PE 11-12	1	1
HIST 201-202	3	3
	16	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
FR 101-102	4	4
ENG 211-212	3	3
AC 211-212	3	3
CHEM 121-122	4	4
CLT 203, FDS 111	3	4
PE	1	1
	18	19

JUNIOR YEAR	Credit Hours Fall	Spring
CLT 211-302	3	3
RA 301, MK 301	3	3
NTR 312		3
SOC SCI Elective	3	
SPCH 220, MG 215	3	3
HMgt 321, ECCD 351	3	3
	15	15

SENIOR YEAR	Credit Hours Fall	Spring
MK 425, CLT 403	3	3
ENG 301	3	3
MK 302, ECCD 463	3	3
RA 323-421	2	3
CLT 414, HEED 450	3	3
Electives	3	6
	17	18

SUGGESTED ELECTIVES
FN 330, Business Finance
MK 329, Salesmanship
MK 431, Advertising
MK 432, Purchasing
MK 334, Buyer Behavior
CLT 415, Internship

Curriculum for Clothing and Textile Minor

A minor in Clothing and Textiles may be elected by any student enrolled in the University. Two options are available: (1) Clothing and Textiles, and (2) Fashion Merchandising.

Courses Required	Credit Hours
Option I	
Clothing and Textiles	
CLT 111	3
CLT 112	3
RA 201	3
CLT 203	3
CLT 300	3
CLT 321	3

Courses Required	Credit Hours
Option II	
Fashion Merchandising	
CLT 111	3
CLT 112	3
RA 201	3
RA 301	3
CLT 403	3
CLT 414	3

HOME ECONOMICS (Food and Nutrition Dietetics Concentration)

Students may choose from two options in the field of Foods and Nutrition. A major in home economics with concentration in Dietetics is designed to develop (1) sound basic up-to-date knowledge in the field of foods and nutrition, (2) the ability to interpret basic facts in actual situations, and (3) to develop the skill and techniques required to apply basic principles to methods of preparation. The program is designed to meet the requirements for entrance into an approved dietetic internship—or traineeship.

CURRICULUM FOR FOOD AND NUTRITION (DIETETICS) (Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
HIST 201-202	3	3
MATH 111-112	3	3
CS 100, FDS 111	3	4
HEED 101, RA 201	1	3
PE 11-12 or AFROTC	1	1
ART 133 or MUS 131	2	
UCOR 100U	1	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
CHEM 121-122 (including Lab)	4	4
NTR 301, SOC 211 or PSY 201	3	3
ZOO 201-202	3	3
ECON 211, CLT 111 or 112	3	3
PE or AFROTC	1	1
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
NTR 311, FDS 311	3	3
CHEM 360, BIO CHEM 320	4	5
RD 311, FDS 313*	3	3
PHIL 201, MCRB 250	2	4
MG 301, SOC 330	3	3
PSY 242	3	
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
*FDS 412, Elective (300+)**	3	3
NTR 411, FDS 452*	3	3
HEED 450	3	
HMgt 433, MG 403	3	3
ECCD 463, HEED 371	3	3
NTR 433, NTR 453	3	3
	18	15

*Required of students for dietetic programs.
**Electives should be chosen with approval of major advisor.

Graduates with a concentration in foods and nutrition may choose a career in nutrition care, education and/or research, or may continue graduate studies. Some career opportunities are (1) Food Service Supervisor, (2) Dietitian, (3) Dietetic Assistant, (4) Industrial Feeding Specialist, (5) Airline Food Service Supervisor, (6) Restaurant Manager, (7) School Food Service Specialist, and (8) Clinical Nutritionist.

HOME ECONOMICS (Food Service Management)

A major in home economics with a concentration in Food Service Management gives the student a strong background in foods and nutrition and business. The program includes on-the-job experience requirements.

CURRICULUM FOR FOOD SERVICE MANAGEMENT (Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
HIST 201-202	3	3
MATH 111-112	3	3
FDS 111, CLT 111	4	3
PE 11-12	1	1
HEED 101, CS 100	1	3
UCOR 100U, ART 133	1	2
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
RA 201	3	
ENG 211-212	3	3
PSY 242, SOC 211	3	3
CHEM 121, 122	4	4
EC 211, 212	3	3
PHIL 201, NTR 301	2	3
PE or AFROTC	1	1
	19	17

JUNIOR YEAR	Credit Hours Fall	Spring
EC 330, FDS 311	3	3
NTR 311, MG 301	3	3
FDS 313, HMgt 321	3	3
FDS 352, ENG 301	3	3
AC 211–212	3	3
Elective (300+), SPCH 375	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
HMgt 433, FDS 452	3	3
MG 403, ECCD 463	3	3
AC 317, HEED 450	3	3
FDS 412, FDS 312	3	3
MK 301, NTR 462	3	3
	15	15

Curriculum for Foods and Nutrition Minor

A minor in foods and nutrition may be elected by any student enrolled in the Department of Home Economics. Two options are available: (1) Foods and Nutrition or Food Service, and (2) Dietetics (with Diet Therapy).

Courses Required	Credit Hours
FDS 111	4
NTR 301	3
NTR 311	3
FDS 311	3
FDS 412	3
FDS 452	3
NTR 453	3

EARLY CHILDHOOD EDUCATION

The Early Childhood Education Program is designed to prepare competent and qualified teachers and teaching assistants for work with children during their nursery, kindergarten, and primary grade years. The learning experiences are arranged so that a student may qualify for employment as a teaching assistant after completion of two years of study—the Associate Degree Program. The students who choose to remain (or return) for an additional two years can earn the Bachelor of Science degree and complete requirements for certification as a teacher at the kindergarten primary level.

A special feature of the program is the provision for early laboratory experiences with young children prior to student teaching. Well designed and equipped nursery school and kindergarten laboratories are located on campus in the Walter S. Davis Complex.

CURRICULUM FOR EARLY CHILDHOOD EDUCATION (Bachelor of Science Degree with Certification K-3)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
ECCD 101, MATH 111	3	3
HEA 151, ECCD 332	2	2
SCI 121-122	3	3
ART 133, MUS 131	2	2
PE or AFROTC	1	1
UCOR 100U, CS 100U	1	3
GEO 171 or 172, HEED 101	3	1
	18	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
EDCI 201, PE 300	3	3
HIST 201-202	3	3
ECCD 201, NTR 433 or ECCD 353	3	2
ECCD 351, Psy 242	3	3
CLT 112		3
MATH 211	2	
PE Electives (20's-50's)	1	1
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
MUS 301, ART 360	3	3
SCI 301, Electives 300-400 level	3	3
EDCI 301-387	3	3
PSY 312, ECCD 461	3	3
ECCD 460, HEA 307	3	3
ENG 320 or LS 363	3	
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
EDCI 322, EDRD 424	3	4
ECCD 462 EDCI 321	3	3
ECCD 464 ECCD 472	3	9
HEED 450	3	
EDSE 465	3	
Electives (300-400 level)	3	
	18	16

CURRICULUM IN EARLY CHILDHOOD AND CHILD DEVELOPMENT (Associate Degree)

The Early Childhood and Child Development Associate Degree curriculum is a two-year program designed to prepare students for employment in nursery schools, day care centers, and preschool enrichment programs. The curriculum is competency based and can be credited toward the four-year program for a Bachelor of Science degree, if desired.

FRESHMAN YEAR	Credit Hours Fall	Spring
UCOR 100U	1	
ENG 101-102	3	3
SCI 121-122	4	4
ART 133 or MUS 131, HEA 151	2	2
ECCD 101, MATH 111	3	3
ECCD 201, CS 100U	3	3
PE 11-12 or AFROC	1	1
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
ECCD 260, SPCH 210 or 220	3	3
ENG 211-212	3	3
ED 201, PSY 242	3	2
HIST 201-202	3	3
ECCD 232-266	2	3
ECCD 251-252	3	3
	17	17

CHILD DEVELOPMENT ASSOCIATE TRAINING PROGRAM

In response to the increased need of the early childhood education and child care community in Middle Tennessee for quality preparation of staff, Tennessee State University during 1977-78 developed a training program related to the national Child Development Associate (CDA) competencies. These competencies serve as a guide to curriculum development and course offerings in the TSU CDA Program.

The curriculum and courses have been carefully designed to provide a practical training plan which meets the unique needs of in-service personnel. Flexible schedule and practically oriented instruction is offered while at the same time comprehensive coverage of the CDA

competency area is maintained. Individuals entering the program may proceed at their own pace in completing any of the 30-39 credit hours of courses available which they need.

Since the training plan is directly related to the national CDA competencies, students are prepared to apply for assessment by the national CDA Consortium and to seek award of the CDA Credential. Students, with assistance from their program advisor, determine the point during their program of training that their performance demonstrates the competency standards of the national CDA Consortium.

The national CDA competencies fall into six broad competency areas which are further defined into 13 functional areas. The functional areas provide definition of the indicators of competent performance. These competency and functional area definitions provide a foundation for the training program as well as assessment.

CDA training is competency based and is, therefore, unlike traditional approaches to professional training. CDA trainees may earn viable college credit before, during and following their involvement in the CDA assessment process. The CDA credential is awarded based upon demonstrated ability rather than solely upon courses taken or degrees awarded. Academic credit for CDA training is also awarded based upon demonstrated ability along with completion of commonly held standards for academic credit such as instructor-student contact, knowledge of subject, and course matriculation. The TSU CDA training program brings these two aspects of professional credentialing (academic and demonstrated professional standards) into a complementary relationship, fulfilling the six national CDA training criteria.

NATIONAL Criteria:

1. Training must be organized around the CDA competencies.
2. Fifty percent (or more) of the training must consist of supervised field experience.
3. Academic and field experiences must be integrated.
4. Training must accommodate individual strengths, individual needs and learning styles.
5. Scheduling must be flexible.
6. Valid, transferable college credit must be offered for both academic and field experiences.

The following course descriptions provide an outline of how the TSU CDA training program addresses each of these six criteria. The TSU training program is designed to meet the needs of preschool, early childhood, head start, and nursery school teachers, who work with children ages 3-5 years in the Middle Tennessee area. This approach to the total child care community allows for a comprehensive training program.

The CDA Course Curriculum is designed as a two year academic program. Students will enroll in two academic courses and two practicums on an average during the academic year (Fall and Spring semesters). All course offerings will be based on individual needs assessment and can be offered during any semester on an independent study or through arranged instructor-student contract.

First Year of Enrollment
ECCD 211
ECCD 212
ECCD 221
ECCD 222

Second Year of Enrollment
ECCD 231
ECCD 232
ECCD 241
ECCD 242

Summer Semester or Optional for the Second Year—Regular Semesters
ECCD 251
ECCD 252
ECCD 253, 254, or 255

Curriculum for Related Art Minor

A minor in Related Art may be elected by any student enrolled in the Department of Home Economics or in any major field within the University. Three options are available, students may select one of the following: Option I, Related Art Minor; (2) Option II, Interior Design Emphasis; or (3) Option III, Costume Design Emphasis.

Option I—Related Art Minor

Credit Required	Credit Hours
RA 201	3
CLT 203	3
RA 301	3
ART 300 or 411	3
RA 323	2
RA 350	2
RA 411	2
RA 421	3

Option II—Related Art Minor with Interior Design Emphasis

RA 323	2
AE 202	2
AE 302	3
RA 301	3
RA 201	3
RA 421	3
RA 411	2

Option III—Related Art Minor with Costume Design Emphasis

RA 201	3
RA 323	2
ART 122	3
CLT 203	3
RA 301	2
RA 421	3
RA 411	2

Substitute selections upon the advice of the Related Art instructor.

Careers with a minor in Related Art include (1) Advertising Artist, (2) Clothing Designer, (3) College or High School Teacher, (4) Color Coordinator, (5) Consumer Information Specialist, (6) Costume Designer, (7) Crafts Instructor, (8) Department Store Buyer, (9) Display Designer, (10) Extension Specialist, (11) Fabrics Coordinator, (12) Fashion Illustrator, (13) Interior Decorator, (14) Magazine Editor, (15) Package Designer, (16) Product Developer, (17) Textile Designer, (18) Therapist, (19) Visual Aids Specialist, (20) Kitchen Planner, (21) Utility Home Economist, (22) Lighting or Laundry Consultant, (23) Equipment Designer, (24) Consumer Consultant, and (25) Research Specialist.

COURSE OFFERINGS

Early Childhood, Child Development, and Family Relationships (ECCD)

ECCD 101 Freshman Practicum (3) A study of staff roles in a variety of pre-school programs for children in Middle Tennessee. The first half of the semester will be spent in observation, the second in a practicum as aide functioning in a variety of roles.

ECCD 166 Observations and Internship. (2) Course provides opportunities for observation and practice work in pre-school programs for young children.

ECCD 201 Principles and Concepts of Child Development. (3) A study of the basic principles and concepts of growth and development which serve as a foundation in understanding children.

ECCD 211 Problems in CDA Competency Area I. (3) Individualized study for early childhood caregivers in setting up and maintaining safe and healthy learning environments for young children. Must be taken in conjunction with ECCD 212 or by consent of instructor.

ECCD 212 Practicum: Safe, Healthy Learning Environments. (3) Caregivers demonstrate ability to set up and maintain safe and healthy learning environments for young children. Consent of instructor.

ECCD 221 Problems in CDA Competency Area 2. (3) Individualized study for caregivers in learning to advance the physical and intellectual development of young children. Consent of instructor.

ECCD 222 Practicum: Physical and Intellectual Competency. (3) Caregivers demonstrate ability to advance the physical and intellectual development of young children. Consent of instructor.

ECCD 231 Problems in CDA Competency Area 3. (3) Individualized study for caregivers building positive self-concept and individual strength in young children. Must be taken in conjunction with ECCD 232 or by consent of instructor.

ECCD 232 Art for Young Children. (2) Course includes self-directed activities in art and creative play experiences.

ECCD 232 (CDA) Self Concept and Individual Strength. (3) Caregivers demonstrate ability to build positive self-concept and individual strength in young children. Consent of instructor.

ECCD 241 Problems in CDA Competency Area 4. (3) Individualized study for caregivers in organizing and sustaining the positive functioning of young children and adults in a group in a learning environment. Must be taken in conjunction with ECCD 242 or by consent of instructor.

ECCD 242 Practicum: Positive Functioning of Children and Adults in a Group. (3) Caregivers demonstrate ability to organize and sustain the positive functioning of young children and adults in a group in a learning environment. Consent of instructor.

ECCD 251 The Young Child. (3) A contemporary modularized course of instructions designed to familiarize students with the philosophy and basics of child development and to increase their competencies in working with children. Outside experiences, guest lectures, and multimedia approaches are arranged.

ECCD 251 (CDA) Problems in CDA Competency Areas 5 and 6. (3) Individualized study for caregivers in coordinating home and center and carrying out supplementary responsibilities. Must be in conjunction with ECCD 252 or by consent of instructor.

ECCD 252 Observation. (3) Observation in nursery school, kindergarten, and other preschool programs for young children.

ECCD 252 (CDA) Practicum: Home, Center and Supplementary Responsibilities. (3) Caregivers demonstrate ability to establish positive and productive relationships with parents; encourage parents to participate in the center's activities, policies, and rules. Consent of instructor.

ECCD 253 Internship in Infant Programs. (2) Observation and participation in infant laboratories.

ECCD 253-254-255 (CDA) Problems in Providing Care for Young Children (3) Individualized experiences for early childhood caregivers. Consent of instructor.

ECCD 266 Internship in Early Childhood and Child Development. (3) Course provides participation and field work in community nursery schools and other preschool programs for young children.

ECCD 331-333-334 Internships for Trainers. (3) Individualized internship experiences for persons interested in providing child caregiver training. Consent of instructor.

ECCD 332 Creative Arts for Young Children. (2) An interpretation and involvement with (1) art learning activities, (2) self-directed activities, and (3) integrated activities with emphasis on the role of creative play.

ECCD 351 The Young Child and His Family. (3) A contemporary based modularized course of instruction designed to familiarize students with the basic of child-development and to increase their competencies in this area. Outside experiences, guest lectures and multi-media approaches are combined with regular classroom instruction to make a wide range of information available to students. The areas of concentration include the philosophy of child development, pregnancy and birth, and the development of the physical, mental socio-emotional and language characteristics of the child.

ECCD 352 Nursery School Observation. (3) Observation in nursery school along with Course 351. Required only of students concentrating in Child Development and Family Relationships.

ECCD 353 Infant Clinic. (3) A course designed to address the human development process from birth to 2 years of age and the relative influences of socialization and the environment. Emphasis is placed on the various theories and curricula being followed in quality day-care programs for infants.

ECCD 371 Methods and Techniques in Teaching Family Relationships. (1) Concerned with methods and techniques of teaching family-social relationships. Attention is given to new materials and equipment currently being used by the federal government in various programs concerned with family life.

ECDD 452 Planning and Administrating Day Care Programs. (3) A course designed to familiarize students with the operational procedures of day care programs. Emphasis will be placed on providing students with practicum experience relating to administering and supervising personnel, managing budgets, developing computer programs, etc.

ECCD 460 Early Childhood Curriculum I. (3) A study of curricula planning in Early Childhood Education includes writing general goals and behavioral objectives for lesson plans.

ECCD 461 Nursery School and Kindergarten Methods and Materials. (3) Includes methods, materials and modern trends on teaching in the nursery school and kindergarten. Organization, equipment and housing in child care centers and public kindergartens are studied based on the developmental levels of children.

ECCD 462 Early Childhood Education Curriculum II. (3) Students will study a variety of Early Childhood Education programs and will be involved in constructing and evaluating curricula in a workshop situation.

ECCD 463 Family Relationships. (3) Problems in family life. A study of modern family life, giving special emphasis to the needs and activities of individuals as they relate to the development of the family throughout the life cycle.

ECCD 464 Later Periods of Childhood. (3) A study of the development of the child from later pre-school to adolescence (5-12) years. Open to men and women of all schools. Prerequisite: ECCD 351.

ECCD 465 Parenting/Practical Steps to Childrearing. (3) This course outlines and examines contemporary problems of childrearing in today's complex and turbulent society. The course focuses on systematic and scientific methods of parenting. Emphasis is placed on improving the parent-child relationship through appropriate parenting procedures. Subject areas to be examined are: child abuse; socialization practices among various cultures, myths and misconceptions about effectiveness of punishment; the rights of children, and principles of behavioral modification; parents of children with special needs, i.e., abnormal development, minimal brain disfunction, and learning disabilities.

ECCD 466 Internship or Fieldwork in Child Development. (9) Opportunity is given to students to do practice work in nursery schools in the community and other agencies caring for children as well as the campus practice laboratory. Taken with approval of the coordinator of Child Development and Family Relationships.

ECCD 472 Observation and Student Teaching. (9) Experiences of supervised observation and teaching in the public schools are provided.

Clothing and Textiles (CLT)

CLT 111 Textiles. (3) Consumer-oriented study of textiles, emphasizing fibers, yarns, fabric construction, finishes and socio-economic background of the textiles and apparel industry in relation to end use.

CLT 112 Cultural and Functional Concepts of Clothing and Textiles. (3) An interdisciplinary study of clothing including cultural patterns, behavioral interactios, changing needs, technological developments and acquisition of clothing.

CLT 203 History of Costume. (3) The history of costume from ancient times to the present and the influence of social and economic conditions upon costume. Open to all students. One lecture and one laboratory period.

CLT 211 Elementary Clothing Construction. (3) Principles of clothing construction are applied to cotton, linen and synthetic fabrics. Use and care of sewing machines, sewing skills, and wardrobe inventory included. Open to all students. One lecture and two laboratory periods.

CLT 300 Intermediate Clothing Construction. (3) Principles of clothing construction are applied to synthetic blended fabrics. Use of commercial patterns, principles of fitting and the use and care of sewing machines included. Prerequisite: CLT 211

CLT 302 Clothing of the Family. (3) A study of the physiological, psychological, and aesthetic aspect of clothing for the family. Based on the needs of the students interested in child development, family relationships, teaching or social work. The study of family clothing problems from the standpoint of income, occupation, and health as well as aesthetic and psychological

factors affecting all family members. Open to all students. Two lectures and one laboratory period.

CLT 312 Applied Dress Design. (3) Features the application of the elements and principles of design as they relate to clothing. Emphasis is placed upon problem solving and the functional, structural and decorative aspects of apparel design. Prerequisite: RA 301.

CLT 320 Needlecraft (3) A study of the fundamental techniques of knitting, crocheting, embroidery and lacemaking. Open to all students. One lecture and one laboratory period.

CLT 321 Advanced Clothing. (3) Deals with advanced construction methods. Emphasis is placed on selection, construction, and care of woolen garments. Prerequisite: examination in construction skills. Juniors and seniors only.

CLT 322 Flat Pattern Adaptation. (3) A study of the principles and techniques of flat pattern design with application of these principles to commercial pattern alteration. The development of original designs emphasized.

CLT 401 Problems in Clothing and Textiles. (3) Special problems in the details of clothing construction, selection, and textiles selected and solved by the students.

CLT 403 Clothing Economics. (3) A study of clothing as it relates to the consumer of clothing and textiles. Emphasis is placed on changing needs and desires, trends in clothing expenditures, legislation and care.

CLT 413 Dress Design and Draping. (3) A course in dress design with emphasis on originality and draping. Opportunity given to investigate sources of design and to practice various methods of designing. Prerequisites: CLT 321. One lecture and two laboratory periods.

CLT 414 Fashion Merchandising Seminar. (3) Problems in various aspects of buying of fashion. A study of the planning involved in marketing of merchandise and computer applications in retailing.

CLT 415 Clothing and Textiles Internship. (3-6) Internship is a temporary period of supervised work experience which provides the student an opportunity to apply theoretical knowledge to a work situation. Internship is designed to give students supervised work experience in an area of clothing and textiles. Prerequisites: (1) junior level or above in Home Economics, (2) the student must have a job in clothing and/or textiles retailing or merchandising, and (3) instructor's written approval.

CLT 462 Honors Clothing and Textiles. (3) An intensive study of the sociopsychological, technology and anthropological aspects of clothing and textiles.

Foods (FDS)

FDS 111 Food Preparation and Meal Management. (4) A study of foods from harvest to service. Consideration of economics, grade standards, sanitation, preparation and nutritional quality is included. The planning, preparation and service of nutritious, attractive meals for different occasions is also emphasized. The planning, preparation and service of nutritious attractive meals at various cost levels for different occasions with emphasis on the conservation of time, energy and money.

FDS 311 Experimental Foods. (3) A study of the scientific principles of food preparation. Emphasis is placed on deviations from the norm and causes. Lecture and laboratory. Prerequisite: Chem 121 and 122.

FDS 312 Experimental Foods. (3) Opportunity is provided for advanced individual study in experimental foods. Sensory evaluation of food products is emphasized.

FDS 313 Institution Equipment. (3) Includes study of the kinds, selection, care, cost, and maintenance of individual pieces of equipment.

FDS 321 Food Preservation. (3) A study of conventional and new methods of preservation. Some laboratory work is done in freezing and canning of foods. Two lectures and one laboratory period.

FDS 352 Food Demonstration. (3) A study of the principles and techniques involved in food demonstration and the use of related equipment as applied to the needs of extension, business, classroom and community teaching.

FDS 412 Quantity Cookery. (3) A study of methods of purchasing and storing foods in quantity, organization of labor, standards of work materials, and meal planning and preparation in large quantities. Some experience is gained in the University Cafeteria or other food facility. One lecture and two laboratory periods.

FDS 452 Organization and Management. (3) Includes a study of institutional food departments, professional ethics and qualifications for managers, employment procedures, personnel schedules and financial records. Also includes menu analyses, the development of standardized recipes, standardized work procedures, and computer applications in the food service industry.

Nutrition (NTR)

NTR 211 Elementary Nutrition. (3) A general course in nutrition. A study of basic nutrition facts, relation of nutrition to health, nutritional needs throughout the life cycle, and the relation of economic, sociological, psychological and cultural factors to the food intakes of individuals or groups.

NTR 301 Basic Nutrition Principles. (3) A study of nutrition and its relationship to health. Emphasis is placed on functions, sources and deficiency symptoms for the various nutrients.

NTR 311 Applied Dietetics. (3) The application of basic nutrition principles to life situations. Includes the study of current issues in nutrition, fad diets, and nutritional status. Prerequisite: NTR 211 or 312.

NTR 312 Nutrition for Elementary and Secondary Teachers. (3) A general course in nutrition and its relation to health.

NTR 411 Advanced Nutrition. (3) A study of chemical physiological factors in digestion, absorption, and metabolism of nutrients. Reports of recent research and their relation to problems of human nutrition are studied. Prerequisite: NTR 211.

NTR 433 Child Nutrition. (3) The study of nutrition as it relates to children from prenatal life through adolescence. Prerequisite: NTR 211.

NTR 453 Diet Therapy. (3) A study of the modifications of the normal diet in the treatment of disease, food and drug interactions, and the role of the dietitian in health care. Prerequisites: NTR 211, 311.

NTR 462 Honors Foods and Nutrition. (3) Individual directed study and investigation involving techniques used in and nutrition research and food service management.

Family Economics and Home Management (HMGT)

HMGT 320 Household Equipment. (3) Deals with the various types of household equipment, standard brands, their selection and care, and the study of problems concerned with the manufacture, marketing and servicing of the equipment of the home.

HMGT 321 Home Management Theory and Decision Making. (3) A study of the management process and how it can be applied to utilize most effectively the specific resources of the individual and family. Attention is given, not only to the traditional resources—money, time and energy—but also to the interests, abilities, and decision making skills of the individual.

HMGT 322 Economics for the Family. (3) Principles and problems associated with production, exchange and use of wealth and their direct relation to the welfare of families.

HMGT 401 Management for the Low Income Family. (3) Deals with problems of families with very low income and those receiving welfare checks; how to get the most value from food stamps and free commodities. Field trips are arranged where actual conditions can be studied.

HMGT 422 Home Management Residence. (3) Designed to integrate the homemaking knowledge, abilities, and skills gained from previous courses and in other ways; to develop an awareness and some understanding of the components which make up the whole of management, such as goal defining, resource allocation and decision making. Prerequisite: HMGT 321. Cannot be blocked with student teaching.

HMGT 433 Consumer Education. (3) Includes the consumer activities in the marketplace and the financial world. Emphasis is given to the most important areas in which students will function as consumers.

Home Economics Education (HEED)

HEED 101 Home Economics as a Profession. (1) An orientation course required of all home economics majors. Designed to acquaint students with home economics professions and to the life of the University. Special emphasis is placed on the philosophy and legislative background of home economics in relation to its contributions to both general and professional education. One lecture.

HEED 312 Introduction to Vocational Education. (3) An introductory course specifically oriented to the philosophy and objectives of vocational education and the role of home economics in relation to it. Special emphasis is given to the study of consumer and homemaking and occupational home economics as major aspects of home economics in vocational education and the Vocational Education Acts.

HEED 371 Teaching Home Economics. (3) Emphasis is placed on the organization and administration of the school and the place of home economics within the school organization, the vocational homemaking program, the Vocational Education Acts, and the introduction to teaching strategies and tactics. Opportunity is provided for experimentation and operation of materials and teaching aids. Emphasis is placed on program planning for youth organizations, adult groups and home experiences. Supervised observation is required.

HEED 372 Special Problems in Home Economics Education. (3) Course is designed for individual and group projects focused on recent research findings and general depth in subject matter. A critical analysis of personal and academic problems related to teacher preparation will be undertaken.

HEED 373 Home-School-Community Programs in Vocational Home Economics. (2) Course is based on interpretation and requirements of federal, state, and local regulations in relation to vocational home economics.

HEED 387 Problems of the Curriculum and Teaching. (3) A study of the reorganization, construction, and administration of the home economics curriculum, specifically those under vocational education legislation. Attention is given to the historical analysis of home economics, the bases of curriculum planning, the competency-based approach, development of modules, interaction analysis and micro-teaching.

HEED 443 Occupational Home Economics Education. (3) Designed primarily for teachers and school personnel in Vocational Education. The course deals with (1) philosophy, legislative background, theory, and development of programs in pre-occupational home economics education; (2) the identification and application of research in problem solving; and (3) decision making concepts applied to program design and implementation.

HEED 450 Senior Project Writing. (3) Instructs the learner in techniques of professional writing, literature searching, and abstracting scientific material or incorporation of area-special concepts into an original project with an accompanying written component. Completion of acceptable project required. Open to all departmental majors.

HEED 458 Field Experience and Internship in Occupational Care and Guidance of Children. (2) Supervised experiences are provided for internship in actual work experiences in industry. Course includes class seminars.

HEED 459 Field Experiences and Internship in Clothing Management, Production, and Service. (2) Supervised experiences are provided for internship in actual work experiences in industry. Course includes class seminars.

HEED 460 Field Experiences and Internship in Food Management, Production, and Service. (2) Supervised experiences are provided for internship in actual work experiences in the food service industry.

HEED 461 Educational Leadership in Adult Education. (3) Philosophy, organization, and administration of home economics programs for adults and out-of-school youths. Interests and needs of various age and social groups are studied in relation to methods and materials effective in group work. Findings of latest research and educational media such as radio and television are emphasized. Three lectures.

HEED 472 Observation and Student Teaching in Home Economics. (9) Experiences of supervised observation and teaching in the public school in Tennessee as provided. Problems of organization and supervision basic to induction of teachers into the profession are explored. Supervised teaching is performed in off-campus teaching centers on a full-time basis for a period of nine weeks. Course is designed for both consumer and homemaking teacher education and for occupational home economics programs.

HEED 473 International Travel. (3) Study tour of European cultural centers, museums, and historical sites designed to develop an appreciation of the historical and cultural contributions of these countries. Visits include: England, France, Italy, Germany, Switzerland, Spain, Holland, and Portugal.

HEED 474H Honors Home Economics Education. (3) Individual directed study and investigation based on Theoretical Principles, Philosophy, and Research in Home Economics Education.

Related Art (RA)

RA 201 Environmental Design. (3) Creative problems in design and color with emphasis on the element and principles of art as applied to the home and individuals; two and three dimensional forms in design; varied materials and techniques. Emphasis on awareness of design. Lab-lecture.

RA 301 Costume Design. (3) An analysis of historic and contemporary trends and practical problems in costume design; the art of dress as a cultural expression; basic design elements and principles applied to dress; problems to develop originality and techniques in costume design and illustration; costume rendering and layout. General prerequisites: RA 201 and CLT 211. Prerequisites for Clothing and Textile majors: RA 201, CLT 203

RA 323 Spatial Living I. (2) Design in home planning; study of space relationship for family living; housing (including furnishings) in relation to design and environment.

RA 350 Studio Design Laboratory. (2) Design for students who experiment with art studio problems, related art problems, design inspiration and media with guidance of instructor.

RA 400 Spatial Living II. (2) Historical and contemporary interiors ... traditional and modern; classic Asian, European and current influences; contemporary.

RA 411 Textile Design. (2) Original design developed in resist and print methods using historic and contemporary techniques.

412 Art Crafts. (2) Designing and executing art craft using inexpensive materials and tools, relationship of design to function, materials, tools and techniques; understanding educational, economic, social, recreational and therapeutic art craft work. Creative objects of original design. Lab-lecture.

RA 421 Interior Architecture. (3) Problems in designing for living; integration of structural concepts; design in relation to site, house and interior environment; selection and coordination of furniture, fabrics, materials, accessories in interior space laboratory. Prerequisite: RA 201 and 323. Lab-lecture.

DEPARTMENT OF PLANT SCIENCE
Kenneth J. Hillsman, Ph.D., Head

The Department of Plant Science is designed primarily to acquaint students with the principles of Plant and Soil Science, the conservation of the renewable natural resources, and the use and care of ornamental plants. The curriculums are designed to give students a broad knowledge of the theories and principles of agronomic and horticultural sciences.

The Department offers curriculums leading to a Bachelor of Science degree in Plant Science with options in Agronomy and Ornamental Horticulture. The options contain adequate flexibility in course requirements to permit the structuring of a program best suited to the individual.

To satisfy the requirements for a degree in Plant Science, the student must complete a minimum of 24 credit hours in a major field, with a minimum of 10 hours in 300 and 400 level major field courses. A student is eligible for graduation when 132 semester hours have been completed with a minimum cumulative grade point average of 2.0. A student who desires to minor in Plant Science must complete a minimum of 18 hours in the Department.

Graduate students may pursue studies in Plant Science leading to the Master of Science degree in Agricultural Sciences. A description of these requirements can be found in the Graduate School Bulletin.

OPTION IN AGRONOMY

The curriculum in Agronomy is designed to offer principles and experience which

will prepare students for successful competition in the agronomic sciences and the conservation of the renewable natural resources.

FRESHMEN YEAR	Credit	Hours
Course & Number	Fall	Spring
Eng 101; 102	3	3
Hist 201; 202	3	3
Math 111; 112	3	3
AGR 102; 210	3	4
Art 133; Mus 131	2	2
PE	1	1
UC 100U	1	
	16	16

SOPHOMORE YEAR	Credit	Hours
Course & Number	Fall	Spring
Eng 211; 212	3	3
Chem 121; 122	4	4
AGR 301; 202	3	4
AS 101; Soc 330	3	3
CS 100U	3	
PE	1	1
	17	15

JUNIOR YEAR	Credit	Hours
Course & Number	Fall	Spring
ENG 300; 301	3	3
AGR 311; HRT 360	3	3
AGR 321; 300	3	3
AS 301; 311	3	3
RD 311; HRT 300 or 400	3	3
Electives 300 & 400 levels	3	3
	18	18

SENIOR YEAR	Credit	Hours
Course & Number	Fall	Spring
Chem 360; AGR 350	4	3
RD 301; 302	3	3
AGR 400; 401	3	4
AGR 411; 412	1	1
AGR 450; 322	3	3
Electives 300 & 400 level	3	1
	17	15

OPTION IN ORNAMENTAL HORTICULTURE

The curriculum in Ornamental Horticulture is designed to offer a program of study whereby students will receive training in urban horticulture disciplines (floriculture, greenhouse management, flower arrangement, etc.).

FRESHMEN YEAR	Credit	Hours
Course & Number	Fall	Spring
Eng 101; 102	3	3
Hist 201; 202	3	3
Math 111; 112	3	3
Art 133; Mus 131	2	2
AGR 102; HRT 200	3	3
PE	1	1
UC 100U	1	
	16	15

SOPHOMORE YEAR	Credit	Hours
Course & Number	Fall	Spring
Eng 211; 212	3	3
Chem 121; 122	4	4
AS 101; Soc 330	3	3
HRT 340; AGR 202	3	4
CS 101U	3	
PE	1	1
	17	15

JUNIOR YEAR	Credit	Hours
Course & Number	Fall	Spring
AGR 300; 322	3	3
AGR 321; 350	3	3
Chem 360; HRT 372	4	3
HRT 360; AS 300 or 400 level	3	3
RD 311; AS 300 or 400 level	3	3
Electives 300 or 400 level	3	
	16	18

SENIOR YEAR	Credit	Hours
Course & Number	Fall	Spring
AGR 411; 412	1	1
AGR 400; 450	3	3
HRT 450; 451	3	3
RD 301; 302	3	3
HRT 400; 452	3	3
Electives 300 & 400 levels	5	4
	18	17

COURSE DESCRIPTION

AGRONOMY (AGR)

AGR 102. Plant Science. (3) A one semester, introductory course in Plant Science that exposes students to the principles of crop science, horticulture, and conservation of the renewable natural resources. Two lectures and one laboratory period per week.

AGR 202. Soil Science. (4) A study of the origin, structure, general nature of soil and the factors related to soil fertility, maintenance, and fertilizer practice. Three lectures and one laboratory period.

AGR 210. General Agriculture Botany. (4) Designed to provide a broad understanding of the fundamental facts and principles of botanical science. Three lectures and one laboratory period.

AGR 300. Plant Physiology. (3) Application of plant physiological principles to seed plants with special emphasis on photosynthesis, respiration, absorption, transpiration and nutrition.

AGR 301. Crop Science. (3) A general study of the distribution culture, use and climatic adaptation of the major agronomic crop plants. Two lectures and one laboratory period.

AGR 302. Soil and Water Conservation Engineering. (2) A study of the factors affecting runoff and erosion. Design and layout of soil conservation practices. Two laboratory periods. Required for persons interested in Soil Conservation Service Cooperative Education.

AGR 311. Elementary Classification. (4) An introductory study of the principles of soil classification and land judging. Required of majors in Agronomy. Prerequisites: AGR 202. Three lectures and one laboratory period.

AGR 320. Economic Entomology. (3) Provides a brief review of the structure, morphology, controls and the recognition of economic insects as related to agriculture. Two lectures and one laboratory period.

AGR 321. Farm Weeds and Their Control. (3) A one semester course work on the identification, eradication, and economic value of the important weeds of fields and pastures. Elective for any department. Two lecture and one laboratory period.

AGR 322. Plant Pathology. (3) A study of the diseases of the most important agricultural plants of Tennessee and the South. Emphasis on the nature of the disease, recognition and control measures. Two lectures and one laboratory period.

AGR 350. Plant Breeding. (3) Application of genetic principles to the improvement of economic crop plants; methods and procedures of plant breeding. Two lectures and one laboratory period.

AGR 400. Legumes and Pastures. (3) Provides information on the important legumes. Adapted to the climate of Tennessee and characterizes the Forage and Pasture Programs of Tennessee. Two lectures and one laboratory period.

AGR 401. Soil and Water Conservation and Management. (4) A study of the principles of tillage, drainage, fertilization and rotation practices as they affect the productive capacity of field soils. Three lectures and one laboratory period.

AGR 402. Advanced Soil Fertility. (4) A study of dealing with the determination of nutrient deficiencies in soil and plants in rapid methods and recommendations of corrective measures. Prerequisites: AGR 202, CHEM 121, 122. Two lectures and one laboratory period.

AGR 411-412. Seminar. (1-1) Includes the discussion of current topics, lectures and demonstrations in Agronomy and related areas.

AGR 450. Senior Project. (3) Required of all Plant Science majors.

HORTICULTURE (HRT)

HRT 200. Vegetable Gardening. (3) A basic study of the principles and practices of vegetable production. Two lectures and one laboratory period.

HRT 201. Principles of Fruit Growing. (3) A study of the principles and practices involved in the culture of orchard plants. Two lectures and one laboratory period.

HRT 202. Landscape Design. (3) An elementary course in landscape design for small properties.

HRT 204. Ornamental Horticulture. (3) An elementary course of principles and practices involved in the production of flowers and ornamental plants. Two lectures and one laboratory period.

HRT 340. Propagation of Horticultural Plants. (3) A study of the methods of propagation of horticultural plants including seeding, cuttage,

and grafting of both economic and ornamental plants. Two lectures and one laboratory period.

HRT 352. Floriculture. (3) A course dealing with the principles underlying culture of greenhouse crops, commercial cut flowers and house plants.

HRT 360. Forestry. (3) A study of forest conservation and management and the relation of forestry to agriculture, including the influence of the forest on climate, stream flow and erosion. Two lectures and one laboratory period.

HRT 372. Landscape Plants and Design. (3) A study of landscape composition dealing with the designing of small lots, city property, public grounds and large estates. The use of ornamental plants such as trees, shrubs and flowers and their identification.

HRT 400. Greenhouse Operation and Management. (3) An elementary course of principles involving greenhouse site selection, types of structure, covering materials, heating and cooling systems and cultural practices for producing flowers and ornamental plants. Two lectures and one laboratory period.

HRT 401. Growth, Development and Processing of Vegetables. (3) A study of breeding procedures in establishing a new strain and variety of vegetables and the processing and grading of vegetables for the market.

HRT 452. Urban and Off-Farm Plant Science. (3) A study of involving nuresery establishment and management, flowers and shrub production and marketing the care of house plants. two lectures and one laboratory period.

HRT 402. Growth, Development and Processing of Fruits. (3) A study of breeding procedures in establishing new strains and varieties of vegetables and the processing and grading of fruits for the market. Two lectures and one laboratory period.

HRT 450. Turf Management. (3) This course will deal with establishing lawns, soil preparation, seeding, watering, fertilization, clipping, and general management. Corrective measures in established lawns. Care of golf course greens.

HRT 451. Floral Design. (3) A course dealing with essentials of flower arrangement. One lecture and two laboratory periods.

API 400. A course involved in bee establishment and management.

PLS 480. Special Problems. (3-8) A course designed to give students experience in the various endeavors of Plant Science, including working in industry.

DEPARTMENT OF RURAL DEVELOPMENT

Gul M. Telwar, Ed.D., Head

The Department of Rural Development offers major programs leading to the degree of Bachelor of Science in Rural Development with five options: (1) Agribusiness & Agricultural Economics, (2) Community Resources Development, (3) Agricultural Education, (4) Agricultural Engineering and (5) Applied Statistics.

The major objective of the Department is to provide broad applied training for people who wish employment working with rural people or agricultural industries. The curriculum in Rural Development provides for a liberal, interdisciplinary education about rural affairs coupled with training of a problem-solving nature and in teacher education for secondary school vocational agriculture teacher certification. In addition to rural development courses students are expected to select course work in applied economics, sociology, communication, selected technical areas, and standard University course requirements for graduation. However, because of the training goals of the Department, individual students plan their curriculum in advisory sessions with the faculty to meet their personal career goals.

The applied problem solving training in the Department is designed to provide students with skills useful in employment in community resource development, extension, general agricultural extension, vocational agricultural teaching, community planning offices, governmental agencies such as Farmers Home Administration, the Agricultural Stabilization and Conservation Service, and the Economic Statistics and Cooperative Service, and with private companies in sales and middle management positions. Students with definite career goals in private agriculturally related businesses will be counseled to select a minor in business management and accounting.

CURRICULUM FOR A MAJOR IN RURAL DEVELOPMENT

FRESHMAN YEAR Course & Number	Credit Hours Fall	 Spring
RD 111, AgEn 102	1	3
RD 201, 202	3	3
Math 111	3	
Eng 101, 102	3	3
Art 133, Mus 131	2	2
AS 201, 202	3	3
PE or AFROT	1	1
	16	15
Total hours	31	

SOPHOMORE YEAR Course & Number	Credit Hours Fall	 Spring
Sci 121, 122	3	3
Eng 211, 212	3	3
Hist 202, 202	3	3
RD 200,	3	
RD 301, 302	3	4
Agr 102, Agr 202	3	3
	18	16
Total hours	34	

JUNIOR YEAR Course & Number	Credit Hours Fall	 Spring
AgEn 301, 302	3	3
RD 311, 312	3	3
RD 303, 304	3	3
Agr 210, FT 303	3	3
Electives (300-400)		
Option I or II)	3	6
	15	18
Total hours	33	

SENIOR YEAR Course & Number	Credit Hours Fall	 Spring
RD 401, 402	3	3
AgEn 400, RD 450	3	3
RD 403, 404	3	3
Electives		
Option I or II	9	9
	18	18
Total hours	36	

Option I, II, V (Agri-business & Agricultural Economics, Community Resources Development & Applied Statistics)

SW 320, 340, 430
Econ 211, 212, 311, 312; MG 215
Math 161, 162

Option III, IV (Required courses for certification in Agricultural Education, Agricultural Engineering)

ED 201, 301, 387, 465, 491
PSY 242, 312
AgEd 301, 301A, 302, 302A, 472

COURSE OFFERING

Rural Development (RD)

RD 111. Orientation (1) Careers in Agriculture.

RD 200. Mathematical Foundations for Statistics A survey of elementary methods of handling and understanding data used in Economics and Statistics. Basic algebra including logarithm, proportions, exponents and radicals; matrices, degrees of freedom permutations, probability and measures of dispersion are covered. Graphic and tabular presentation of data.

RD 201. Introduction to Rural Economics (3) Application of principles and methods of economics to the rural economy with an emphasis on agriculture including the organization, management, marketing, and finance of rural enterprises, and evaluation of politics, programs and institutions.

RD 202. Community Development (3) Analysis of the function, structure, practices and trends of the contemporary community.

RD 301. Agricultural Marketing (3) An understanding of the operations of food marketing (theory of marketing) and a familiarity with many of the descriptive and factual aspects of food marketing.

RD 302. Farm Management (4) Organizational planning and operating farm business to make the most effective use of available resources and procedures for making economic decisions.

RD 303. Rural Finance (3) An examination of the rural credit institutions and the role of credit in the development of rural economics.

RD 304. Cooperatives (3) A study of the history and present status of cooperatives; what they have done and tried to do for communities, their problems, finance and control.

RD 311. Introduction to Applied Statistics I (3) Basic concepts and principles of measurements, data collection, scientific investigation, and survey design. Topics include statistical measures of central tendency and dispersions, probabilities, normal and other distributions, tests of significance, regression and correlation, analysis of variance and index numbers. Prerequisite: Six hours of college math.

RD 312. Sample Survey Theory and Techniques. (3) A practical course in conducting, analyzing, and summarizing surveys. Includes review of probability, distribution, and statistical measures; simple random sampling, stratified, systematic and cluster sampling, multiframe, objective measurement, and enumerative surveys; sampling and non-sampling errors. Questionnaire design and enumeration techniques are included. Prerequisite: RD 311.

RD 401. Community Development (3) Analysis of the meaning, structure and function of community development with emphasis on the factors important in community change.

RD 402. Community Resources, Organization and Problems (3) Planning and management of resources, understanding of the principles and forces of change most pertinent to community organization and problems in development of rural areas.

RD 403. World Agricultural Development (3) Role of Agriculture in Economic Development. Survey of lesser developed nations with special emphasis on Africa.

RD 404. Experimental Design (3) Includes review of scientific investigation principles and statistical inference. Subjects include analysis of variance and covariance, non-parametric and analysis, multiple comparison test and experimental designs. Designs cover are randomized block, balanced block, latin square, factorial, split plot, rectangular latice and augmented. Greater emphasis placed on logic rather than on mathematics. Prerequisite: RD 311.

RD 450. Senior Project (3) A study and discussion of senior projects on which students have been working (under direction) for at least one semester.

Agricultural Education (AGED)

AgEd 301. Adult Education in Agriculture/ Agribusiness (3) Administering, planning, organizing, and arranging courses and programs for adults in agriculture/agribusiness.

AgEd 301A. Intra-Curricular and Related Activities in Agriculture Education (3) Planning and supervision of agricultural experience programs and youth organizations; establishing and maintenance of necessary reports and records; development and use of instructional materials; operation and use of audio and visual equipments.

AgEd 302. Methods of Teaching and Management in Vocational Agriculture (3) A study of teaching methods, materials, and concepts of classroom management for teaching vocational agriculture. Emphasis will be placed on developing a program of vocational agriculture/ agribusiness that will relate to a total school; agricultural business and/or industry's program.

AgEd 302A. Methods of Teaching Agricultural Mechanics (3) Developing agricultural mechanics programs, application of methods, practices, and skills; study of shop layouts; equipment, organization and laboratory exercises. Two lecture—One lab.

AgEd 472. Student Teaching in Agricultural Education (10) A supervised experience in teaching vocational agriculture. Offered in off-campus centers. Prospective teachers will receive experiences in all phases of the program. Prerequisite: AgEd 301, 302 or consent of the instructor.

Agricultural Engineering (AGEN)

AgEn 102. Introduction to Agricultural Engineering (3) The fundamental principles of agricultural power and machinery; agricultural arc and acetylene welding; agricultural structures; soil and water conservation, and agricultural uses of electricity. One lecture—Two laboratory periods.

AgEn 301. Agricultural Power and Equipment (3) Basic power units and machine elements; principles of selection, operation and maintenance of field machinery; farm materials handling and processing equipment. One lecture—Two lab periods.

AgEn 301A. Agricultural Mechanics Shop (3) Shop planning and organization; bench work; agricultural carpentry, concrete and masonry; plumbing; repair and reconditioning farm machinery, and electrical equipment operation and maintenance. One lecture—Two lab periods.

AgEn 302. Rural Home Construction, Mechanics and Maintenance (3) Basic home construction; theories of heat, light and electricity in relation to the home, including operation, maintenance and repair of equipment. Two lecture—One lab.

AgEn 400. Agricultural Engineering Special Problems (3) Supervised laboratory or field work research of a problem in agricultural engineering. Written project outline and report of results required.

AgEn 401. Agricultural Buildings (3) Planning, location, selection of material, methods and costs of construction, water systems, and sewage disposal. Two lecture—one lab.

Rural Development Faculty & Staff

F. S. Bagi. B.S. & M.S.—Punjab Agricultural University. Ph.D.—Ohio State University, Associate Professor—Research, Department of Rural Development.

Rex Butler. B.S.—Baker University, Balwin, Kansas. M.S.—Kansas State University.

Sammy Comer. B.S. & M.S.—Tennessee State University, Assistant Professor, Rural Development.

B.N. Hiremath. B.S.—University of Agricultural Sciences—Bangalore, India; M.S.—G.B. Pant University of A&T—Pantnagar, India and Tennessee State University; Ph.D.—University of Kentucky—Lexington, Kentucky, Agricultural Economist.

Surendra P. Singh. B.S. & M.S.—Agra University. Ph.D.—The Pennsylvania State University, Associate Professor, Department of Rural Development.

Gul M. Telwar. B.S.—University of Kabal. B.S. & M.S.—University of Wyoming. Ph.D.—Oklahoma State University, Professor and Head of the Department of Rural Development

SCHOOL OF ALLIED HEALTH PROFESSIONS

Andrew Bond, Ph.D., Dean

The School of Allied Health Professions is jointly supported and administered by Meharry Medical College and Tennessee State University. The purpose of the School is to offer educational programs designed to produce practitioners and prepare individuals who are interested in pursuing careers as educators in the health professions; to encourage, develop and support interest in research; and to provide health care, when appropriate, and continuing educational services to the community. This threefold purpose is consistent with the stated missions of both the Tennessee State University and Meharry Medical College.

The specific objectives of the School of Allied Health Professions are as follows:

1. To develop and implement educational programs designed to produce allied health practitioners and educators based upon employment demands and the availability of resources.

2. To recruit students interested in careers in the health care field in programs offered in the School and instill in these students the basic principles of morality and professional ethics. Also to provide these students with career counseling, academic advisement and tutorial assistance designed to assist them in their effort to achieve their career goals.

3. To maintain full accreditation by appropriate agencies for all programs offered by the School.

4. To recruit and maintain faculty capable of making significant contributions to the supporting institutions' basic and applied research efforts.

5. To encourage and promote the rendering of service to the community through the sponsorship of seminars, workshops, consultation and the delivery of health care whenever appropriate.

6. To identify and develop the talents of students whose prior educational and cultural disadvantage has prevented their being prepared fully to pursue an allied health career successfully without special assistance as well as to serve students who are well-prepared and talented.

The School presently offers programs in the following areas:

Dental Hygiene
Health Care Administration and Planning
Medical Record Administration
Medical Technology
Respiratory Therapy
Speech Pathology and Audiology

Upon completion of either the associate or baccalaureate program in Dental Hygiene, or Health Care Administration and Planning, the degree will be conferred by Tennessee State University and the appropriate certificate will be by Meharry Medical College. Students completing a major in Medical Technology will receive the baccalaureate degree from Tennessee State University and a certificate from the affiliate medical institution. Tennessee State University will confer the baccalaureate degree upon graduates from the programs in Medical Record Administration, Respiratory Therapy, and Speech Pathology and Audiology.

Courses that are required by all departments in the School of Allied Health Professions for the Bachelor Degree are defined as the core curriculum. These required courses are consistent with University Requirements and are considered basic to the general mission to the School of Allied Health Professions.

CORE COURSES

English 101, 102 (6 hours)
Literature (6 hours)
History 201, 202 (6 hours)
Zoology 201, 202 (8 hours)
Physical Education 011, 012 (2 hours) and two additional hours of activity courses
Speech 220 (or its equivalent by department approval) (3 hours)
Sociology 211 (3 hours)
Philosophy 336 (3 hours)
Art, Music, Drama (2 hours)
Math 111 (4 hours)
AHP 100 (1 hour)

Students are responsible for their own transportation costs to off campus sites for clinical training.

DEPARTMENT OF RESPIRATORY THERAPY

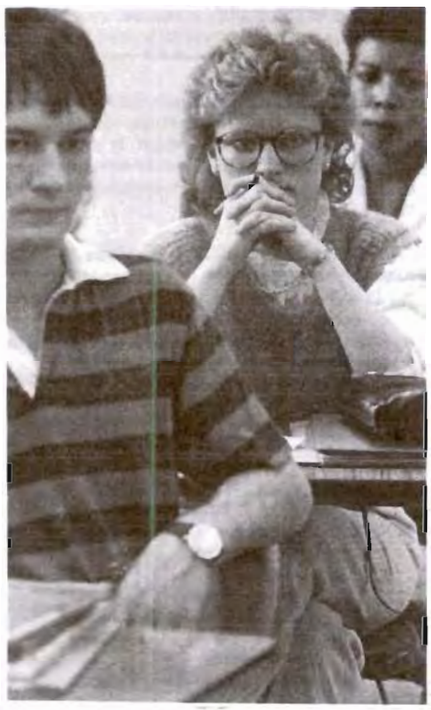
The Respiratory Therapy Program qualifies graduates to assume primary care responsibilities for all respiratory modalities including responsibilities involved in supervision of respiratory technician functions. The scope of patient care that the graduates from this program will be able to provide includes, but is not limited to: intermittent positive pressure breathing (IPPB), humidity/aerosol therapy, medical gas administration, broncho-pulmonary drainage, airway management, emergency care, pulmonary function testing, cardiorespiratory rehabilitation, infection control and cardiopulmonary drug administration.

The overall goal of the baccalaureate degree program in Respiratory Therapy is to provide an educational curriculum designed to prepare students for registration by the National Board of Respiratory Therapy, expanded duty practice of respiratory therapy, and to be educators and/or supervisors in the field of respiratory therapy. In addition, the program is designed to offer career ladder opportunities to Registered Respiratory Therapists, Certified Respiratory Therapy Technicians, and on-the-job trainees who wish to become expanded duty practitioners, educators and supervisors in Respiratory Therapy.

ADMISSION REQUIREMENTS

Two letters of recommendation from persons who have known the applicant for at least two years. Time lengths will be waived in case of employer's letter of recommendation.

Interview prior to acceptance by the Admissions Committee or its designee. All applicants will be screened by the Department of Respiratory Therapy Admission Committee.



ENTERING FRESHMAN

In addition to meeting minimum admission criteria of Tennessee State University, applicants seeking admission to the Respiratory Therapy Program must meet one of the following requirements:

1. High School graduation with a minimum cumulative grade point average of 2.5 on a 4.00 scale.
2. GED test scores of 50 or above for the five subjects tested.
3. A minimum composite test score of 16 on the ACT.

TRANSFER STUDENTS

Applications will be accepted from transfer students from other colleges or universities, or from other departments of Tennessee State University.

Applicants with fewer than 30 semester credit hours in courses required by this program must have an overall college grade point average of 2.5 on a 4.0 scale and meet the admission requirements for entering freshman applicants.

Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from accredited programs will be accepted where evidence is provided that the content of courses previously taken is essentially the same as the content for courses in this curriculum. No credit will be accepted for essential courses in which the student has received a grade lower than a "C".

SPECIAL REQUIREMENTS

Students are required to purchase uniforms, stethescopes, malpractice insurance, and have a physical exam prior to each academic year.

RETENTION POLICIES

Any student whose overall grade point average falls below 2.00, earns lower than "C" in two or more essential courses, or fails to matriculate the program on a continual basis, will be dropped from the program. After one regular academic term or both summer sessions, students dropped for poor academic performance may reapply for admission to the program. Students who request readmission to the program should present to the Admissions Committee evidence of substantial change in their circumstances that could lead to improved performance in this program.

DEPARTMENT OF RESPIRATORY THERAPY CURRICULUM

FRESHMEN YEAR Course & Number	Credit Hours Fall	 Spring
UC 100 University College Orientation	1	
ENG 101/102 Freshman English	3	3
MATH 111 Intro. to College Mathematics	4	
ZOO 201/202 Human Anatomy & Physiology	4	4
CHEM 121 & L General Chemistry		4
AHP 100 Orientation to Allied Health	1	
AHP 200 Survey of Medical Terms		2
PE Physical Education	1	1
HIST 201/202 American History	3	3
	17	17

SOPHOMORE YEAR Course & Number	Credit Hours Fall	 Spring
RT 101 Respiratory Therapy Tech I	3	
PHYS 211 Physics	3	
MCRB 250 General Bacteriology	4	
HEA 151 Personal Hygiene		2
RT 104 Respiratory Therapy Clinical I		2
RT 201 Respiratory Therapy Tech II		4
RT 212 Respiratory Pharmacology		3
RT 232 Cardiopulmonary/ Renal Physiology		3
SOC 211 Intro. to Sociology or PSY 201 General Psychology	3	
ENG 211/212 American Literature or ENG 361/362 (T) World Literature	3	3
	16	17

SUMMER	
RT 204 Respiratory Therapy Clinical II	4
RT 211 Pulmonary Function in Disease	3
RT 203 Pulmonary Function Testing & Evaluation	4
	11

JUNIOR YEAR Course & Number	Credit Hours Fall	 Spring
SPCH 375 (T) Communicative Skills or		2-3
ART 133 Art Appreciation PHIL 336 (T) Medical Ethics or		2-3
MUS 131 Music Appreciation		
RT 301 Mechanical Ventilation	3	
RT 302 Respiratory Therapy Clinical III	6	
RT 303 Critical Care	3	
RT 304 Neonatal/Pediatric Resp. Care	4	
RT 322 Respiratory Therapy Clinical IV		6
RT 311 Current Trends		2
	16	12-14

SENIOR YEAR Course & Number	Credit Hours Fall	 Spring
RT 431 Strategies of A.H. Education	3	
RT 441 Respiratory Therapy Management	3	
Recommended Electives*	6	6
RT 450 Senior Project		3
RT Elective**		4
PSY 311 Elementary Statistics	3	
	15	13

***Recommended Electives**

PSY 353 Death and Dying
SW 446 Intervention in Child Abuse & Neglect
SW 472 Psychosocial Care of the Aged
MG 301 Management Organization Theory & Behavior
MG 403 Personnel Administration
HCA 390 Communication & Technical Writing
HCA 490 Health Care Research
EDCI 387 Curriculum Development
EDCI 463 Audiovisual Aids in Education

****RT Electives**

RT 422 Advanced Critical Care Management
RT 424 Advanced Neonatal-Pediatric Respiratory Care
RT 426 Advanced Pulmonary Function Testing
RT 428 Respiratory Therapy Education Practicum
RT 430 Respiratory Care Services Management Practicum

COURSE DESCRIPTIONS

RT 101 Respiratory Therapy Technology I (3) A course designed to introduce the student to the fundamental principles of respiratory care. This course will include the professional development of respiratory therapy; the principles, operations and maintenance of compressed gas source and gas administration devices; the use of aerosol and humidity therapy; and basic respiratory mechanics. (2,2) Prerequisites: ZOO 201/202, CHEM 121, MATH 111, and AHP 200.

RT 104 Respiratory Therapy Clinical I (2) This course serves to introduce the beginning respiratory therapy student to the clinical environment. The student spends eight hours/week participating in clinical oriented workshops or observing the application of respiratory therapy in the clinical setting. Prerequisite: RT 101.

RT 201 Respiratory Theraoy Technology II (4) A study which includes the principles of the operation and usage of various respiratory care modalities such as Aerosol Therapy, IPPB, IS, PD&C, manual resuscitators, sterilization techniques, and classification of mechanical ventilators. Students will also be instructed in CPR and patient assessment. (3,2) Prerequisites: RT 104, MCRB 250, PSY 211.

RT 204 Respiratory Therapy Clinical II (4) This course provides the respirnatory therapy students with opportunities to practice basic respiratory therapy procedures. The student will spend a minimum of 16 hours/week in the clinical setting with emphasis placed on performance of respiratory therapy procedures and application of equipment. This course will emphasize topics such as oxygen therapy, aerosol therapy, IS, and IPPB therapy. The student will assume limited patient care responsibilities. Prerequisites: RT 101, RT 104, RT 201.

211 Pulmonary Function in Disease (3) A review of the application of respiratory therapeutic modalities in the treatment and management of medical, and pre-post surgical patients. Course includes etiology, recognition and management of pulmonary diseases, and an introduction into basic x-ray interpretation. Prerequisites: RT 201, RT 204, RT 212, RT 232.

RT 212 Respiratory Pharmacology (3) A course designed to present the various classifications of pharmacological agents used in the treatment and management of cardio-respiratory diseases. Course includes safe handling, dispensing, and administration of pharmacological agents. Emphasis is placed upon the effects, indications, and contraindications of respiratory pharmacological agents. Prerequisite: RT 201.

RT 232 Cardiopulmonary/Renal Physiology (3) A course which goes beyond general physiology to cover the respiratory system as it relates to ventilatory mechanics, gas transport, gas exchange, acid-base physiology, neurological and chemical control of respiration, fluid and electrolyte balance, ventilation/perfusion relationships, etc. Prerequisite: RT 201.

RT 203 Pulmonary Function Testing and Evaluation (4) A course designed to expose the student to the pulmonary function testing, evaluation, and assessment. It includes spirometry, diffusion studies, flow volume loops, helium dilution, nitrogen washouts, and the instructional sequence necessary to become certified in ABG analysis. (3,2) Prerequisites: RT 201, RT 212, RT 232, RT 204.

RT 301 Mechanical Ventilation Technology (3) A comprehensive course covering the principles, operation and application of devices used to provide ventilatory assistance and support. Course includes an indepth study of patient-ventilator interface, artifical airways, ventilatory failure, and physiological alterations resulting from mechanical ventilation, (2,2) Prerequisites: All 200 level RT courses.

RT 302 Respiratory Therapy Clinical III (6) A 24 hour/week supervised clinical application of patient care skills developed in RT 204, RT 212, RT 232, and RT 203. This course provides the student with opportunities to refine procedural and evaluation skills including applied respiratory pharmacology, bedside spirometry, PFT, ABG analysis, pre-post operative evaluation, and pediatric respiratory care. Prerequisites: All 200 level RT courses.

RT 303 Critical Care (3) An intensive study of critically ill patient care which includes patient monitoring techniques and evaluation, acute and chronic respiratory failure, neuromuscular diseases and trauma management. Prerequisites: all 200 level RT courses.

RT 304 Neonatal/Pediatric Respiratory Care (4) A study of the principles, practices and techniques utilized in the respiratory care management of the newborn and pediatric patient. Topcics will include common pathological conditions associated with such patients. Prerequisites: RT 203, RT 204, RT 211.

RT 322 Respiratoty Therapy Clinical IV (6) a 24 hour/week supervised clinical practicum designed to provide performance competencies in the administration of respiratory therapy to critically ill patients. Prerequisites: RT 302, RT 303, RT 304.

RT 311 Current Trends in Respiratory Care (2) A discussion and presentation of controversial topics and new trends in respiratory care. The course shall also include preparation for professional credentialing. Prerequisites: RT 302, RT 303, RT 304.

RT 431 Strategies for Allied Health Educators (3) A study of the teaching methods, curriculum, course content, and teaching aids characteristics of allied health education. All phases of allied health education including accreditation training programs, in-service programs, and community education will be surveyed. Special application is made to health care center departments. Prerequisites: all 300 level RT courses.

RT 441 Respiratory Therapy Management Concepts (3) The human dimensions of personnel, financial and material management, and planning as related to respiratory care services. Prerequisites: all 300 level RT courses.

RT 450 Senior Project (3) An approved independent study project. Prerequisites: all 300 level RT courses.

RT Elective

RT 422 Advanced Critical Care Management (4) An intensive didactic-clinical where the student is exposed to continuous and extensive critical care patient management. Prerequisites: all 300 level RT courses.

RT 424 Advanced Neonatal-Pediatric Respiratory Care (4) An intensive didactic-clinical where the student can develop exceptional skills in neonatal-pediatric respiratory care. Prerequisites: all 300 level RT courses.

RT 426 Advanced Pulmonary Function Testing (4) An intensive didactic-clinical where the student can develop emphasis on methodology of diagnosis of respiratory diseases, including advanced pulmonary physiology and pathology. Prerequisites: all 300 level RT courses.

RT 428 Respiratory Therapy Education Practicum (4) A practicum where students will student-teach, under supervision, in a respiratory therapy educational program or hospital continuing education program. Prerequisites: all 300 level RT courses.

RT 430 Respiratory Care Services Management Practicum (4) A practicum where students will be exposed to the day-to-day planning, scheduling, short and long range management of a respiratory care service under the supervision of the respiratory care service department manager. Prerequisites: all 300 level RT courses.

DEPARTMENT OF DENTAL HYGIENE

Elzer Chandler Ed.S., Head

The dental hygienist, a licensed professional with specialized clinical and educational skills, performs preventive and therapeutic services under the supervision of a licensed dentist. The primary functions of the dental hygienist include working as an integral part of the dental health team, in assisting individuals and groups of persons in obtaining and maintaining optimal oral health. Associated activities concern the prevention and control of dental diseases and disorders.

Graduates of the Associate of Science degree program function primarily within dental offices, hospitals, and clinics. Specifically, graduates with the Associate of Science degree assist dentists, polish restorations, scale, plane, and polish teeth, apply topical agents, provide guidance on diet and plaque control, manage patients with early signs of periodontal disease, expose, develop, mount, and read radiographs, perform diagnostic tests, function as supervisor of other dental auxiliaries, and participate in the community health care delivery system.

The Bachelor of Science degree program, implemented in the fall semester of 1977, prepares students to perform duties in addition to those of the Associate of Science degree dental hygienists. These duties and responsibilities include supervising other dental hygienists, performing extended duties in periodontics, serving as resource teachers in public schools, and teaching in dental hygiene programs. The baccalaureate degree may serve as a foundation for further study or as a supplement to previous study.

The dental hygiene program recently received reaffirmation of full approval accreditation status from the Commission on Dental Accreditation. Graduates qualify to take the National Board Dental Hygiene Examination, regional, and state board examinations in all states and regions in which the graduates may choose to practice.

The dental hygiene clinics, laboratory, and classroom, located in Clement Hall, provide the primary sites for the study of dental hygiene and dental sciences. Additionally, students fulfill assignments at various clinics within the School of Dentistry at Meharry Medical College. Baccalaureate level students participate in externships at health centers and other off-campus facilities.

Dental hygiene students participate in all extra-curricular activities of both Meharry Medical College and Tennessee State University. Students have complete access to facilities and privileges of both campuses; e.g., libraries, inter-library loans from the Vanderbilt University School of Medicine Library, and other libraries within the metropolitan Nashville area made possible through the Public Service Department of the Meharry and the Tennessee State libraries.

APPLICATIONS

Application forms for admission may be obtained from the Department of Dental Hygiene or the Office of Admissions and Records at Tennessee State University. After application for admission to the University and transcript are submitted to the Office of Admissions and Records, inquiries concerning dental hygiene admissions should be directed to the Department of Dental Hygiene. All transcripts and other materials must receive evaluation by the Committee on Dental Hygiene Admissions prior to gaining acceptance to the program. Students should submit all application materials by mid-May preceeding the fall semester of anticipated enrollment.

Students may receive advanced standing and transfer credits for appropriate courses taken at other institutions. Requests for prior study credits must receive approval by the program director.

ADMISSION REQUIREMENTS

Associate of Science Degree Program. Applicants for the 2-year Associate of Science degree program must first meet the general requirements for admission to the university. Additional minimum requirements follow:

1. A minimum high school average of 2.5 on a 4.0 scale.
2. One year of high school algebra
3. One year of high school biology
4. One year of high school chemistry
5. A score of 16 on the ACT or an equivalent score on the SAT (Applicants who do not meet this criteria must have a "C+" average in biology and chemistry courses or a 16 Natural Science ACT score)

*6. Two letters of recommendation from science teachers describing the applicant's potential for success in the dental hygiene curriculum.

7. One character recommendation
8. A brief autobiographical sketch in the applicant's hardwriting.
9. A complete health evaluation on the official forms provided by the Department of Dental Hygiene
10. A personal interview (Interviews may be arranged for applicants who live beyond 300 miles of the university).

*If the applicant has had a long period of absence from an academic program, references from employers, counselors, or other community leaders who know the applicant may substitute for references from science teachers.

Bachelor of Science Degree Program. Applicants who wish to enter the Bachelor of Science degree program at the freshman level must submit the same data as required for associate degree applicants. Applicants who wish to enter the Bachelor of Science degree program at the junior level must submit the following data and meet the following criteria:

1. A "C" average in clinical dental hygiene courses and a minimum overall grade point average of 2.5 on a 4.0 scale (Applicants with grade point averages higher than the minimum may be given priority in acceptance)

**2. Two letters of recommendation from dental hygiene faculty persons who taught the applicant (One letter must attest to the clinical competencies of the applicant)

**3. Complete college transcript(s)

**4. A passport type photograph taken within the last year

5. A complete health evaluation on the official forms provided by the Department of Dental Hygiene
6. A personal interview with members of the Committee on Admissions (Interviews may be arranged for applicants who live beyond 300 miles of the university)

Note: Some level two dental hygiene courses (300-400 level dental hygiene courses) require national board certification and/or Tennessee State licensure: DH 301, DH 402, DH 403, DH 411, and DH 412.

**May not be required of recent Meharry Medical College/Tennessee State University graduates.

Acceptance to the university does not insure acceptance into the dental hygiene program. Following notification of acceptance to the university by the Office of Admissions and Records, the prospective dental hygiene applicant's admission material will be evaluated by the committee on admissions of the Department of Dental Hygiene. Dental hygiene applicants will be informed of their acceptance or rejection by the Chairpersons of the Committee on Dental Hygiene Admissions. Each candidate who presents minimum requirements is evaluated competitively and is accepted, placed on the alternate list, or rejected on the basis of related qualifications.

Should an applicant fail to meet minimum requirements for entrance into the dental hygiene program but shows potential as a dental hygienists, the Committee on Dental Hygiene Admissions will advise the applicant of mechanisms for meeting the requirements.

Pre-dental hygiene status is granted to persons whose academic backgrounds do not reflect the necessary prerequisites for admission as a dental hygiene major but who possess demonstrated interest in becoming a professional dental hygienist. These students will receive academic advisement and counseling by the dental hygiene faculty, and compete for class positions in ensuing fall semesters.

A non-refundable deposit of $25.00 is required to hold a class space. Falsification of any portion of the admission data disqualifies the applicant for further consideration by the Committee on Admissions. This policy supersedes the requirements for admission already in force.

Dental hygiene students, upon registration, pay a refundable library deposit of twenty dollars ($20.00) and a non-refundable library usage fee of ten dollars ($10.00) at Meharry Medical College. Tuition and other fees will be paid to Tennessee State University. Students wishing to obtain health care and participate in Meharry Medical College activities will pay the appropriate fees. There are instruments to be purchased for use in dental hygiene, the cost of which varies from year to year. Upon acceptance, the applicant receives information regarding the approximate cost of supplies and instruments relating to the dental hygiene course of study.

ADMISSION TO ADVANCED STANDING

Students must earn, in residence, a minimum of 24 of the last 30 hours offered for the associate degree in dental hygiene. The following requirements are necessary:

1. Matriculation in an accredited dental hygiene program.
2. Official transcripts from each school attended showing the fulfillment of entrance requirements for admission to this program.
3. Satisfactory scholastic and disciplinary records from the dental hygiene program from which the applicant is withdrawing. No students are accepted whose failures have resulted in dismissal or academic probation in another dental hygiene program.
4. A statement of honorable dismissal from the dean or director of the program from which the applicant is withdrawing.
5. If the interval since attendance has exceeded two years, the applicant may be required to take examinations as the Committee on Curriculum recommends.
6. If any deficiencies exist, disposition may require:
   a. validation of credits by department chairmen
   b. examination of credits by department chairmen
   c. completion of certain courses not common to all dental hygiene curricula
7. Admission to advanced standing may necessitate auditing, or taking for credit, courses which the Committee on Curriculum may deem necessary to insure adequate preparation for continued dental hygiene study.

RE-ADMISSION

Application for re-admission must be sent to the Office of Admissions and Records and approved by the dental hygiene admissions committee. The applicant must meet all requirements in force at the time of such application. If the interruption has exceeded two years, the applicant will be required to take examinations in courses for which credit is desired, unless otherwise advised by the curriculum committee. Students who have been dismissed from the dental hygiene program are eligible for reconsideration only under extenuating circumstances.

ADMISSION AS AN AUDITING STUDENT

To register as an auditor, a student must be admitted to the university and pay all appropriate fees. Requests to audit dental hygiene courses must be approved by the Office of the Director. A student may be directed to audit one or more courses.

COURSES OF STUDY

The courses of study for the baccalaureate program conform to that of the associate degree program for the first two years, with few exceptions. This and the Bachelor of Science curriculum are outlined below:

ASSOCIATE OF SCIENCE DEGREE CURRICULUM

Freshman
First Semester

Course	Credit Hours
English 101	3
Zoology 201	4
Chemistry 101/101L	2
DH 101/101C	5
DH 110	2
DH 111	2
	18

Second Semester

Course	Credit Hours
English 102	3
Zoology 202	4
DH 102	2
DH 102C	2
DH 104	2
DH 112	3
DH 114	2
	18

Summer Session I

Course	Credit Hours
DH 103	2
Microbiology 240	4
	6

Sophomore
First Semester

Course	Credit Hours
DH 201/201C	6
DH 210	3
DH 211	2
DH 212	2
DH 215	2
DH 304	2
EDRD 310	1
	18

Second Semester

Course	Credit Hours
DH 202/202C	6
DH 205/205C	3
Psychology 201	3
Sociology 211	3
Speech 220	3
	18

BACHELOR OF SCIENCE DEGREE CURRICULUM

Junior
First Semester

Course	Credit Hours
DH 301/301C	3
DH 304	2
History 201	3
PE	1
Math 111	3
Electives (300-400 level)	3
MGT 215	3
	18

Second Semester

Course	Credit Hours
DH 305	2
DH 313	3
History 202	3
EDCI 387	3
PE	1
Math 112	3
Electives (300-400 level)	3
	18

Senior
First Semester

Course	Credit Hours
DH 411	3
Philosophy 336	3
English 351 or 361	3
PE	1
Electives (300-400 level)	4
Psychology 311	3
	17

Second Semester

Course	Credit Hours
DH 402	3
DH 412	3
DH 450	3
English 352 or 362	3
PE	1
Electives (300-400 level)	3
	16

Note: All curricula subject to change without notice.

A minimum of 10 hours may be chosen from the following list of electives:

Senior

HCA 330	3
DH 403	2
DH 404	3
DH 405	2
EDCI 201	3
MGT 301	3

Electives may also be selected from other areas such as health instruction and biological sciences. Candidates for the baccalaureate degree must satisfy university requirements in the following areas:

English (300 level)	6
Philosophy 336	3
Physical Education	4
Mathematics	6
History	6
Humanities	2

Additionally, 45 hours of upper level courses (300-400) are required for graduation

Curriculum for Bachelor of Science Degree Students Entering At the Freshman Level

First Year Pre-Professional Program
First Semester

Course	Credit Hours
English 101	3
Chemistry 101/101L	2
Math 111	3
History 201	3
Psychology 201	3
PE	1
	15

Second Semester

Course	Credit Hours
English 102	3
AHP 100	1
MGT 215	3
Sociology 211	3
History 202	3
Math 112	3
PE	1
	17

Second Year (Professional Program)
First Semester

Course	Credit Hours
DH 101/103C	5
DH 110	4
DH 111	2
Zoology 201	4
Elective	3
PE	1
	19

Second Semester

Course	Credit Hours
DH 102	2
DH 102C	2
DH 104	2
DH 112	3
DH 114	2
Zoology 202	4
Psychology Elective	3
PE	1
	19

Summer Session I

Course	Credit Hours
Microbiology 240	4
DH 103	2
	6

Third Year
First Semester

Course	Credit Hours
DH 201/201C	6
DH 210	3
DH 211	2
DH 212	2
DH 215	2
DH 304	2
EDRD 310	1
	18

Second Semester

Course	Credit Hours
DH 202/202C	6
DH 205/205C	3
Philosophy 336	3
Speech 420	3
	15

Fourth Year
First Semester

Course	Credit Hours
Eng 351 or 361	3
Elective (300-400)	3
MGT 300	3
DH Elective (300-400)	2
PSY Elective (300-400)	3
	14

Second Semester

Course	Credit Hours
Eng 352 or 362	3
Elective (300-400)	3
Speech 420	3
DH 450 or HCA 490	3
DH Elective (300-400)	2
	14

Upon completion of the baccalaureate program, students must have completed a minimum of 144 credit hours.

The following regulations are in addition to those of the university and apply specifically to dental hygiene students:

1. Examinations, other than mid-terms and finals, will be held at the discretion of the instructor.
2. The evaluation of a student's performance is expressed according to Tennessee State University's system.
3. Students are encouraged to remove an "I" (Incomplete) in dental hygiene and prerequisite courses by the end of the semester following the one in which the "I" was received. All "I" grades that are not removed within one calendar year, not including summer sessions, will be changed to "N.C." (no credit).
4. Recommendations for advancements are the charge of the Dental Hygiene Evaluation Committee which meets following mid-term and the final examination periods. All teachers who take part in the student's instructional program serve as members of this committee, and the program director is chairperson. This committee serves as a forum wherein instructors discuss the estimate of each student's academic standing in all subjects. Recommendations are made concerning promotions and the disposition to be made of students who encounter difficulty in their studies. Departmental recognition is given for superior work.
5. Citations for outstanding performance originate with the Evaluation Committee. Generally a qualifying student is one who has uniformly done outstanding work during a particular semester.
6. In order to facilitate a student's acquisition of discipline and motivation that will result in maximum professional development, students are expected to attend a minimum of 80% of their didactic classes and 100% of their clinical experiences.
7. Students are required to maintain a minimum grade point average of 2.0 for each academic year. "D" grades are earned in all courses; however, grades less than "C" earned in major courses are not accepted toward the meeting of departmental requirements.

REQUIREMENTS FOR GRADUATION

Students must meet all requirements for graduation as set forth by Tennessee State University. All fees to Meharry Medical College must be paid. Students must have completed all academic and clinical requirements. Further, all candidates for graduation must be recommended by the faculty to the Board of Trustees.

When a student files for graduation, a fee for the dental hygiene certificate must be paid to Meharry Medical College and the diploma fee must be paid to Tennessee State University.

Students seeking the Associate of Science degree must complete the curriculum outlined for the freshman year, summer session and the sophomore year, for a total of seventy-eight (78) semester hours. Students seeking the Bachelor of Science degree must complete the full four year curriculum which encompasses 144 semester hours.

PRIZES AND AWARDS

Regular students are given preference for prizes and awards. Consideration shall be on an individual basis and exceptions made in the case of irregular and special students who have done outstanding work. Departmental awards are:

THE NASHVILLE DENTAL SUPPLY COMPANY AWARD. Awarded to the graduating dental hygiene student who has rendered the highest quality of direct patient services above and beyond stated minimum criteria.

THE HU-FRIEDY GOLDEN SCALER. Awarded to the oustanding dental hygiene student in theoretical and clinical dental hygiene.

THE OLYMPHIC AWARD. Awarded to the graduating student having the highest general average for the entire course in dental hygiene.

THE HEALTHCO DENTAL SUPPLY AWARD. Awarded to the graduating student who has exhibited the greatest proficiency and interest in dental health educatin.

THE TENNESSEE DENTAL HYGIENISTS' ASSOCIATION AWARD. Awarded to the graduating dental hygiene student, who, in the opinion of his/her peers, best epitomizes the ideal dental hygienist.

THE SIGMA PHI ALPHA DENTAL HYGIENE HONOR SOCIETY AWARD. Awarded to the electee of Omicron Chapter with the highest scholastic average.

THE DENTAL HYGIENE FACULTY AWARD. Awarded to the graduating student who has made the most overall progress during the entire course in dental hygiene.

THE PATTERSON DENTAL SUPPLY AWARD. Awarded to the graduating dental hygiene student, who, in the opinion of the faculty, best epitomizes the professional dental hygienist.

THE ORAL MYOLOGY AWARD. Presented to the students who have shown the greatest proficiency and creativity in working with myofunctional therapy patients.

THE CLINICAL AWARD. Awarded to the graduating dental hygiene student who has demonstrated the best patient management skills.

THE DENTAL HYGIENE DIRECTOR'S AWARD. A certificate and cash award awarded to the graduating student who has exhibited leadership potential as demonstrated by his/her participation in student, departmental, and community activities. The awardee must also have indicated a desire to matriculate in advance education and to ultimately serve as a change agent within the dental hygiene profession.

THE QUINTESSANCE AWARD. Awarded to the graduating student of the baccalaureate program who has the highest average in the prescribed curriculum of the junior and senior years.

ASSOCIATE OF SCIENCE AND BACHELOR OF SCIENCE DEGREE CURRICULA IN DENTAL HYGIENE

Course Offerings

Courses which do not hear a "DH" prefix are described elsewhere in this catalogue. Readers must therefore refer to descriptions of such courses in the sections of respectives disciplines or fields of study. Courses preceeded by the "DH" prefix are intended for dental hygiene majors, only. Exceptions must receive approval of the program director.

DH 101 Dental Hygiene Lecture. (3) An introduction to basic concepts, methods, materials, and techniques of dental hygiene care.

DH 101C Pre-Clinical Dental Hygiene (2) Clinical simulation of dental hygiene using manikin heads and student partners. Taken concurrently with DH 101.

DH 102 Radiology (2). Lecture, group, and individually supervised practice covering x-ray production, radiation hygiene, exposing, developing, mounting, reading and interpretation of intra-oral radiographs. Taken concurrently with DH 102C.

DH 102C Clinical Dental Hygiene (2). Supervised application of the practice of dental hygiene on patients within the clinical setting. Prerequisites: Satisfactory completion of prescribed first semester curriculum.

DH 103 Periodontics (2). An introduction to periodontics with emphasos on the recognition of gingival and periodontal problems, their probable cause, treatment and prevention, first aid procedures, techniques of patient education, and continued application of theoretical principles of clinical dental hygiene. Prerquisite: satisfactory completion of the prescribed first two semesters of studies.

DH 104 Dental Materials (2). Study of characteristics and technique of the manipulation of materials used in dentistry. Emphasis is placed on basic knowledge for selecting dental materials. Laboratory experiences supplement lectures. Taken as designated in the first year curriculum.

DH 110 Histology and Embryology (2). Study of microscopic oral tissues to provide students with the knowledge and understanding of the cellular structure and its application to dental problems. Taken concurrently with prescribed courses of the first semester, first year curriculum.

DH 111 Tooth Morphology (2). A study of the nomenclature, form, and structure of the permanent and deciduous dentition and their supporting and related structures. Taken concurrently with other prescribed courses of the first semester, first year curriculum.

DH 112 Nutrition and Applied Biochemistry (3). A study of nutrients essential for the healthy functioning of humans and the biochemical functions of these nutrients with special attention to diet in relation to dental health and dental disorders. Biochemical processes of the cellular, tissue, and organ levels with emphasis on the dynamic relationship among such units are covered. Taken as designated in the first year curriculum.

DH 114 Head and Neck Anatomy (2). The structure and functional aspects of the head and neck and their significance to the practice of dental hygiene. Taken as designated in the first year curriculum.

DH 201 Dental Hygiene Lecture (2). Includes several modules: ethics, jurisprudence, dental office emergencies, and cardio-pulmonary resuscitation. Prerequisite: Satisfactory completion of the prescribed first year of study.

DH 201C Clinical Dental Hygiene (4). Supervised competency-based application of the practice of clinical dental hygiene. Prerequisites: DH 101 and DH 101C. DH 201 and DH 210 must be taken concurrently.

DH 202 Dental Hygiene Lecture (2) Includes modules in hospital dentistry and pain control each of which must be completed satisfactorily in order to successfully complete the course. Prerequisites: DH 201 and DH 201C. DH 202C must be taken concurrently.

DH 202C Clinical Dental Hygiene (4). A progressive continuation of competency-based supervised applications of clinical dental hygiene. Prerequisite: DH 201 and DH 201C. DH 202 must be taken concurrently.

DH 205 Expanded Periodontics for the Dental Hygienist (1). Designed to offer aspects of periodontics which are not generally considered as traditional dental hygiene functions. Advanced instructions are offered to further enable students to recognize and label periodontal disease and to understand etiological factors. Students are taught to participate in the planning of treatment for early or minor forms of periodontal disease and to apply and remove dressings. Prerequisite: DH 103. DH 205C to be taken concurrently.

DH 205C Expanded Periodotics Laboratory/ Clinic (2). Practical application of DH 205. Prerequisite: DH 103 and DH 202C are taken concurrently.

DH 210 General and Oral Pathology (3). A study of disease and disease process, the oral manifestations of systematic disease, oral pathology with particular attention to oral cancer and cancer detection methods. Taken as designated in the second year curriculum.

DH 211 Community Dentistry (2). A survey of private, community, and governmental agencies. Dental epidemiology, socio-economic factors relating to dental care, special programs, and third party payment plans are covered. Prerequisite: Completion of the prescribed first semester curriculum.

DH 212 Pharmaology (2). Principles of therapeutics, the application of pharmacologic principles to dental and dental hygiene care, management of dental office emergencies with particular attention to drugs and medicaments used for the treatment of allergic reactions, anaphylactic shock, syncope, cardiac arrest, etc. Must be taken concurrently with DH 201 and DH 201C.

DH 215 Dental Health Education (2). A study of dental health educational methods and procedures for individuals and groups. Students will design and produce relevant projects. Prerequisite: Completion of the first year curriculum.

DH 301 Advanced Dental Hygiene Seminar (1). This course is designed to encompass those advanced skills allowable in the state by the Tennessee Dental Practice Act e.g., nitrous oxide conscious sedation, root planning, curettage, pit and fissure sealants.

DH 301C Advanced Dental Hygiene Clinic. (2) 6 clinic hours. Clinical application of DH 301 theory.

DH 304 Myofunctional Therapy (2). Designed to teach the basic knowledge and skills of myofunctional therapy in order to be able to recognize or "diagnose", examine, plan and describe a therapy regimen for representative patients with inappropriate oral pressure habits. The course emphasizes basic principles and concepts of anatomy and physiology of the head and neck, growth and development, basic aspects of speech, communication and behavior change strategies. Prerequisites: Zoology 202 or may be taken concurrently.

DH 305 — DH 405 Clinical Practicum and Seminar in Myofunctional Therapy. (2) 4 clinic/ seminar hours. The EIS student, under supervision of the Myofunctional Team, provides direct patient care in the screening, examination, data collection and reporting, diagnosing and ren-

dering of therapeutic services to patients who exhibit signs and symptoms of inappropriate oral pressure habits. These are elective courses for AS students. Prerequisite: DH 304.

DH 313 Advanced Oral Biology and Pathology (3). An indepth approach to the prevention of oral disease including, in some instances, correlation with selected studies for advanced students, effecs of chemotherapeutic agents of oral flora, allergic reactions, and diagnosis and treatment of oral disease. Prerequisite: DH 210.

DH 402 Dental Hygiene Externship (3). One hour of seminar and 4 hours, externship. An application of dental hygiene techniques to various settings, e.g., hospitals, health centers, clinics. Experiences will be individualized and designed to meet student proposed career goal.

DH 403 Expanded Function (2). This course has been divided into the following modules:

(a) Advanced Clinical Periodontics. This module is designed to provide the hygienist with knowledge and skill in such advanced procedures such as marking surgery points, suturing, infiltration and anesthesis, and administration of nitrous oxide.
(b) Four-Handed Dentistry. The basic concepts of four-handed dentistry are covered. Students will have the opportunity to apply knowledge and skill while assisting during dental and dental hygiene procedures. Various dental instruments along with their nomenclature and use will be included.
(c) Hospital Dentistry. This module is designed to provide an opportunity for the dental hygienists to perform completely in the hospital setting as a member of the health care team. Prerequisites: Dh 301-301C and national board certification.

DH 404 Community Health Consultant Services (3). The student will gain some practical information on how to be an effective consultant and how to conduct effective meetings and workshops.

HD 405 See DH 305-405.

DH 411 Curriculum Concepts in Dental Hygiene and Allied Health Education (3). A course designed to explore theories of learning, teaching strategies, and evaluation techniques as applicable to dental hygiene and allied health education. Prerequisite: EDCI 387 and National Board Certification/State Licensure.

DH 412 Teaching Practicum (3). One hour lecture and 4 hours of practicum. A teaching practicum designed to provide practical experience in the clinical and classroom settings for baccalaureate students. Prerequisite: DH 411.

DH 450 Senior Project (3). An introduction to research design with emphasis on the application of research techniques in the study of current dental literature. Students will be required to complete an independent senior project. Prerequisite: Psy 311 or equivalent.

DEPARTMENT OF HEALTH CARE ADMINISTRATION AND PLANNING

Jean Morgan-Burton, M.S.
Acting Director

GENERAL INFORMATION

In affiliation with Meharry Medical College, Tennessee State University offers an undergraduate course of study in Health Care Administration and Planning designed to prepare individuals for leadership roles in the health care field. The curricular programs provided by the department are the Bachelor of Science Degree Program and the Associate of Science Degree Program.

ADMISSION REQUIREMENTS

Students desiring to pursue either the Bachelor of Science or the Associate of Science Degree must be accepted at Tennessee State University and also by the Health Care Administration and Planning Admission Committee of Meharry Medical College. The Committee will consider application of candidates who present the following qualifications.

1. Acceptance into Tennessee State University.
2. A grade point average of at least 2.25 on a 4.0 scale. Consideration will be given to relevant work experience when considering applicants who fall below this requirement.
3. Two letters of recommendation from persons who have known the applicant for at least two years. Time lengths will be waived in case of employer's letters of recommendation.
4. Interview on campus or by out-of-town agency named by the Admissions Committee prior to acceptance into the program.

CURRICULUM AND DEGREES

The Bachelor of Science Degree at Tennessee State University provides instruction in health management, decision making and health planning. Emphasis is placed on those management and decision-making techniques which lead to efficiency in a supervisory position. The Bachelor of Science Degree is awarded after a student satisfactorily completes a minimum of 132 semester hours including one summer field placement. Tennessee State University will award the Associate of Science Degree after satisfactory completion of 71 semester hours including one summer field placement. For the student who seeks to minor in Health Care Administration and Planning, 26 semester hours must be completed. The required courses are: HCA 201, 202, 210; Economics 211-212; Accounting 211; 212 and Management 404. Courses in the department lead to certification by Meharry Medical College and are dictated by the academic policies of the institution. Majors and minors in the Department of Health Care Administration and Planning must meet the general academic requirements of the University and the certifying requirements of Meharry Medical College.

TWO YEAR CURRICULUM ASSOCIATE OF SCIENCE DEGREE

Freshman Year

Fall Semester Course NO:	Credit Hour
ENG 101	3
HIST 201	3
MATH 111	3
PE or AFROTC	1
SOC 211	3
HCA 201	3
AHP 100	1
Total Hours	17

Spring Semester	
ENG 102	3
HIST 202	3
MATH 112	3
PE or AFROTC	1
HCA 202	3
HCA 210	3
Total Hours	16

Sophomore Year

Fall Semester	
HCA 390	3
ACCTG 211	3
ECON 211	3
HCA 320	3
HCA 420	3
PE or AFROTC	1
Total Hours	16

Spring Semester	
MG 301	3
MG 404	3
ACCTG 212	3
ECON 212	3
SPEECH 230	3
PE or AFROTC	1
Total Hours	16

Summer Session	
HCA 400—Field Placement Practicum	6
GRAND TOTAL HOURS	71

FOUR YEAR CURRICULUM BACHELOR OF SCIENCE DEGREE

Freshman Year

Fall Semester	Credit Hour
AHP 100	1
MATH 111	3
ENG 101	3
HIST 201	3
SCI 121	3
PE	1
Art, Music or Drama	2
	16

Spring Semester
MATH 112 3
ENG 102 3
HIST 202 3
SCI 122 3
PE 1
SPEECH 230 3
16

Sophomore Year
Fall Semester
ENG 211 3
GPA 221 3
SOC 211 3
HCA 201 3
PE 1
ECON 211 3
16

Spring Semester
ENG 212 3
HCA 202 3
MG 301 3
HCA 210 3
PE 1
ECON 212 3
16

Junior Year
Fall Semester
HCA 310 3
ACCTG 211 3
HCA 320 3
PHIL 336 3
HCA 330 3
15

FOUR YEAR CURRICULUM BACHELOR OF SCIENCE DEGREE

Junior Year—Continued

Spring Semester	Credit Hour
HCA 390	3
ACCTG 212	3
GPA 420	3
**MG Elective	3
*HCA Elective	3
Total Hours	15

Summer Session
HCA 400—Field Placement Practicum 6

Senior Year
Fall Semester
SOC 330 3
SOC 300 3
HCA 420 3
*HCA Elective 3
SOC 460 3
**MG Elective 3
Total Hours 18

Spring Semester
HCA 460 3
HCA 410 3
HCA 490 3
MG 404 3
Art, Music or Drama 2
Total hours 14
Grand total hours 132

*Choose two (2) of the four recommended Health Care Administration and Planning electives.

Electives
HCA 360 Cultural-Social Aspects of Health Care 3
HCA 430 Epidemiology 3
HCA 440 Environmental and Sanitary Health 3
HCA 470 Long-Term Care Admin. 3
**Business Administrative Electives —TSU
MG 215 Basic Computer Science 3
MG 315 Cobolt 3
MG 304 Management Science I 3
MG 403 Personnel Administration 3

REQUIRED COURSES IN HEALTH CARE ADMINISTRATION AND PLANNING

HCA 201 Introduction to Health Care Organization (3). Provides an overview of the American Health System, with emphasis on acquaintance with the many varied aspects of the entire field, including terminology, facilities, placements, and people. The subject areas include history of the development of the American Health Care System, a descriptive analysis of the various levels of health care delivery and the patient care system, exposure to financing of health care, and an introduction to governmental involvement in the health care system.

HCA 202 Introduction to Health Care Organization (3). Provides an overview of the more significant national and local planning activities designed to alleviate some of this country's and this area's pressing health problems. This course will focus on the origin, planning and experience of health related legislation and program. Prerequisite: HCA 201, Admission to the Health Care Administration Program.

HCA 210 Approaches to Planning in Health Care (3). The principal theories and methodologies of the planning discipline will be studied via lectures, reading, case studies, and guest lectures. The philosophical foundations of various methodologies and those of the planning process will be examined. Specific interpretation and application of comprehensive health planning legislation will be considered. Emphasis will also be given to the concepts of regionalization. This course is recommended for all those considering employment of postgraduate study in planning. Prerequisite: HCA 201, 202.

HCA 310 Health Economics (3). The economics of the health care industry will be reviewed, with attention to the supply and demand for health care services. Critical issues to be examined include the economic mechanisms of the health care industry, methods of paying, cost-effectiveness and benefit-cost analysis, national health insurance plans, and governmental intrusion. The economics of the present health care system will also be analyzed in its relation to the poor and minorities. Prerequisite: HCA 201, 202: ECON 211, 212.

HCA 320 Seminar: Health and Facilities Law (3) Introduction to the specifics of health related legislation and programs, and their implications for providers and consumers of health care. The legal principles and issues for medical caseworkers, along with liability of health care facilities and staff for injuries to patients, and abuses to patient rights by the health care system will be examined. Topic areas also include malpractice suits and legislation, collection of bills, labor law, informed consent of patients to medical and surgical procedures. Prerequisites: HCA 201, 202.

HCA 330 Sociology of Health (3). The objectives of the course will be to examine the social and psychological implications of illness from inception to termination. Materials will be drawn from the relevant literature of the behavioral sciences that relate to health. Prerequisite: HCA 201, 202; SOC 211.

HCA 390 Communication and Technical Writing (3). The special requirements and techniques for the professional report will be examined along with an analysis of the general communication skills required of the professional health administrator. Students will receive training in practical communication and grant interpretation. Also, attention will be given to the development of writing skills and the special communication needs of individual students.

HCA 400 Field Placement (6). The internship is deisnged to give the student direct experience in various health care settings. The experimental component allows the student an opportunity to apply his newly acquired normative and cognitive skills in an actual working situation. The areas from which students may choose are hospitals, federal government agencies, long-term care facilities, intermediate care facilities, group practices, medical programs, volunteer agencies. During the ten-week placement, the summer between the junior and senior year, students will be required to submit mid-term and final reports to the Department. Prerequisite: Senior Standing.

HCA 410 Seminar: Critical Health Issues (3). The objectives of the seminar will be to examine the many current issues which face the health care industry. Emphasis will be placed on a full evaluation of a gamut of issues, with particular attention being given to the issues of minority health care delivery health care for the poor, rising cost of health care, medical specialization, legislative impact on health care for minorities of voluntary and governmental health plans.

HCA 420 Health Care Management I (3). The application of management techniques to the administration of health care facilities will be examined. The various administrative management elements of health care—systems approach of decision making, the estasblishment of management of complex and normative organizations—will be discussed. Also, the different levels of administrative management will be discussed. Prerequisites: HCA 201, 202, 210; ECON 211, 212; ACCT 211, 212; MG 215.

HCA 460 Health Care Management II (3). As an extension of Health Care Management I, advanced quantitative methods and statistical techniques will be studied. In addition, this course will study managerial financing of health care facilities in relation to acquisition, planning and control of funds from internal/external sources for short-term, intermediate and long-term objectives. Issues to be examined include financial analysis, profit planning, cost-benefit analysis, and reorganization. Prerequisites: HCA 201, 202, 210, 420; ECON 211, 212; ACCTG 211, 212, MG 215, 403.

HCA 490 Health Care Research (3). An introduction to the research design will be provided with emphasis on application of statistical and research techniques to problems of concern to the health care system. Students will be required to carry through to completion a management research problem. Prerequisites: HCA 201, 202, 310, 320, 330, 390, MG 301.

HEALTH CARE ADMINISTRATION AND PLANNING ELECTIVES

HCA 360 Cultural-Social Aspects of Health Care (3). Discussion will center on the effects of the social and cultural milieu on the level of health of the community, the nature accessibility and availability of health care services. Prerequisites: HCA 201, 202.

HCA 430 Epidemiology (3). The objective of this course is to acquaint students with epidemiology as a scientific discipline and to facilitate the students' understanding of the role of epidemiology in health service planning and administration. Emphasis will be placed on methods employed in current epidemiologic studies of chronic diseases, public health, vital statistics, environmental sanitation and communicable disease control on a local, national, and global basis. Prerequisites: HCA 201, 202, 310.

HCA 440 Environmental and Sanitary Health (3). This course will discuss the responsibilities of the administrator for providing a hygienic, safe, institutional environment, as well as the responsibility of the institution to contribute to the environmental health of the community. The course will also discuss critical environmental health issues as they relate to the overall health of the community. Prerequisites: HCA 201, 202.

HCA 470 Long-Term Care Administration (3). The administration issues of care for long-term patients will be addressed with specific discussion on the aged and primary and extended care of the aged. The peculiar social, cultural, and economic environment will be discussed as each related to accessibility and availability of health services and the aspects of administration in long-term care facilities. Prerequisites: HCA 201, 202.

DEPARTMENT OF MEDICAL RECORD ADMINISTRATION

Elizabeth Kunnu, R.R.A., Head

The Medical Record Administration program is accredited by the American Medical Association Committee on Allied Health Education and Accreditation in cooperation with the American Medical Record Association Education and Registration Committee. Successful graduates of this program receive a Bachelor of Science degree in Medical Record Administration and are eligible to take the national registration examination to become Registered Record Administrators (RRA's).

As a key member of the modern health team, the Medical Record Administrator has responsibilities that are primarily administrative—

1. Planning and developing medical record systems for various types and sizes of health care facilities to meet standards of accreditation and regulatory agency requirements.
2. Assisting the medical staff in evaluating the quality of patient care.
3. Collecting and analyzing patient care data.
4. Developing policies and procedures for mediocolegal uses of records.
5. Providing consultant services to various types of health care facilities.

WHERE ARE THE JOB OPPORTUNITIES

Employment prospects for qualified Medical Record Administrators (Registered Record Administrators—RRAs) continue to increase, due to technological advanced and a growing demand for patient information. Registered Record Administrators are needed in hospitals, federal and state health agencies, international health agencies, educational institutions, health insurance companies, private industry, ambulatory and long-term care facilities.

CURRICULUM

The Medical Record Administration curriculum takes a CAREER-LADDER approach. It is divided into a technical phase (the first two years) to better accommodate graduates of associate degree Medical Record Technology programs who wish to progress to the professional level of a Medical Record Administrator. You receive laboratory and practical experiences under the supervision of a qualified practitioner.

HOW DO I APPLY?

To be eligible for admission to the program, you must:

I. Admission Requirements:
   (a) Satisfy regular University admission requirements.
   (b) Have a 2.5 overall grade-point average on a 4.0 scale from high school or an approved college or university or GED test scores of 50 or above for the five subject areas.
   (c) When the GPA is less than 2.25, or the GED test score is less than 50, you will be considered for admission if you have successfully maintained an overall GPA of 2.0 after the first semester with at least a "C" average in each of the Medical Record, Allied Health, Anatomy, Physiology and English courses.
   (d) Any student who does not have a 2.25 GPA or a score of 50 on the GED, but has an ACT score of 16 or above will be admitted.

II. Admission Procedures:
   (a) Submit an application for acceptance to Tennessee State University to the Office of Admissions and Records.
   (b) If you meet University entrance prerequisites, the admissions office will forward the application to the Department of Medical Record Administration program for completion.
   (c) Upon receipt of the completed forms and transcripts, your application must be approved by the department's Admission and Retention Committee.
   (d) You will be advised of the final decision regarding your acceptance into the Medical Record Administration program.

III. Transfer Students:
   Applications including all transcripts are accepted from transfer students from other colleges or universities, or from other departments of the University. You must have an overall college grade point average of 2.25 on a 4.0 scale and meet the University admission requirements for Transfer Admissions. When the college GPA is less than 2.25, you will be considered for admission if you have successfully maintained an overall GPA of 2.0 after the first semester, with at least a "C" average in Medical Record and Allied Health courses, Anatomy and Physiology and English.

   In addition to the above, University students seeking a transfer to the

Medical Record Administration Program are required to complete a Change of Major form. The department's Admission and Retention Committee will make the final decision regarding your admission to the Medical Record Administration program. The candidate will be advised of the final decision regarding his/her acceptance into the program.

RETENTION POLICY

(a) Any student whose overall grade point average (GPA) falls below 2.0 in a semester will be placed on academic probation. At the end of the next semester, if the students fails to attain a minimum of 2.0 GPA, he/she would be dropped from the program.

(b) A student who has been dropped from the program for poor academic performance may reapply for admission into the program. Students who request readmission to the program should present to the Admissions Committee evidence of substantial change in their circumstances that could lead to improve academic performance in this program.

ARTICULATION

Graduates of the Medical Record Technology programs at Volunteer State Community College, Chattanooga State Community College and other accredited associate degree Medical Record Technology programs may be accepted as a junior in the Medical Record Administration program at TSU.

FINANCIAL AID

Financial aid in available through a number of programs. The most important step in applying for financial aid at TSU is the completion of the Financial Aid form which is designed and processed by the College Scholarship Service.

Included in the program for financial aid are: Basic Education Opportunity and Supplemental Educational Opportunity Grants, College Work Aid or Work Study programs and National Direct Student Loan Programs.

In addition, the American Medical Record Association Foundation of Record Education (FORE) provides LOAN FUNDS to students in the medical record field. For information regarding the FORE loans contact the national office at:

FORE
American Medical Record Association
875 N. Michigan Ave., Suite 1850
Chicago, IL 60611

DEGREE REQUIREMENTS

CURRICULUM

FIRST YEAR

FALL SEMESTER

AHP 100 Orientation to Allied Health	1
ENG 101 Freshman English	3
MATH 111 Intro to College Math	3
MRA 101 Intro to Health Records	1
UC 100 College Orientation	1
ZOO 201 Human Anatomy & Physiology	4
HIST 201 American History	3
PE or ROTC	1
	17

SPRING SEMESTER

CHEM 100 Basic Chemistry	3
CHEM 100L Basic Chemistry Lab	1
ENG 102 Freshman English	3
*MRA 104 Medical Terminology/ Transcription	4
ZOO 202 Human Anatomy & Physiology	4
SPCH 230 Business & Prof. Speech	3
	18

SECOND YEAR

FALL SEMESTER

ENG 212 Sophomore Literature	3
MRA 300 Legal Aspects of Health Rec	3
Elective (Humanities: 300-400)	3
EdRd 0310 Strat. for Suc. Test Taking	1
BE 315 Business Communication	3
MCB 240 Principals of General Bacteriology	4
	17

SPRING SEMESTER
(TECHNICAL BLOCK)

MRA 202 Basic Foundation for Health Information Systems	5
MRA 203 Directed Practice/Seminar	4
MRA 204 Management of Health Data	5
	14

THIRD YEAR

FALL SEMESTER

AHP 302 Current Trends in Health Care	3
HEA 151 Personal Hygiene	2
PSY 311 Elementary Statistics	3
HIST 202 American History	3
ENG 212 Sophomore Literature	3
MRA 304 Fundamentals of Medical Sc	4
	18

SPRING SEMESTER

MG 215 Basic Computer Science	3
MG 301 Management Organization	3
MRA 303 Utilization & Evaluation of Health Care	5
HCA 490 Health Care Research	3
PE and ROTC	1
Elective (300-400 level)	3
	18

FOURTH YEAR

FALL SEMESTER

MG 403 Personnel Administration	3
OM 430 Administrative Office Managm	3
MRA 440 Organization & Management of Health Infor Systems	3
MRA 450 Senior Research Project	3
MRA 400 Computerized Health Infor Systems	3
Elective (Social Science 300-400 Level)	3
	18

SPRING SEMESTER

MRA 442 Practicum in Medical Record Administration/Seminar	13
	13

Total Semester Hours: 133

*MRA 102 Medical Terminology along with MRA 102L Medical Transcription may be substituted for MRA 104 Medical Terminology/ Transcription.

COURSE DESCRIPTIONS FOR THE MEDICAL RECORD ADMINISTRATION COURSES

AHP 302 Current Trends in Health Care. (3) A study of the current trends in health care delivery; federal, state and local laws and regulations that pertain to the health care field; the principles, practice and development of public health including local, state, and federal programs. Prerequisite: Junior standing in any allied health or health related curriculum. (Formerly MRA 310)

MRA 101 Introduction to Health Records. (1) An introduction to the health care industry, governmental and voluntary care organizations in health care, the organizational patterns of health care facilities and health record department. An overview is also given to the national, state, regional, and local medical record professional associations.

MRA 102 Medical Terminology. (3) Language of medicine, including word construction, definitions, and use of terms. Prerequisite: ZOO 201 with a minimum grade of C. Pre or Co-requisite: ZOO 200 and MRA 102L. (Formerly MRA 301-302)

MRA 102L Medical Transcription. (3) Techniques of word processing and machine transcription for the medical language. (This course is not required for Non-medical record administration majors). Prerequisite: ZOO 201 and a typing proficiency of 45 WPM Pre or Corequisite: MRA 101 and ZOO 202. (Formerly MRA 410-410L)

MRA 104 Medical Terminology/Transcription. (4) Language of medicine, including word construction, definitions, and use of terms. Administration, as well as techniques of word processing and machine transcription of the medical language. Transcription is considered the laboratory portion of this course, consisting of two (2) clock hours per week. The Medical Terminology portion consists of three (3) clock hours per week. Prerequisite: ZOO 201. Corequisite or Prerequisite: ZOO 202. Some typing skills required.

MRA 202 Basic Foundation for Health Information Systems. (5) Storage, retrieval and control techniques of medical retention policies and procedures; origin, uses, content, and format of health/medical records; quantitative and qualitative analysis of patient records. This course is taken for seven weeks during the sophomore year and requires a laboratory component. Prerequisites: Completion of AHP 100, ZOO 201-202; MRA 101, 102, 102L, or MRA 104 with a minimum grade of C. An overall minimum grade point average of C (2.0). Formerly MRA 311)

MRA 203 Directed Practice and Seminar in Health Records. (4) Students are assigned to a health information center for eight continuous weeks for experiences in the technical aspects of health record science that is covered in MRA 202 and MRA 204. A pre and post-directed practice seminar will also be held. Directed practice experience is received under the direct supervision of either an ART or RRA. Prerequisite: Completion of AHP 100, ZOO 201-202; MRA 101, 102, 102L or MRA 104. Pre or Co-requisite: MRA 202, 204. AHP 100, ZOO, MRA courses must be completed with a minimum grade of C. An overall minimum grade point average of C (2.0) is also required. (Formerly MRA 330-461).

MRA 204 Management of Health Data. (5) The content, format, maintenance requirements and control of various indexes and registries; nomenclature, classification system; data abstracting techniques; medical staff organizations and bylaws; vital statistics; reporting requirements, definitions and formulas for computing hospital and public health statistics. This course is taken for seven weeks during the sophomore year and requires a laboratory component. Prerequisites: Completion of AHP 100, ZOO 201-202; MRA 101, MRA 102, 102L or MRA 104 with a minimum grade of C. An overall minimum grade point average of C (2.0). (Formerly MRA 312-MRA 312L).

MRA 300 Legal Aspects of Health Records, (3) Legal terminology and procedures, the court system. Liability of health care facility, policies and procedures for the control and use of personal health information, health care legislation and regulation including privacy, health care planning and financing, ethical standards for medical record practice. Prerequisites: MRA 101, 104 or 102 and 102L.

MRA 303 Utilization and Evaluation of Health Care. (5) Components of quality assurance programs in health care facilities including concurrent and retrospective methodologies. Development and application of quality assurance/risk management problems for health information services. Prospective Payment Systems, Diagnostic Related Groups (DRG) and medical records; impacts and action. Prerequisites: MRA 202, 203, 204 and Junior standing in the MRA curriculum. This course has a 4 hours per week practicum, where the students will apply the knowledge gained in the classroom. (Formerly MRA 412).

MRA 304 Fundamentals of Medical Science. (4) A study of the nature, cause, treatment and management of pathologic, microbiologic, and clinical disease processes. Prerequisites: MRA 102, 102L or MRA 104, MRA 202, 203, 204, ZOO 201-202 and MCB 240.

MRA 400 Computerized Health Information Systems. (3) An introduction to automatic information systems with data display techniques useful to health care facilities and agencies. Prerequisites: MG 215; MRA 202, 203, 204; Psy 311; and senior standing in the Medical Record Administration curriculum.

MRA 440 Organization and Management of Health Information System Seminar. (3) Seminars and special assignments in the area of planning, organizing, maintaining, and evaluating health information service operations; developing, applying and evaluating policies and procedures for health information services/functions; establishing standards for and evaluating quality and quantity of health information services; analyzing health information services and constructing a systematic flow of information; and recommending and communicating health information and standards to administrative and professional staff. Special assignments include inservice education. Prerequisite: Senior standing in the MRA curriculum with a minimum GPA of 2.0.

MRA 442 Practicum in Medical Record Administration/Seminar. (13) A seminar experience in health facilities in which students are provided the opportunity to apply their knowledge, previously gained through didactic on campus and previous directed practice and on-campus laboratory experiences, in carrying out management types of activities under the direct supervision of a qualified Registered Record Administrator. A pre and post practicum seminar will be held to discuss practicum expectations, explore potential methods of identifying and solving specific types of problems encountered during the practicum. Prerequisite: Completion of all MRA, MG, ZOO, AHP courses with a minimum grade of C; have an overall minimum grade point average of C (2.0). Senior standing in the Medical Record Administration curriculum (formerly MRA 462).

MRA 450 Senior Research Project in Medical Record Administration. (3) Independent study and research related to problems of a theoretical and/or practical nature in the administration of health record centers. Prerequisites: AHP 490, PSY 311.

DEPARTMENT OF MEDICAL TECHNOLOGY

Anne Mitchell-Hinton, M.T. (ASCP), M.S., Education Coordinator

Medical Technology, as a health profession, represents the application of scientific knowledge to the performance of laboratory tests. The student is taught the laboratory technological aspects of medicine which involve the use of accepted clinical laboratory diagnostic methodologies. Students majoring in Medical Technology do not have a major concentration or emphasis other than Medical Technology.

The Medical Technology Program is jointly sponsored by Tennessee State University and Meharry Medical College and consists of three years of preclinical training and twelve months (three semesters) of clinical training. The Medical Technology program is approved by the National Accrediting Agency for Clinical Laboratory Sciences under the auspices of the Committee on Allied Health Education and Accreditation, and the Tennessee State Development of Health and Environment. Medical Technology students are entitled to participate in all extra-curricular activities of both Meharry Medical College and Tennessee State University. Students have complete access to facilities of both campuses, libraries, inter-library loans from Vanderbilt University School of Medicine and other libraries within the Metropolitan Nashville Area. This is made possible through the public service departments of Meharry Medical College and Tennessee State University libraries.

Admission Requirements (Pre-Clinical Component)

1. Entering Freshmen:

   In addition to meeting minimum admission criteria of Tennessee State University, applicants seeking admission to the Medical Technology program must meet one of the following requirements:
   a) high school graduation with a minimum cumulative grade point average of 2.5 on a 4.0 scale
   b) GED test scores of 50 or above for the five subjects tested
   c) a minimum composite test score of 16 on the ACT

2. Transfer Students

   Applicants will be accepted as transfer students from other colleges or universities, or from other departments of Tennessee State University. Applicants with fewer than 30 semester credit hours in courses required by this program must have an overall college grade point average of 2.5 on a 4.0 scale and meet the admission requirements for first year freshman applicants. Applicants with 30 or more semester credit hours will be admitted if they have maintained an overall college grade point average of 2.5 or above on a 4.0 scale. Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from accredited medical technology programs will be accepted where evidence is provided that the content of courses previously taken is essentially the same as the content of courses in this curriculum. No credit will be accepted for major field courses in which the student has received a grade lower than a C+.

Admission Requirements (Clinical Component)

Tennessee State University students who have met retention requirements and completed the prescribed curriculum will progress directly into the clinical component of the program.

Applicants from affiliated institutions who have successfully completed the agreed upon three-year pre-clinical curriculum, and individuals who possess a baccalaureate degree and have entrance credits approved by National Accrediting Agency for Clinical Laboratory Sciences will be admitted on a competitive basis.

The necessary prerequisite for all students shall include the following as minimum requirements for admission: chemistry-16 semester or 24 quarter hours; biological science-16 semester or 24 quarter hours, including Microbiology (bacteriology) and Immunology. The content of chemistry and biological science courses must be acceptable toward a major in those fields or in medical technology, or be certified by the college/university as equivalent. A minimum of one course in college level mathematics is required.

Retention Policies

Any student whose overall grade point average falls below 2.5 or who earns lower than a C+ in two or more courses will be dropped from the program.

Pre-Clinical Component Courses

A suggested pre-clinical program follows:

FRESHMAN YEAR	Credit Hours	
Course & Number	Fall	Spring
AHP 100	1	
CHEM 121, 122	3	3
CHEM 121L, 122L	1	1
BIO 111, 112	4	4
MATH 111, 112	3	3
ENG 101, 102	3	3
PE or Air SCI	1	1
UC 100 Orientation		1
	16	16

SOPHOMORE YEAR	Credit Hours	
Course & Number	Fall	Spring
CHEM 311, 312	3	3
CHEM 311L, 312L	1	1
CHEM 310		3
CHEM 310L		2
MCB 240	4	
ZOO 201	4	
HIST 201, 202	3	3
ENG 211, 212	3	3
MUS 131		2
	18	17

JUNIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
CHEM 341	3	
CHEM 341L	1	
PHYS 211	4	
BIO 370		4
MCB 420		4
SOC 211	3	
CHEM 351, 352	3	3
CHEM 351L, 352L	1	1
PE or Air SCI	1	1
ART 133		2
	16	15

Clinical Component Courses

Only medical technology majors who have been accepted for the clinical year by the Department of Medical Technology will be allowed to enroll in these courses.

SENIOR YEAR		Credit Hours	
Course & Number	Summer	Fall	Spring
MT 401-02-03	4	4	4
MT 411-12-13	3	3	3
MT 421-22-23	1	3	3
MT 431-32-33	1	2	2
MT 451-52-53	2	2	2
MT 460			1
MT 462L		2	2
MT 471-72-73	1	1	1
	12	17	18

COURSE DESCRIPTIONS FOR CLINICAL COMPONENT

MT 401-02-03 Clinical Chemistry. (4,4) Offers the student a brief review of basic chemistry before going into the principles of clinical chemistry. Included are chemistry problems, automation, and quality control. Laboratory experience will include practical application of this theory in blood chemistry laboratory under trained technical supervision. Students will have the opportunity to work with actual specimens from hospital patients. The lectures include review of the anatomy and physiology of the urinary system, body fluids, and special techniques in the laboratory.

MT 411-12-13, Microbiology. (3,3,3) Offers the student an introduction to the clinical aspects of bacteriology with emphasis on morphology and physiology of bacteria, preparation of culture media, and techniques used for identification. An introduction to mycology is also presented. The students will practice under trained supervision in a hospital laboratory.

MT 421-22-23 Immunohematology. (1,3,3) The basic principles of blood banking are taught with emphasis on importance of accuracy in laboratory testing. Practical application of theory is carried out in the laboratory by the student under technical supervision. Cross-matching, identification of antibodies, and screening of donors are included in the training of students.

MT 431-32-33 Immunology Serology. (1,2,2) Formal lectures in this course will include immune response, antigen-antibody reactions, hypersensitivity, autoimmune disease and serologic procedures.

MT 451-52-53 Hematology. (2,2,2) The use of the microscope, methods of obtaining blood and hematological procedures are presented. Principles and procedures for performance of red and white blood counts, differentials, hemoglobin and hematocrit are stressed. In addition, diseases involving increased blood production and increased blood destruction are presented as well as the principles and theories of coagulation. Laboratory practice will be carried out in the hematology laboratory of the hospital.

MT 460 Parasitology. (1) The objective of this course is to familiarize the student with techniques and methods used to recover and identify parasitic organisms that produce diseases in humans. Life cycles of the organisms and the human immunological responses will be presented.

MT 462L Basic Techniques. (2,2) Presented to familiarize the student, through participation, with the basic laboratory techniques and instrumentation used in the various disciplines in the area of medical technology.

MT 471-72-73 Clinical Microscopy. (1,1,1) The objective of this course is to offer the student general information regarding (1) the anatomy and physiology of the urinary system and (2) the role of urine, body fluids and excretions in the diagnosis of diseases by laboratory methods.

DEPARTMENT OF SPEECH PATHOLOGY AND AUDIOLOGY

H. R. Mitchell, Ph.D. Head

The Department of Speech Pathology and Audiology in the School of Allied Health Professions offers courses of study leading to the Bachelor of Science (B.S.) degree in speech pathology and audiology. The Teacher Education Program (T.E.P.) and the non-certification option are the two curriculums presently offered. These curriculums prepare students primarily for graduate school.

The major for the B.S. degree within the T.E.P. requires, in addition to the University's general education and the school's core curriculums, a minimum of 42 semester hours in the major area.

Students enrolled and admitted to the T.E.P. are required, additionally, to take 33 semester hours in the T.E.P. professional core. Non-teaching students are required to select at least one minor; with careful planning, two minors are possible.

Departmental courses are structured to provide students with background information, theories, principles, and techniques for diagnosis of and remediation of speech, hearing, and language disorders in clinical and educational facilities. The program meets the demands of undergraduate study within a broad spectrum of topics, which include studies in articulation, organic speech disorders, language and voice disorders, aural rehabilitation, clinical audiology, and diagnostic audiology with specialized courses taught within each area. The course of study emphasizes an understanding of normal communicative processes, including reception, integration, and expression. Furthermore, the undergraduate program emphasizes analyses of communicative disorders with added emphasis on management techniques.

The program supplements classroom instruction with required supervised cilincal observation and practicum experiences in speech-language pathology and audiology. Students obtain clinical experiences applicable toward ASHA certification. The on-campus clinic, the Speech, Hearing, and Language Development Center, provides diagnostic and therapy services to children and adults in Nashville-Davidson County, and surrounding counties. Additionally, students are assigned to off-campus practicum sites for diagnostic and clinical experiences, and involvement in interdisciplinary team approaches to case management.

In addition to its academic commitment, the program in speech pathology and audiology provides diagnostic and clinical services in the areas of speech, hearing, and language pathologies for the surrounding University community through prognosis and management, of these communicative disorders. Joint lectures and health-care programs are also sponsored in cooperation with Vanderbilt University and Meharry Medical College. Students are allowed to acquire other clinical experiences at various daycare centers, the Veterans' Administration Hospital, and several Senior Citizens Centers in the metropolitan area.

All students entering the department will be screened to determine if they have disorders of communication. Students who are found to have such disorders will be required to enroll in the proper therapeutic program/course for remediation. Students are urged to begin therapy during their freshman year, or as early therafter as possible. No student will be allowed to engage in student teaching until this requirement is satisfactorily met. Students are also reminded that they are expected to show steady growth in their development of vocabulary, reading, speaking, and writing skills.

Grades of C or better are required in courses with the major. Grades falling below this acceptable minimum must be repeated.

CURRICULUM *REQUIRED FOR A MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY—BACHELOR OF SCIENCE DEGREE

SPTH 200 Introduction to Clinical Practicum
SPTH 250 Speech and Hearing Science
SPTH 260 Phonetics
SPTH 270 Phonetics Lab (only if C in 260)
SPTH 280 Introduction to Speech, Hearing and Language Disorders
SPTH 290 Clinical Methods in Articulation Disorders
SPTH 300 Clinical Practicum
SPTH 305 Voice and Diction
SPTH 350 Language and Speech Development of Children
SPTH 372 Identification and Appraisal of Speech and Hearing Problems
SPTH 373 Aural Rehabilitation
SPTH 374 Introduction to Audiology
SPTH 400 Supervised Clinical Practicum
SPTH 450 Senior Project
SPTH 460 Organic Speech Disorders
SPTH 470 Stuttering and Allied Disorders
SPTH 476 Language Disorders in Children

*All courses of content listed as 300 and above carry associated and required observations and/or practicum. Practicum courses, 300 and 400, require students in the Teacher Education Program to accumulate a minimum of 75 clock hours of clinical practicum prior to student teaching. These courses require non-teaching students to accumulate a minimum of 100 clock hours.

All students are required to enroll in practicum during each semester of enrollment in the Department. Participation in practicum during the Summer Session is optional but encouraged.

CURRICULUM FOR A MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY (WITH TEACHER CERTIFICATION)

FRESHMAN YEAR	Credit Hours	
Course & Number	Fall	Spring
Eng 101, 102	3	3
Hist 201, 202	3	3
Zoo 201, 202	4	4
Math 111, HLTH 151	4	2
AHP 100	1	
PE 11, PE 12	1	1
SPTH 280, CS 100	2	3
	18	16

SOPHOMORE YEAR	Credit Hours	
Course & Number	Fall	Spring
Eng 211, 212	3	3
EDCI 201, SOC 211 or GPA 221	3	3
PSY 242, SPTH 290	3	3
SPTH 350, SPTH 200	3	1
SPTH 260, SPTH 250	3	3
THEA 120, Art 133		
Mus 131, Phil 336	2	2
PE, PE	1	1
	18	16

JUNIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
EDCI 301, Elective	3	3
EDCI 387, EDSE 337 or 336	3	3
SPTH 372, SPTH 373	3	3
SPTH 374, SPTH 476	3	3
EDSE 465, PSY 312	3	3
SPTH 300a, b	1	1
	16	16

SENIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
SPTH 450, 371	3	3
SPTH 460, EDRD 491	3	4
SPTH 470, EDCI 472 S & O	3	9
SPTH 400a, SPTH 305	1	3
Electives	6	
	16	18

CURRICULUM FOR A MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY (WITHOUT TEACHER CERTIFICATION)

FRESHMAN YEAR	Credit Hours	
Course & Number	Fall	Spring
ENG 101, 102	3	3
HIST 201, 202	3	3
ZOO 201, 202	4	4
MATH 111, Hlth 151	4	2
AHP 100, CS 100	1	3
PE 11, PE 12	1	1
THEA 120, ART 133 MUS 131 or PHIL 336	2	2
	18	18

SOPHOMORE YEAR	Credit Hours	
Course & Number	Fall	Spring
ENG 211, 212	3	3
EDCI 201, SOC 211 or GPA 221	3	3
PSY 242, SPTH 290	3	3
SPTH 350, SPTH 200	3	1
SPTH 260, SPTH 305	3	3
SPTH 280, SPTH 250	2	3
PE PE	1	1
	18	17

JUNIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
SPTH 372, 373	3	3
SPTH 374, 476	3	3
SPTH 300a, b	1	1
EDSE 465	3	
EDCI 336 or 337		3
Elect (300-400 level)	6	6
	16	16

SENIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
SPTH 450	3	
SPTH 460	3	
SPTH 470	3	
SPTH 400, a, b	1	1
PSY 383		3
PSY 437		3
Elect (300-400 level)	6	8
	16	15

COURSE DESCRIPTIONS

SPTH 200 Introduction to Clinical Practicum. (1) Orientation to the clinical practicum experience. Students will be introduced to the policies and procedures of the Speech, Hearing and Language Development Center, the organization and content of clinic files, professional report writing style, clinical session planning, and the basic skills necessary for effective client-clinical interactions. (A grade of C or better is required for subsequent enrollment in SPTH 300/400.)

SPTH 250 Speech and Hearing Science. (3) Introduction to the anatomy and physiology of the speech and hearing mechanisms. An inspection of the acoustics and perception of speech as well as the psychophysics of hearing.

SPTH 260 Phonetics (3) An introductory course in phonetics, the science of speech sounds, which includes acoustic, articulatory and perceptual analysis of speech sounds and transcription of American speech into the International Phonetic Alphabet. Students in speech pathology and audiology are expected to apply this knowledge in the clinical setting.

SPTH 270 Phonetics Lab (1) A remedial self paced course for the individual who needs to improve his or her skills in phonetic transcription. This course follows SPTH 260. (Only if C in 260).

SPTH 280 Introduction to Speech, Hearing and Language Disorders (2) Introduces the student to the nature and types of speech, hearing and language problems, presenting characteristics and overviews of various methods used in identifying and managing these disorders.

SPTH 290 Clinical Methods in Articulation Disorders (3) The description, diagnosis and remediation of articulation problems. Academics to be covered include a review of physical production of speech, normal developmental learning patterns of speech, various models of speech processes and theoretical bases for therapeutic procedures. (Prerequisite: SPTH 260.)

SPTH 300 (a, b, c, d) Supervised Clinical Practicum. (1-4) Application of clinical session planning skills to first direct client-contact situation, management of one therapy case with close supervision; administration of basic diagnostic tests. Prerequisite: SPTH 200.

SPTH 305 Voice and Diction Improvement (3) Designed to present the student with an overview of the anatomical and physiological bases for the principles inherent in effective oral communication, especially as related to articulation, language, voice, rhythm, and listening skills—accompanied by practical exercises that will assist in the modification of the student's speech behavior. Individualized laboratory experiences will be arranged, when necessary, within the speech and language clinic.

SPTH 350 Language and Speech Development of Children (3) This course is designed to familiarize the undergraduate student with the normal development of language and speech. Students must understand the nature and purposes of communication, the elements of the language and speech. Students must understand the nature and purposes of communication, the elements of the language system, the neurophysiological bases for language development, and the psychosocial aspects of the development of speech and language.

SPTH 371 Methods in Public School and Clinical Speech and Hearing Problems (3) A methods course dealing with the observation, diagnosis, management, organization and therapy for various communication disorders in the K-12 setting. This course is primarily for the student who plans to enter the public school teacher certification program. Prerequisite: Teacher Education Core and three-fourths of major courses.

SPTH 372 Identification and Appraisal of Speech and Hearing Problems (3) This course prepares the student to administer and interpret results of various diagnostic procedures used by professionals in the area of speech pathology and audiology. The theoretical bases for the tests will be covered and basic skills in administration of the tests will be required.

SPTH 373 Aural Rehabilitation (3) History, principles and theory of speech-reading and auditory training, and introduction to amplifying systems including hearing aids. Discussion of comprehensive care for the hearing impaired including psychological aspects and counseling.

SPTH 374 Introduction to Audiology (3) An introduction to the anatomical and psychophysical aspects of hearing. Consideration of etiology and types of hearing loss. Theory and practice of techniques of auditory assessment with emphasis on pure tone and speech audiometry. Interpretation of test results. Prerequisite: 250.

SPTH 376 Speech, Language and Voice Improvement Training (3) Communication aids and telesensory instruments will be utilized to train students to identify and isolate distinctive features and other characteristics of their speech, voice, language, and listening skills with opportunities to modify them through practical clinical exercises, designed by the instructor.

SPTH 377 Identifying Communication Problems of the Developmentally Disabled with Strategies for Remediation (3) Since this course is designed to acquaint the student with the various types of communication patterns found in various groups of developmentally handicapped individuals (both adults and children), the course avoids the traditional areas of stuttering and articulation, and instead stresses the patterns and functions of verbal and nonverbal communication, and their impact on adpative life skills and social interactions. The course progresses to intervention strategies and remediation tactics often used for the different types of communication disorders. Stress is placed upon a consideration of the dysfunction and its remediation in daily living experiences.

SPTH 400 (a, b, c, d) Supervised Clinical Practicum (1-4) (Senior Year-Prerequisite: SPTH 300 a, b 2 semester hours) Management of two or more therapy cases with supervision. Demonstration of increased skill in diagnosis, management, treatment, evaluation, and report writing skills.

SPTH 450 Senior Project (3) An advanced composition or special project conducted by the graduating senior to acquire and demonstrate basic principles of research or investigation. The student is supervised by a member of the faculty.

SPTH 460 Organic Speech Disorders (3) The nature of disorders of speech in which structural alternation is an important contributing cause. Includes the study of neurological disorders (cerebral palsy and aphasia), cleft palate, laryngectomy (esophageal speech), and disorders of voice in which structural alteration can be either demonstrated or inferred.

SPTH 470 Stuttering and Allied Disorders (3) This course is designed to provide the student with the theoretical and historical background of stuttering and its allied disorders. The student will be exposed to traditional, and new methods or techniques for diagnosing, treating, and counseling the stutterer and members of his family and environment.

SPTH 473 Special Problems in Speech Pathology or Audiology (2) Seminar study of some selected problems in speech pathology audiology. Prerequisite: 21 hours in the major field.

SPTH 476 Language Disorders in Children (3) The nature of language disturbances resulting from damage to the central nervous system, auditory impairment, environmental, social, and psychogenic influences. Managerial procedures are discussed while numerous diagnostic tests of language are demonstrated. Prerequisite: SPTH 350.

SPTH 477 Alternatives for the Severely Speech, Hearing and Language Impaired. (3) A course designed to provide an overview of recent developments of nonvocal communication systems and other telesensory electronic devices and instruments—as well as an understanding of the potentials that may be realized through use of special techniques, communication aids, and other technological developments for the physically disabled child or adult.

SPTH 478 Non-Verbal Communication System (3) This course is designed to introduce the student to the various sign language systems with an opportunity to learn one or more techniques for communicating with specific groups, including the deaf, mentally retarded, physically disabled, and other special populations which may need a non-vocal communication system.

SPTH 479 Communication Problems of the Elderly (3) This course is designed to teach students how to identify, diagnose, treat and manage communication problems associated with the aged. Special attention will focus on speech, hearing, language, voice, fluency problems, commonly seen among the elderly. Various diseases, medications, social conditions, biological, sociological and psychological factors will be studied to isolate their influencing properties.

THE SCHOOL OF ARTS AND SCIENCES

Wendolyn Y. Bell, Ph.D. Acting Dean

PHILOSOPHY

The Arts and Sciences address the whole man. They should stir the mind and vivify the spirit. By inducing habits of logical and dispassionate thought, and by promoting the development of creative energies, the Arts and Sciences faculty aims to guide the students to enrich the occupational and vocational skills. In keeping with the purpose of the University, that of the School of Arts and Sciences in twofold: liberal and technical.

ORGANIZATION

The School was organized in 1951. It has a Dean, an Associate Dean, and two clerical staffs (one at each campus—main and downtown).

The courses which comprise the School's curriculum are offered by fourteen academic departments. They are the Department of Art, Biological Sciences, Chemistry, Communication, Criminal Justice, English, Government and Public Affairs, History and Geography, Modern Foreign Languages, Music, Philosophy and Religious Studies, Physics and Mathematics (Computer Science), Social Welfare, and Sociology. (See departmental sections for information on specific degree programs).

HONORS PROGRAM

The Honors Program is also sponsored by the School of Arts and Sciences. The Honors Program serves academically superior students who need the challenge and the opportunity to achieve academic excellence. Admissions to the Honors Program is made on the basis of the student's ACT scores, and/or high school record, and recommendations. (See the Honors section in this Catalog).

PURPOSE

The School of Arts and Sciences provides a basic Undergraduate Education for those students planning (1) to continue in graduate study, (2) to enter the professions, or (3) to engage, upon graduation, in other gainful occupations and vocations.

TEACHER EDUCATION

In addition to programs that prepare the student for professions and vocations, the School of Arts and Sciences offers Teacher Certification curricula. These teacher education programs are available through the following Departments: Art, Biological Sciences, Chemistry, Communication, English, Government and Public Affairs, History and Geography, Modern Foreign Languages, Music, Physics and Mathematics, and Sociology.

DEGREES

The School offers a total of four Baccalaureate Degrees. The Bachelor of Arts (B.A.) and The Bachelor of Sciences (B.S.) degrees are offered in the academic departments. Additionally, the School itself offers The Bachelor of Arts in Arts and Sciences (B.A.) and The Bachelor of Sciences (B.S.) in Arts and Sciences.

STUDENT ORGANIZATIONS

To ensure our students the best education and training, the arts and sciences faculty sponsor more than twenty (20) student organizations, honor societies, and group activities, both academic and cultural. The School and its departments also sponsor the WTSU Radio Station, the Annual University-Wide Research Day, art exhibitions, dramas, musical concerts, and a variety of seminars.

SCHOLARSHIPS

The various departments offer a limited number of scholarships for students who achieve high academic standing. Arts and Sciences students may also apply for University and private scholarships and grants.

PUBLIC SERVICE

The School also operates a Public Service Program which has as its function the fulfillment of one of the primary missions of the University—to serve the needs of the community. The Public Service Program offers non-credit courses, off-campus courses, conferences, institutes, seminars, and workshops to non-traditional and adult students and other audiences.

EVENING STUDIES

The Evening Studies Program is offered by the School of Arts and Sciences mainly at the University's downtown campus. The Evening Studies Program is designed to meet the educational and retraining needs of the working adult in a time of technological transition. It encourages non-traditional students and senior citizens to seek renewed acquaintance with the visual arts, music, literature, history, philosophy, social sciences, and natural sciences. The student may simply take courses of interest or pursue a degree through one of the academic departments. The Evening Studies Program also provides a General Degree (B.A. or B.S.) for those who do not seek to pursue a traditional major in a single discipline.

INTRA-DISCIPLINARY STUDIES

The Bachelor of Arts or Bachelor of Science in Arts and Sciences

The General Studies Program is a cross-disciplinary program which involves studies in overlapping disciplines such as Humanities, Natural Sciences, and Social Sciences. It exposes the student to the knowledge and methodologies of various fields of study within and without the School of Arts and Sciences.

This degree permits students in consultation with their advisors to develop a personalized program of study. Students concentrate their studies in one discipline, strengthening it with appropriate courses from related disciplines. The

degree is also useful for some pre-professional curricula (e.g., pre-law, pre-medical, pre-dental), allowing the student to construct more easily a degree program from the required courses in various disciplines.

Summary of Requirements for this Degree:

A. A minimum of *128* hours is required for graduation. (Credit for courses in military science and physical education are *excluded* in arriving at this total).
2. A minimum of 60 upper division hours must be completed.
3. A minimum of 32 upper division hours must be completed in Arts and Sciences:
   (a) 23 upper division hours must be completed in one of the three broad areas of Humanities, Natural Sciences, or Social Sciences; 15 of these hours must be in a single discipline; 8 additional hours must be in a second discipline in the same broad area.
   (b) Nine additional upper division hours must be completed; these hours may be in any area of concentration in Arts and Sciences.
4. The remaining 28 upper division hours needed to fulfill the second requirement described above may be taken in any disciplines in any School in the University.
5. At least 12 upper division hours in the area of concentration must be taken at Tennessee State University.
6. A 2.0 average must be maintained in the area of concentration.
7. English Proficiency Examination and General Education Courses are required.
8. In lieu of Senior Project, the student is advised to enroll in a writing or special topics course that requires a major undergraduate paper.

All of the fields in which a student may earn a degree in the general program are cited under the three broad concentrations of Humanities, Natural Sciences and Social Sciences.

HUMANITIES

The Humanities introduce the student to a broad range of questions and ideas focusing on man as being with moral, historical, creative and philosophical interests. Disciplines include art, music, history, philosophy, English, journalism, religious studies, speech, and foreign languages, which include French, German, Russian, and Spanish.

The student in Humanities may prepare for advanced study, develop creative skills, or use this knowledge in a wide variety of careers.

NATURAL SCIENCES

The Natural Sciences offer formal study in the disciplines of **biology, chemistry, computer science, geology, mathematics and physics**. Lower division courses are offered in astronomy. Preprofessional curricula preparing the student for studies in pharmacy, dentistry, and medicine are also offered.

A Natural Science education enhances a student's awareness of the natural environment and prepares the student to engage in logical thought processes. Such an education also readies the student for further studies in chosen scientific and professional fields.

SOCIAL SCIENCES

The Social Sciences offer formal study in the disciplines of anthropology, economics, geography, gerontology, government and public affairs, psychology, and sociology.

The function of the Social Sciences is to provide students with a disciplined approach to both the theories and methodologies which will assist them in understanding man in society and culture.

Courses are intended for students who will pursue graduate study and for those who are preparing for professional careers in government, business, and law. The overall objective is to assist students in gaining a clearer understanding of the relevance between social sciences and significant social issues in contemporary society.

INTRA-DISCIPLINARY STUDIES REQUIREMENTS (B.A. in Arts and Sciences)

1. English (6 hrs.): Composition 101-102U or 101H-102H.
2. Literature (6 hrs.): Any combination of a 211U and a 212U course.
3. Foreign Language (12 hrs.): 101U and 201U level courses.
4. History (6 hrs.): American History 201-202U or 201H-202H.
5. Philosophy and the Arts (4-6 hrs.): One (1) course from each of two (2) of the following disciplines: Art, Music, Philosophy (except Phil 250-251), Religious Studies, or Theatre 120.
6. Rational Thought (3-8 hrs.): Mathematics 111U or Mathematics 163U (must take Math, Philosophy 250U or Phil 251).
7. Natural Sciences (8 hrs.): One (1) of the following sequences: Biology 111-112; Zoology 201-202; Astronomy 111-112; Chemistry 131 and 131L-132 and 132L (restricted to students not concentrating in Natural Sciences); Geology 101-102; Physics 211-212).
8. Social Sciences (12 hrs.): Any twelve (12) lower division hours with a maximum of six (6) in any one (1) of these disciplines: Anthropology, Economics, Geography, Gerontology, Government and Public Affairs, Psychology, Social Welfare and Sociology.
9. Physical Education (0-4 hrs.).
10. Area of Concentration (23 hrs.)
11. Upper division hours in the School of Arts and Sciences (32 hrs.).
12. Major Discipline (15 hrs.): Courses in one (1) discipline (e.g.: English, History, Music, etc.).
13. Minor Discipline (8 hrs.): Courses in a second discipline in the same area of concentration (e.g.: Humanities, Natural Sciences, and Social Sciences).
14. Electives (9 hrs.): Nine (9) upper division hours in any area of concentration in Arts and Sciences.
15. Additional Studies (28 hrs.): Upper division hours in any of the disciplines offered by any of the Schools of the University.

INTRA-DISCIPLINARY STUDIES DEGREE
BACHELOR OF ARTS (B.A.)

*Suggested Program for Full-Time Student

FRESHMEN YEAR	Credit Hours	
Course & Number	Fall	Spring
University College Eng 101-102 (or 101H-102H)	3	3
University College for Lang 101-102	3	3
University College Humanities	2	
University College Math 111		3
University College Natural Science	4	4
History 201-202	3	3
University College Phy Educ	1	1
	16	17

SOPHOMORE YEAR	Credit Hours	
Course & Number	Fall	Spring
University College Eng 211-212	3	3
University College For Lang 201-202	3	3
University College Humanities		2
University College Math	3	
University College Phy Educ		2
Social Science (100-200 levels)	3	3
Minor Discipline 100-200 or 300-400 Levels	3	

Major Courses 300-400 Levels	2	3
	17	16

JUNIOR YEAR Course & Number	Credit Hours Fall	Spring
Social Science 100-200 Levels	3	3
Major Discipline 300-400 Levels	6	6
Minor Discipline 300-400 Levels	3	3
Electives 300-400 Levels	3	6
	15	18

SENIOR YEAR Course & Number	Credit Hours Fall	Spring
Additional Studies 300-400 Levels	17	16
	17	16

*This suggested plan of study should be followed under the direction of an academic adviser who may alter the program relative to changing factors. The advisor may suggest another plan of study for the part-time student.

INTRA-DISCIPLINARY STUDIES

B.S. in Arts and Sciences

1. English (6 hrs.): Composition 101-102U or 101H-102H.
2. Literature (6 hrs.): Any combination of a 211U course and a 212U course.
3. History (6 hrs.): History 201-202U or History 201H-202H.
4. Additional Humanities (4-6 hrs.): One (1) course from two (2) of the following disciplines (lower division) —Art, Foreign Language, Music, Philosophy, Religious Studies, Theatre 120.
5. Natural Science:
   (a) Mathematics (6-8 hrs.): Math 111U and Math 113U *or* Math 163U and 164U.
   (b) Biological Sciences (8 hrs.): Either Biology 111-112 of Zoology 201-202.
   (c) Physical Science (8 hrs.): Either Astronomy 111-112 or Chemistry 121U and 121L—122U and 122L; or 131 and 131L—132 and 132L (restricted to students who are *not* concentrating in Natural Science); or Geology 101-102 or Physics 211-212.
6. Social Science (12 hrs.): Any twelve (12) lower division hours with a maximum of six (6) in any one of these disciplines: Anthropology, Geography, Geerontology, Government and Public Affairs, Psychology, Sociology, Social Welfare, and Economics.
7. Physical Education (0-4 hrs.).
8. Area of *Concentration (23 hrs.).*
9. Upper Division hours in the School of Arts and Sciences (32 hrs.).
10. Major Discipline (15 hrs.): In one discipline (i.e.: Art, Biology, Social Welfare, etc.).
11. Minor Discipline (8 hrs.): In a second Discipline in the same area of concentration (e.g.: Humanities, Social Science, Natural Science).
12. Electives (9 hrs.): Upper division hours in any area of concentration in Arts and Sciences (Humanities, Natural Science, Social Science).
13. Additional Studies (28 hrs.): Upper division hours in any of the Schools of the University.

INTRA-DISCIPLINARY DEGREE BACHELOR OF SCIENCE (B.S.)

*Suggested Program for Full-Time Student

FRESHMEN YEAR Course & Number	Credit Hours Fall	Spring
University College Eng 101-102 (101H-102H)	3	3
University College Humanities		2
University College Mathematics	3	3
University College Natural Science	4	4
University College History 201-202	3	3
University College Phy Education	1	1
	14	16

SOPHOMORE YEAR Course & Number	Credit Hours Fall	Spring
University College Eng 211-212	3	3
University College Humanities	2	2
University College Phy Education		2
Social Science 100-200 Levels	9	6
Minor Discipline 100-200 or 300-400 Levels	3	3
	17	16

JUNIOR YEAR Course & Number	Credit Hours Fall	Spring
Minor Discipline 300-400 Levels	2	
Major Discipline 300-400 Levels	3	3
Electives 300-400 Levels	3	3
Additional Studies 300-400 Levels	9	12
	17	18

SENIOR YEAR Course & Number	Credit Hours Fall	Spring
Major Discipline 300-400 Levels	3	6
Electives 300-400 Levels	4	3
Additional Studies 300-400 Levels	9	9
	16	18

*This suggested plan of study should be followed under the direction of an academic adviser who may alter the program relative to changing factors. The advisor may suggest another plan of study for the part-time student.

DEPARTMENT OF ART

Herman Beasley, Ed.D., Head

The Art Department offers a major in Art leading to the degrees of Bachelor of Art in Arts and Sciences and Bachelor of Science. The department also offers a minor in Art, the curriculum of which is listed below.

A minor consists of 18 semester hours of Art.

The minimum number of semester hours required for a degree in Art is 132. The minimum number of semester hours in Art required is 57, 45 hours of which must be on the 300 and 400 levels.

1. Art majors should earn at least a grade of "C" in courses taken in the department, otherwise the course in question must be repeated.
2. Art majors may be required to repeat any of the supporting courses in which a grade of "D" has been received.
3. Art majors who show evidence of fundamental weaknesses in an area of study may be requested by the head of the department, to take additional course work in the area.
4. A transfer student is expected to present a comprehensive portfolio of his/her work.
5. Art majors are expected to keep comprehensive portfolios of their work to be inspected periodically. Sophomore Review and Senior Review are mandatory.
6. The department reserves the right to retain at least one example of the student's creative work in a given course.
7. All persons pursuing an organized program of study in the department are expected to participate in the program of the Art Guild.

THE BACHELOR OF SCIENCE DEGREE WITH EMPHASIS IN ART EDUCATION

The Art Curriculum with emphasis on Art Education has the following objectives: (1) to prepare the student to teach art on the elementary and secondary level; (2) to offer courses which stimulate students to learn about art and express themselves creatively as a part of their cultural growth; (3) to guide students in the understanding of the importance of art experiences in public school education, and life in general; (4) to guide

students in the realization of the many ways that art affects their daily living; (5) to acquaint students with the arts of all people through assigned reading, observation and visual aids; (6) to show the relationship of art to other fields of learning; (7) to counsel and encourage students who show interest and ability for artistic growth to continue the study of art in its various forms so as to be instrumental in placing art education in the public school curriculum on a level with other school subjects.

THE BACHELOR OF SCIENCE DEGREE WITH EMPHASIS IN STUDIO ART, COMMUNICATION DESIGN/COMMERCIAL ARTS, AND ART HISTORY

The Art curriculum, with emphasis on Studio Art, Commercial Art/Communication Design and Art History; (1) prepares the student for advanced graduate study in a studio discipline of interest; (2) prepares and strengthens the student's skills for professional work in the arts: (3) prepares the student as a graphic designer/commercial artist; and (4) prepares the student with the necessary foundation that will enable him to broaden his knowledge in the field of Art History and Criticism through further study and/or practice.

Eighty-two hours of art courses including:

a. Introduction to Art, Basic Design, Drawing I-II, Drawing and Pictorial Design I-II, Painting I-II, Ceramics, Printmaking I-II, Aesthetics, Senior Seminar.
b. Twelve semester hours of individual problems.
c. Eighteen semester hours in major area of concentration. Students with emphasis in Communication Design/ Commercial Art, twenty-four semesters needed in area of concentration.

Areas of concentration in Studio Art are Printmaking, Ceramics, Painting, Sculpture or Art History, Photography.

THE BACHELOR OF ARTS DEGREE IN ARTS AND SCIENCES WITH EMPHASIS IN PRINTMAKING, CERAMICS, PAINTING, SCULPTURE OR ART HISTORY

This program in the Department of Art is designed to prepare students to perform competently in the business world and to cope with the complex problems of graduate school. The specific programs goals are: (1) To provide students with an understanding of Commercial Art; (2) To provide training in modern business as related to Commercial Art; (3) To prepare students for graduate work; (4) To educate students for the teaching of Art on the collegiate levels; (5) To provide students with a sound foundation for successful competition in the art world.

CURRICULUM FOR BACHELOR OF SCIENCE IN ART WITH EMPHASIS IN ART EDUCATION

FRESHMEN YEAR	Credit Hours	
Course & Number	Fall	Spring
English 101-102U	3	3
Art 101-132	3	3
Art 121-122	3	3
Math 111U		3
History 201-202U	3	3
Music 131U		2
CS 100U; 100L	3	
PE or AERO	1	1
Orientation Co 100U	1	
	17	18

SOPHOMORE YEAR	Credit Hours	
Course & Number	Fall	Spring
English 211-212U	3	3
Sci. 121-122U	3	3
Psy. 242		3
Ed. 201	3	
Art 221-231	3	3
Soc. Sci. (Any level)	3	
Phil. 201U		3
PE or AERO	1	1
	16	16

JUNIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
Psy. 312	3	
Ed. 301-387	3	3
Art 301	3	
Art 331-332	3	3
Art 350-351	3	3
Art 341-342	3	3
Art 360		3
	18	15

SENIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
Art 326	3	
Ed. 465	3	
Ed. 491		3
Art Elective	3	
Art 450	3	
Art 371		3
Art Elective (any level)	3	
Art 400, 401 or 402	3	
Ed. 472		9
	18	15

CURRICULUM FOR A BACHELOR OF SCIENCE WITH EMPHASIS IN STUDIO ART

FRESHMEN YEAR	Credit Hours	
Course & Number	Fall	Spring
English 101-102U	3	3
Math 111U		3
History 201-202U	3	3
Art 101-132	3	3
Art 121-122	3	3
CS 100	3	
Music 131	2	
PE or AERO		2
Orientation Co 100U	1	
	16	17

SOPHOMORE YEAR	Credit Hours	
Course & Number	Fall	Spring
English 211-212	3	3
Soc. Sci. Elective (Lower Division)	3	
Art 210-220	3	3
Art 221-231	3	3
Phil. 201U		3
Elective	3	
Art 331		3
PE or AERO	1	1
	16	16

JUNIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
Art 301	3	
Art 321 or 333	3	
Art 332-434	3	3
Art 341-342	3	3
Art 350-351	3	3
Art 326		3
Art Elective	3	
Elective (Any Level)		3
	18	15

SENIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
Bio. or Phys. Sci. (Any Level)	3	3
Art Hist. Elective (300-400 level)	3	
Art 400, 401 or 402 (Major Emphasis)	3	3
Art Electives (300-400 Level)	3	
Art Electives (300-400 Level)		6
Electives (300-400 Level)	3	3
Art 450	3	
	18	15

CURRICULUM FOR A BACHELOR OF ARTS IN ART WITH EMPHASIS IN STUDIO ART

FRESHMEN YEAR	Credit Hours	
Course & Number	Fall	Spring
English 101-102	3	3
Art 101-132	3	3
Art 121-122	3	3
CS 100	3	
Foreign Language 101-102	3	3
Music 131		2
PE or AERO	1	1
Orientation Co 100U	1	
	17	15

SOPHOMORE YEAR	Credit Hours	
Course & Number	Fall	Spring
English 211-212U	3	3
History 201-202U	3	3
Math 111U		3
Foreign Language 201-202U	3	3
Art 210-220	3	3
Art 221-231	3	3
PE or AERO	1	1
	16	19

JUNIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
Social Science Elective (Lower Division)		3
Phil. 201U	3	
Art 301-302	3	3
Art 321 or 333	3	
Art 341-342	3	3
Art 350	3	
Art 326		3
Art 331-332	3	3
	18	15

SENIOR YEAR	Credit Hours	
Course & Number	Fall	Spring
Biol. or Phys. Sci. (Any Level)	3	3
Art 434	3	
Art 450	3	
Art 400, 401 or 402 (Major Emphasis)	3	3
Art Electives (300-400)	3	6
Electives (300-400)		3-6
	15	15-18

COURSE OFFERINGS

Art 101 Introduction to Art (3). An introduction to the fundamental principles of the visual arts with stress on appreciation and the significance of art in contemporary life.

Art 110 Introductory Studio Course I (3). Two dimensional design and color theory; interpretative drawing, object and figure, three dimensional design.

Art 120 Introductory Studio Course II (3). Two dimensional design and color theory; interpretative drawing, object and figure, three dimensional design.

Art 121 Fundamentals of Drawing I (3). An introduction to various tools techniques and materials of basic drawing. A study of perspective and function of the visual elements of composition.

Art 122 Figure Drawing II (3). An exploration of formal and expressive potentials of the figure. Traditional and experimental approaches to drawing. Prerequisite: Art 121.

Art 132 Design (3). A contemporary approach to basic visual elements in design as they are related to two and three dimensional problems. Problem-stating, problem-solving will be a vital part of three-dimensional form organization; with emphasis on individual creative and expression in design theory and innovation in the use of materials and techniques. Lettering techniques will be included in so far as it relates to design.

Art 133U Art Appreciation (2). A course for all students interested in understanding the visual arts in everyday experiences. An introductory survey of the visual arts dealing with fundamental and historical fragmentations of Eastern and Western civilizations.

Art 133H Honors Art Appreciation (2). A comprehensive survey of the art of prehistoric Egypt, Greece, Rome, and the Romanesque and Gothic periods; the art of the Renaissance, Baroque and Rococo periods. Emphasis on comparing these periods historically as well as stylistically.

Art 171 Introduction to Art History I (3). Prehistoric through the Renaissance.

Art 172 Introduction to Art History II (3). Composition, stressing figure and environmental situation. Prerequisite: Art 110-120, or 121-122, 132.

Art 210 Drawing and Pictorial Design I (3). Composition stressing figure and environmental situation. Prerequisite: Art 110-120, or 121-122, 132, 210.

Art 220 Drawing and Pictorial Design II (3). Composition, stressing figure and environmental situation. Prerequisite: Art 110-220 or 121, 122, 132, 210.

Art 221 Introductory Oil Painting I (3). The nature of modern techniques and their versatility in the use of oil and acrylics. Prerequisite: Art 110-120, or 121-122, 132.

Art 231 Introductory Oil Painting II (3). The nature of modern techniques and their versaility in the use of oil and acrylics. Prerequisite: Art 110-120, or 121-122, 132, 221.

Art 240 History of Film (3). An historical study of the development of film as an art medium.

Art 241 Crafts (3). An introduction to the processes, materials and techniques available to the artist-craftsman in design Two and Three Dimensional art forms in clay, fibers, and metals. Emphasis is on development of functional/non-functional forms, as well as, artistic expression.

Art 251 Lettering (3). Technique of letter indication, finished lettering, letter design, typography and film lettering, usage and adaptation of lettering skills to practical problems. Prerequisite Art 110 or 132.

Art 252 Layout (3). Preparation of roughs and comps, emphasis on skills as well as taste in design. Principle bacics stressed, such as composition and perspective. Prerequisite: Art 110-120 or 121-122, 132.

Art 253 Illustration (3). Study of pictorial design as used by the graphic designer/commercial artist. All media including photography.

Art 300 Aesthetics (3). Problems in the philosophy of art and art criticism; aesthetic experience, truth and art; aesthetic value. Prerequisite: Previous art of philosophy courses.

Art 301 Ceramics I (3). An introductory course in pottery making including designing, hand forming, decorating and firing ceramic object.

Art 301N Ceramics I (3). An introductory course in pottery making for non-majors.

Art 302 Ceramics II (3). Experiences in designing, forming, decorating, firing, and glazing functional and non-functional forms with emphasis on wheel throwing techniques. Prerequisite: Art 301.

Art 310 Advanced Drawing and Pictorial Design I (3). Advanced compositions, stressing figure. Prerequisite: Art 210-220 or consent of instructor.

Art 311 Graphic Design (3). Emphasis on creative advertising, problem-solving within an area of printed materials. Prerequisite: Art 251-252.

Art 312 Production (3). Technology and skills necessary to the designer/commercial artist. Printed technology, preparation of finished art suitable for reproduction. Prerequisite: Art 251-252.

Art 313 Advanced Illustration (3). Study of advanced pictorial concepts, methods and techniques. Prerequisite: Art 253.

Art 320 Advanced Drawing and Pictorial Design II (3). Advanced compositions stressing figure. Prerequisite: Art 310 or consent of instructor.

Art 321 Intermediate Oil Painting I (3). Further study of modern techniques in oil and acrylics. Prerequisite: Art 221 or consent of the instructor.

Art 322 Intermediate Oil Painting II (3). Advanced development in various painting media and techniques with emphasis on oils and acrylics. Individual selection of content encouraged. Prerequisite: Art 221 or consent of the instructor.

Art 333 Advanced Oil Painting (3). Advanced study and original projects in oil.

Art 326 Photography (3). The fundamentals of photographic process, including the proper use and maintenance of the camera, photographic enlarger and related equipment.

Art 327 Basic Photography (3). Advanced studies in the area of black and white photography.

Art 330 Watercolor Painting (3). Composition in transparent and opaque watercolor.

Art 331 Art History I (3). An introductory survey of the development of the visual arts from Pre-historic through the Early Medieval era.

Art 332 Art History II (3). An introductory survey of the development of the visual arts from Romanseque Art through the Baroque in France and England.

Art 333 Watercolor Painting I (3). Composition in transparent and opaque watercolor. Prerequisite: Art 110-120 or 121, 122, 132 or consent of the instructor.

Art 334 Watercolor Painting II (3). Composition in transparent and opaque watercolor. Prerequisite: Art 221 or 333.

Art 341 Sculpture I (3). An introduction in the tools and techniques of indirect sculpture with emphasis on modeling, mold-making and casting. Prerequisite Art 132 or 110-120.

Art 342 Sculpture II (3). Experimentation with the various tools and techniques of direct sculpture, with emphasis on working directly in clay, plaster, wood, stone, plastic, fiberglass and metal. Prerequisite: Art 341.

Art 350 Printmaking II (3). An introductory course in the art of printmaking, its history, methods and techniques, including a comprehensive study of various printmaking processes: Intaglio (etching, drypoint, engraving), Planographic (lithography), Relief (block-cuts), Stencil (Serigraphy) and Calligraphy.

Art 351 Printmaking II (3). An intermediate printmaking course, with emphasis on lithography, photosilkscreening, photo-etching, and calligraphy. Work completed in this course should qualify as part of senior exhibition. Prerequisite: Art 350.

Art 352 Intermediate Printmaking I (3). In depth work in any chosen medium including combinations of media.

Art 353 Intermediate Printmaking II (3). In depth work in any chosen medium including combinations of media.

Art 359 Visual Art and Early Childhood (3). A method course with various education theories and problems encountered on the early childhood levels.

Art 360 Public School Art (3). A survey of various education theories and problems encountered on the elementary and seconary levels. Reading, discussions and studio experiences.

Art 371 Art Education (methods) (3). To give students experience and understanding in methods, materials and media as they relate to the art program in grades level, 1-12.

Art 372 History of Twentieth-Century Painting (3). Europe and America.

Art 373 History of Modern Sculpture (3). Sculpture in Europe and America during the nineteenth and twentieth centuries.

Art 375 History of Classical Art (3). The art of ancient Greece and Rome.

Art 381 History of American Art (3). Art from the Colonial Period to the present day.

Art 400, 400A, 400B and 400C (3). Individual Problems (3). Upper division students only and permission of instructor.

Art 401, 401A, 301B and 401C (3). Individual Problems. Upper division students only and permission of instructor.

Art 402, 402A, 402B and 402C (3). Individual Problems. Upper division students only and permission of instructor.

Art 409 Ceramics III (3). Advanced problems in sculptural and functional ceramics, utilizing both throwing and handbuilding techniques, glazing and fixing project.

Art 411 Three Dimensional Design (3). Display-design package, design point of purchase, advanced concepts. Prerequisites Art 311.

Art 412 Advanced Graphic Design (3). Primarily planned to coordinated graphics projects. Prerequisite: Art 311, 411.

Art 417 Advanced Photography (3). Advanced Photography course with emphasis in the individual approaches to photographic process.

Art 421 Advanced Oil and Acrylic Painting I (3). Advanced study and original projects in oil or acrylics. Prerequisite: Art 321-Art 322 or consent of instructor.

Art 434 Art History III (3). Contemporary. A course dealing with special topics on the development of the visual arts from Neo-Classicism through the Twentieth-Century.

Art 450 Senior Project (3). The project is designed to give seniors in the department the opportunity of selecting and developing creative and written research related to art. This project is to be done under the supervision of the student's advisor and department head. Three copies of the written project should be typed and approved. One copy is returned to the student and two copies filed in the department.

Art 452 Advanced Printmaking (3). An advanced printmaking course with emphasis on in-depth, individual approaches in the various printmaking processes. Prerequisite: Art 351.

Art 452 Advanced Printmaking I (3). An advanced printmaking course with emphasis on in-depth, individual approaches in the various printmaking processes.

Art 453 Printmaking III. (3). An advanced printmaking course with emphasis on in-depth, individual approaches in the various printmaking processes.

Art 454 Afro-American Design (3). An advanced course in design using the African motif.

DEPARTMENT OF BIOLOGICAL SCIENCES

Edward Risby, Ph.D., Head

The curriculum of the Department of Biological Sciences is designed to fulfill the requirements in the areas of (1) teacher education, (2) preprofessional training for the medical branches, including health, environmental and basic biological sciences; (3) graduate training of inservice teachers and professionals; and (4) service courses for other departments of the University. The biology curriculum, therefore, allows preparation with emphasis based on the student's interest in one of the following areas: (1) secondary teacher education for teaching biology, general science, and chemistry, (2) professional biology, zoology or botany-microbiology; (3) pre-medicine or pre-dentistry.

The major undergraduate curriculum offerings terminate in the Bachelor of Science or Arts degree. Upon entering, students desiring the Teacher Education emphasis should select the curriculum for professional emphasis in Zoology or the curriculum for a professional emphasis in Botany-Microbiology. Upon successful completion of the University College requirements, the student is to proceed in his specific major emphasis area under the guidance of major adviser. No grade less than "C" in any major course will be accepted as credit toward meeting departmental requirements.

A minimum number of 132 semester hours are required for each major emphasis area (60 semester hours must be on the 300-400 level). Forty-five (45) semester hours of biological course work are required in each professional emphasis major (a minimum of 16 must be on the 300-400 level). Thirty-eight (38) semester hours of biological course work are required in the major area with Teacher Certification (a minimum of 16 must be on the 300-400 level). One year of German or French or equivalents must be included. This requirement may also be met by passing a foreign language proficiency test for French or German. A student must qualify for the Bachelor of Arts degree by completing the equivalent of 20 semester hours of German or French in addition to the regularly prescribed courses.

Seniors who have demonstrated high achievements in their majors are encouraged to take Biology 460, an honors research program. This course offers opportunity to gain experience in research under the direction of the Departmental Faculty.

An undergraduate minor in the Department consists of a minimum of 24 semester hours, 16 of which should be taken in sequence in Biology 111-112, Bacteriology 240, and Botany 220. General Chemistry 121-122 is required as a supporting related course and must precede Bacteriology 240. The remaining 8 hours of the minor must be on the 300 and or 400 level and may be elected in the minor area desired by the student.

INTRA-DISCIPLINARY DEGREE IN NATURAL SCIENCES: Students may select an intra-disciplinary program in the natural sciences with emphasis in Biology. This curriculum allows for more freedom in course selections, yet prepares the student for future studies in professional or graduate programs.

COMBINATION CURRICULAR FOR THE STUDY OF MEDICINE AND DENTISTRY

Curricula preparatory for the study of medicine and dentistry are offered at Tennessee State University in Cooperation with Meharry Medical College. The curricula are joint programs between the two institutions and qualify students for the bachelor's degree. The first part of this joint curriculum is offered to regularly enrolled students at Tennessee State University who are pursuing a Bachelor of Arts or a Bachelor of Science curriculum with a major in the Biological Sciences.

The first two years of this curriculum consist of the Basic Curriculum for Professional major in the Biology Lower Division. The third year consists of the Junior Year of either the curriculum for Professional Emphasis in Zoology or in Botany and Microbiology of the Upper Division of Biological Sciences.

The fourth year of the joint curriculum is offered to those students who are admitted to Meharry Medical College. At the successful completion of the freshman year curriculum in the School of Dentistry or the School of Medicine of Meharry medical College, the student makes application to Tennessee State University for the Bachelor of Arts or Science degree. Upon joint recommendation of Meharry Medical College and Tennessee State University, the student becomes a candidate for the Bachelor of Arts or Science degree. The degree is awarded by Tennessee State University.

CURRICULUM FOR A MAJOR IN BIOLOGY (Professional Emphasis in Zoology)

FRESHMAN YEAR	Credit Hours Fall	Spring
BIO 111-12U	4	4
MATH 161-62U	3	3
ENG 101-02U	3	3
HIST 201-02U	3	3
PE or AERO	1	1
OR 100U	1	
HUMANITIES	2	
CS 100U		3
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
MCB 240	4	
BOT 220		4
ENG 211-12	3	3
GER or FR 101-02U	3	3
CHEM 121-22U	4	4
PE or AERO	1	1
SOC (300 Level)		0
HUMANITIES		2
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
BIO 370	4	
ZOO 330		4
CHEM 311-12	4	4
PHY 211-12	4	4
BIO Elective	4	4
	16	16

SENIOR YEAR	Credit Hours Fall	Spring
ZOO 430	4	
BIO 491-92	1	1
BIO 480		4
BIO Electives (300-400 level)	4	3
PSY (300 level)		3
Electives (300-400 level) (BCHM 341-42 recommended)	8	8
	17	16

CURRICULUM FOR A MAJOR IN BIOLOGY (Professional emphasis in Botany and Microbiology)

FRESHMAN YEAR	Credit Hours Fall	Spring
BIO 111-12U	4	4
MATH 161-62U	3	3
ENG 101-02U	3	3
HIST 201-02U	3	3
PE or AERO	1	1
OR 100U	1	
HUMANITIES	2	
CS 100U		3
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
BOT 220		4
MCB 240	4	
GER or FR 101-02U	3	3
ENG 211-12	3	3
CHEM 121-22U	4	4
PE or AERO	1	1
SOC (300 Level)	3	
HUMANITIES		2
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
BIO 370	4	
MCB 310		4
BOT 320		4
CHEM 311-12	4	4
PHY 211-12	4	4
BIO Elective	4	
	16	16

SENIOR YEAR	Credit Hours Fall	Spring
BIO 491-92	1	1
BOT 420	4	
MCB 410		4
Electives (MCB or BOT 300-400)	4	3
PSY (300 level)		3
Electives (300-400 Level) (BCHM 341-42 recommended)	8	8
	17	16

CURRICULUM FOR A MAJOR IN BIOLOGY (with Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
BIO 111-12U	4	4
MATH 161-62U	3	3
MUS 131U	2	
OR 100U	1	
HIST 201-02U	3	3
ENG 101-02U	3	3
CS 100U		3
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
MCB 240	4	
BOT 220		4
CHEM 121-22U	4	4
ENG 211-12	3	3
ART 133U		2
PE or AERO	1	1
EDCI 201		3
PSY 242	3	
	15	17

JUNIOR YEAR	Credit Hours Fall	Spring
BIO 370	4	
ZOO 340, MICRO 310 or BOT 420	4	4
PHY 211-12	4	4
EDCI 301-387	3	3
Humanities (300 level)		3
Elective (300 or 400) (Social Science)	3	
BIO Elective (300-400 level)		4
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
EDCI 465	3	
EDCI 491		3
SCI ED 371		3
EDCI 472o		0
EDCI 472s		9
BIO 480	4	
PSY 312	3	
CHEM 360	4	
BIO 491 or 492	1	
HEA (Elective) (300-400 level)	2	
	17	15

COURSE DESCRIPTIONS

BIOLOGY (BIO)

College Orientation 100U (1) Designed to aid in the adjustment of freshmen and new students to the college community. Consideration of Tennessee State University's heritage and mission, personal development, study method evaluation and careers in the biological sciences.

BIO 111-12U Principles of Animal Biology. (4-4) This course is designed to provide a sound understanding of structure function and life characteristics of animals. Lecture: 2 credits; Laboratory: 2 credits per semester.

BIO 370 Principles of Genetics. (4) An introduction of genetics, including classical and modern approach, the laws of heredity, role of

heredity in developmental physiology, and the relation between heredity and evolution. Prerequisites: Biology 111 and Botany 220. Lecture: 2 credits; Laboratory: 2 credits.

BIO 380 Biometrics. (3) An introduction to the methods of statistics that are of particular interest to biologists for experimental design and interpretation. Prerequisites: Math 161, Biology 111, 112 and Botany 220 or their equivalents. (3)

BIO 440 Special Topics. (3) Student and faculty generated course. Scope of subject matter to be determined by students and instructor. Prerequisites: 12 hours upper division biology and permission of instructor. (e)

BIO 460 Junior Honor's Research. (3) Open to seniors of outstanding attainment who have demonstrated high achievements in their major field. It offers opportunity to do individual research under the direction of a member of the Department Faculty. (e)

BIO 470 Microtechniques. (4) Methods of microscopic study of tissues. Prerequisites: Biology 111, 112, Botany 220 and Chemistry 121, 122 or their equivalents. Lecture: 1 credit; Laboratory; 3 credits. (e)

BIO 480 Principles of Ecology. (4) Fundamental ecological principles with special reference to levels of organization, population and community properties, structural adaptation, functional adjustments and other factors affecting the distribution of organisms. Prerequisites: Biology 111, 112 and Botany 220. Lecture: 2 credits; Laboratory: 2 credits.

BIO 490 Cell Biology. (4) Structure and function of cells and their components. Prerequisites: Chem. 312, Biology 111, 112 and Botany 220 or their equivalents. (e)

BIO 491-92 Biology Seminar. (1-1) Current problems in Biology. A minimum of one semester required of all seniors in the Department. Meets one hour per week.

BOTANY (BOT)

BOT 220 General Botany. (4) Deals with a study of the anatomy, physiology, and taxonomy of plants. Lecture: 2 credits; Laboratory: 2 credits.

BOT 320 Plant Morphology. (4) Consideration of the structure, embryology, and phylogeny of higher vascular plants. Prerequisites: Botany 220. Lecture: 2 credits; Laboratory: 2 credits.

BOT 420 Introductory Plant Physiology. (4) Consideration of the functions of digestion, mineral, nutrition, growth, photosynthesis, respiration, translocation, photoperiodism, plant hormones, transpiration and water relations as occurring in a typical green plant. Prerequisites: Botany 220 and General Chemistry 121, 122 or equivalents. Lecture: 2 credits; Laboratory: 2 credits.

BOT 430 Mycology. (4) Morphology, taxonomy, development and phylogeny of fungi. Prerequisite: Botany 220. Lecture: 2 credits; Laboratory: 2 credits. (e)

BOT 440 Introductory Plant Pathology. (4) A course dealing with plants and their diseases, both infectious and non-infectious diseases; plant disease control, impact of plant disease on agriculture. Prerequisites: Botany 220. Lecture: 2 credits; Laboratory: 2 credits. (e)

BOT 460 Field Botany. (4) A course designed to acquaint the student with basic principles of plant classification and identification, the use of manuals with reference made to the families, genera and species of the local flora. Prerequisites: Botany 220 or equivalent. Lecture: 1 credit; Laboratory of Field Periods: 3 credits. (e)

MICROBIOLOGY (MCB)

MCB 240 Principles of General Bacteriology. (4) This course is concerned with the isolation, identification, culture, nutrition, sterilization and chemotherapeutic procedures employed in studying bacteria. Prerequisites: Biology 111, 112, and 1 year General Chemistry (121-122) or equivalents. Lecture: 2 credits; Laboratory: 2 credits.

MCB 250 General Bacteriology. (4) Consideration of identification, culture, sterilization and disinfectant procedures employed in studying certain microorganisms. Open to majors in Home Economics, HPE and Nursing. Prerequisites: Biology 111 or Chemistry 121, 122. Lecture: 2 credits; Laboratory: 2 credits. (e)

MCB 310 Introduction to Microbial Physiology. (4) This course outlines some of the salient features in the physiology or microorganisms. Selected examples of the metabolism of carbohydrates, lipids and nitrogen containing compounds will be considered as a basis for further understanding of biologic phenomena. Prerequisites: Microbiology 240 and Organic Chemistry 311, concurrently, or equivalents. Lecture: 2 credits; Laboratory: 2 credits.

MCB 410 Pathogenic Microorganisms. (4) This course surveys some of the important features of host-parasite interaction. Characteristics of the organism, host hypersensitivity, natural and acquired immunity will be considered as contributing factors toward this interaction. Modern preventive methods will be emphasized. Prerequisite: Microbiology 240. Lecture: 2 credits; Laboratory: 2 credits.

MCB 420 Immunology and Serology. (4) Theories of immunity, training in serological methods and procedures for immunization. Prerequisites: Microbiology 240 and 410. Lecture: 2 credits; Laboratory: 2 credits. (e)

MCB 430 Virology (4) Survey of bacterial, Plant, and animal viruses with emphasis on their infectious cycles. Prerequisite: MCRB 240. Lecture: 2 credits: Laboratory: 2 credits. (e)

ZOOLOGY (ZOO)

ZOO 201-02 Human Anatomy and Physiology. (4-4) The fundamentals of the structure, function and organization of the organ-system of man. These courses should be taken in sequence. Lecture: 2 credits: Laboratory: 2 credits. (e)

ZOO 330 Comparative Anatomy. (4) The comparative anatomy and evolution of the organ system of chordate animals. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory: 2 credits.

ZOO 340 Mammalian Physiology. (4) Consideration of the dynamic interactions and integrations of mammalian organ systems. Special emphasis is placed upon recent advances in methodology and new concepts in physiology and contributing sciences. Prerequisites: Biology 111, 112 or Biology 105, 106 and Chemistry 121, 122 or equivalents. Lecture: 2 credits; Laboratory: 2 credits. (e)

ZOO 350 Ornithology. (4) A study of the natural history of local birds. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory or field periods: 2 credits. (e)

ZOO 400 Invertebrate Zoology. (4) This course is a study of the morphology, physiology, taxonomy and life histories of the invertebrates. Emphasis is placed on the systematic developments of invertebrate types. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory: 2 credits. (e)

ZOO 410 Field Zoology. (4) Selected groups of animals studied. Methods of collecting, classifying and preserving will be emphasized. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory or field periods: 2 credits. (e)

ZOO 420 Herpetology. (4) Classification, distribution, life histories, collections and identification of amphibians and reptiles, primarily of local species. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory or field periods: 2 credits. (e)

ZOO 430 Embryology. (4) A general consideration of gametogenesis, fertilization and cleavage of gametogenesis, fertilization and cleavage in animals and the early development of Echinoderms, Protochordates and selected vertebtates with emphasis on early development of the chick. Prerequisites: Zoology 330 is strongly recommended. Lecture: 2 credits; Laboratory: 2 credits.

ZOO 440 Introduction to Parasitology. (4) Introduces the student to animal parasites and their methods of entering the body of man and mammals. the several types of host-parasite relationships are surveyed, with emphasis on the effects of parasites on or within the hosts, immunogenic responses by the host to parasitism are reviewed and a history of this discipline along with past and present contributors enlightens students of parasitology as an applied and/or basic science in biology. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory: 2 credits. (e)

ZOO 450 Histology. (4) Study of animal tissues. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory: 2 credits. (e)

ZOO 460 Endocrinology. (4) The function of vertebrate hormones with emphasis on those concerned in the physiology of reproduction. Techniques used in small animal surgery in endocrine research. Prerequisites: Zoology 430. Lecture: 2 credits; Laboratory: 2 credits. (e)

ZOO 470-71 Physiology and Pathophysiology. (4-4) A closely integrated series of lectures and laboratory demonstrations which emphasize human physiology and pathophysiology. Physiology of the nervous system, blood circulation, respiration, and special senses is considered as is the basic and applied physiology of the digestive, excretory, and endocrine systems. Mechanisms of integration of various sys-

tems are emphasized. Must be taken in sequence. Prerequisites: Zoo 202 and either Chem. 221 or 311. Lecture: 3 credits; Laboratory: 1 credit. (e)

SCIENCE (SCI) INTERDISCIPLINARY COURSES

SCI 121-22U Introduction to Biophysical Sciences, (3-3) An interdisciplinary course involving the principles of mathematics, chemistry, physics, biology, earth and space science. The objective of the course is to integrate the applicable areas as they are related to the living organisms. Two lecture periods and one laboratory (2 hours) per week.

SCI 481-82 Contemporary Problems in Ecology. (3-3) A study of some of the contemporary problems constituting our environmental crisis; the hazards comprising such problem; and the complexity affecting their resolutions.

SCI 400 Biomedical Concepts. (2) This course is designed to provide a sound understanding of biomedical concepts as related to biology, chemistry, mathematics and physics. Prerequisites: Biology 111-12, Chemistry 311 and Physics 211 or their equivalents. (e)

SCI 401-02 Fundamentals of Medical Science I, II. (3-3) Disease processes affecting the human body, studies through an integrated approach to specific disease entities. Required of all MRA majors. Prerequisites: MRA 301, 302; MCRB 240; ZOO 201-02 or their equivalents. (e)

MARC Program

The following courses are offered through the MARC Honors Program. Enrollment is restricted to MARC participants, or by permission of the Director.

BIO 302 Scientific Communications. (4) This course is designed to improve written, verbal and quantitative skills deemed necessary to enhance career development in the sciences.

BIO 303 Computer Literacy and Statistics I. (3) This course provides training in computer components and types, data processing, word processing and computer systems.

BIO 304 Computer Literancy and Statistics II. (3) This course is designed to provide the student with (1) an understanding of basic statistical concepts used in scientific research and (2) a working knowledge of the computer as a tool for statistical analysis of data. Prerequisite: BIO 303.

BIO 403 Cell Physiology. (4) This course is an introduction to the interrelationships of biological, physical, and chemical aspects of the cell. Prerequisites: BIO 111-12, CHEM 121-22 or equivalents.

BIO 405 Modern Scientific Methods. (3) This course is designed to acquaint the student with the actual use and applications of modern laboratory equipment and techniques. Prerequisite: BIO 403.

BIO 407-10 Honors Undergraduate Research I, II, III, and IV. (1-4) This series is designed to provide both intramural and extramural biomedical research experiences for participating students.

BIO 450 Current Biomedical Topics. (0) This course is designed to provide training in critical analysis and oral presentations of current journal publications in selected biomedical fields.

BIO 493-6 MARC Seminar Series. (102) This series is designed to provide exposure to current presentations by eminent scientists in biomedical research.

NATURAL SCIENCE COURSES OFFERED BY GULF COAST RESEARCH LABORATORY

By affliation agreement* with the Gulf Coast Research Laboratory, Ocean Springs, Mississippi, the following courses are listed which may be taken for resident credit by TSU students:

Botany 421	Marine Botany (4)
Botany 431	Coastal Vegetation (3)
Botany 441	Salt Marsh Plant Ecology (4)
Chemistry 465	Marine Chemistry (6)
Geology 431	Coastal Marine Geology (3)
Microbiology 452	Marine Microbiology (5)
Biology 421	Special Problems in Marine Science (TBA)
Biology 422	Special Topics in Marine Science (TBS)
Biology 423	Seminar (1)
Biology 424	Graduate Research (TBA)
Biology 431	Marine Science for Elementary Teachers (3)
Biology 432	Marine Science for Teachers I: Basic Techniques (3)
Biology 433	Marine Science for Teachers II: Advanced Studies (3)
Biology 451	Oceanography I: Physical, Chemical and Geological (5)
Biology 452	Oceanography II: Marine Biology (5)
Zoology 413	Marine Invertebrate Zoology (6)
Zoology 414	Marine Vertebrate Zoology and Ichthyology (6)
Zoology 443	Behavior and Neurobiology of Marine Animals (4)
Zoology 461	Parasites of Marine Animals (6)
Zoology 442	Marine Fisheries Management (4)
Zoology 464	Aquaculture (6)
Zoology 448	Early Life History of Marine Fishes (4)
Zoology 452	Marine Ecology (5)
Zoology 447	Fauna and Faunistic Ecology of Tidal Marshes (4)
Zoology 408	Comparative Histology of Marine Organisms (1-6)

Complete course descriptions and registration forms for courses offered at the Gulf Coast Research Laboratory may be obtained by contacting the Biology Chairman.

*Subject to negotiation of annual agreement.

DEPARTMENT OF CHEMISTRY

David Holder, Ph.D., Head

The purpose of the Department of Chemistry is the preservation, interpretation, dissemination, and advancement of chemical ideas and knowledge. Thus, the principal objectives of the Department of Chemistry are (1) to instruct students in the basic principles and techniques of the various branches of chemistry, (2) to educate the general public as well as students in other areas of the importance of chemistry to the quality of the environment and everyday living, and (3) to engage in research and publication of new scientific information.

The Chemistry Department offers both undergraduate programs earning B. S. degrees and a graduate program earning a M. S. degree (See Graduate Catalog). Five different undergraduate curricula are available to students according to his/her individual interest.

Curriculum 1—Professional Chemistry Major—designed for students pursuing professional chemist careers in industry, government, and or advanced degrees.

Curriculum 2—Professional Chemistry Major with Biochemical Emphasis—designed for students pursuing professional careers (Pharmacy, Dentistry, Medicine).

Curriculum 3—Major in Chemistry—designed for students interested in chemistry-related careers; such as, chemical sales, laboratory and research technicians, and others.

Curriculum 4—Natural Science degree with Emphasis in Chemistry—general degree for students with special interests.

Curriculum 5—Major in Chemistry with Teacher Certification—designed for secondary teaching careers.

A Professional Chemistry major consists of 44 semester hours of chemistry with at least 36 hours upper division.

A Chemistry major consists of 32 semester hours of chemistry with at least 24 hours upper division while a Natural Science major consists of 28 semester hours with 20 upper division hours in chemistry.

Chemistry minor consists of 20 semester hours of chemistry with at least 12 hours upper division while a Natural Science minor in chemistry consists of 17 semester hours in chemistry with 9 upper division hours.

No grade of less than a "C" in any major or minor course will be accepted as credit toward meeting departmental requirements.

Curriculum-1—Professional Chemistry Major

This program is designed for students pursuing professional chemists career opportunities in industry, government laboratories or to pursue advanced studies in graduate school.

A minimum of 44 semester hours of chemistry, 36 of which must be in 300 or 400 level courses. These credits may be accumulated through pursuing the following courses: 121H, 122H, 310, 311, 312, 321, 322, 410, 420, 431 450, 491, 492 and accompanying laboratories plus one additional course from 431, 440, 460, 461 or 481. This curriculum is based upon recommendations by the American Chemical Society. Suggested program:

FRESHMAN YEAR	Credit Hours Fall	Spring
Chem. 121H, 122H	3	3
Chem. 121A, 122A	1	1
Eng. 101U, 102U	3	3
Math 163U, 164U	4	4
Mus. 133U	2	
Art 131U		2
CS 121	2	
Soc. 211U		3
PE or Air Sci	1	1
UCOR 100U	1	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
Chem. 311, 312	3	3
Chem. 311L, 312L	1	1
Hist. 201U, 202U	3	3
Eng. 211U, 212U	3	3
CS 220, 240	3	3
Phys. 211, 212	3	3
Phys. 211L, 212L	1	1
PE or Air Sci.	1	1
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
Chem. 321, 322	3	3
Chem. 321L, 322L	1	1
Chem. 310	3	
Chem. 310L	1	
Electives	5	4
Elect. (300-400)		4
Math Elect. (300-400)	3	3
	17	15

SENIOR YEAR	Credit Hours Fall	Spring
Chem 410	2	
Chem 420	3	
Chem. 432		3
Chem. 432L		1
Chem 450		2
Chem. 491, 492	1	1
Chem. Elect. (300-400)	3	
Elect. (300-400)	6	8
	15	15

Curriculum 2-Professional Chemistry Major with Biochemical Emphasis

This program is designed for students pursuing a professional career in Medicine, Dentistry, Pharmacy or Veterinary Medicine. This program is similar to the Professional Chemistry Major except the minor is in biology related subjects.

The required number of hours is the same as the Professional Chemistry Major with credit hours accumulated through pursuing the following courses: 121U, 122U, 310, 311, 312, 331, 332, 341, 342, 410, 450, 491, 492, and accompanying laboratories. Suggested program:

FRESHMAN YEAR	Credit Hours Fall	Spring
Chem. 121U, 122U	3	3
Chem. 121L, 122L	1	1
Eng. 101U, 102U	3	3
Bio. 111U, 112U	4	4
Math 161U, 162U	3	3
Mus. 131U		2
PE or Air Sci.	1	1
UCOR 100U	1	
	16	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
Chem. 311, 312	3	3
Chem. 311L, 312L	1	1
Chem. 310		3
Chem. 310L		1
Hist. 201U, 202U	3	3
Eng. 211U, 212U	3	3
Soc. 211U	3	
Art 133U	2	
PE or Air Sci.	1	1
CS 121		3
	16	18

JUNIOR YEAR	Credit Hours Fall	Spring
Chem. 341, 342	3	3
Chem. 341L, 342L	1	1
Chem 331, 332	3	3
Phys. 211, 212	4	4
Zoo. 201	4	
MCB 240		4
Elect.	2	
	17	15

SENIOR YEAR	Credit Hours Fall	Spring
Chem. 410	2	
Chem. 450		2
Chem. 491, 492	1	1
Chem. 470	3	
Chem. 470L	2	
Elect. (300-400)	5	10
Bio. Elect. (300-400)	4	4
	17	17

Curriculum 3—Major in Chemistry

This Program of study is designed to train students for career objectives other than professional chemist, graduate school, professional schools, or teacher certification. This program will give students more flexibility in regard to individualized course selection which will prepare students for careers as laboratory technicians, research technicians or in chemical sales, process control, chemical editing-writing, and patent law. The minor in this concentration will be selected by the student according to his/her career goals and monitored carefully by an advisor.

Thirty-two (32) hours of Chemistry with 24 hours of 300-400 level courses. This degree is designed for students whose career objectives are in fields where chemistry has indirect applications. Suggested program:

FRESHMAN YEAR	Credit Hours Fall	Spring
Chem. 121U, 122U	3	3
Chem. 121L, 122L	1	1
Eng. 101U, 102U	3	3
Hist. 201U, 202U	3	3
Math 161U, 162U	3	3
CS 121		3
PE or Air Sci.	1	1
UCOR 100U	1	
	15	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
Chem. 311, 312	3	3
Chem. 311, 312L	1	1
Chem. 310		3
Chem. 310L		1
Bio. 111U, 122U	4	4
Eng. 211U, 212U	3	3
Soc. 211U	3	
Art 133U; Mus 131U	2	2
PE or Air Sci.	1	1
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
Chem. 331, 332	3	3
Chem. 331L, 332L	1	1
Phys. 211, 212	4	4
Elect. (100-200)	5	4
Elect. (300-400)	4	4
	17	16

SENIOR YEAR	Credit Hours Fall	Spring
Chem. 410	2	
Chem. 450	2	
Elect. (300-400)	12	16
	16	16

Curriculum 4—Natural Science degree with Emphasis in Chemistry

This program is referred to as the General Program. It permits you to specialize in one area by electing a concentration, but also encourages you, by working with an advisor, to design a course of study to reflect your special interests and unique professional goals.

The General Degree Program is designed to allow great flexibility in combining several disciplines. A major in Natural Science consists of 24 hours of chemistry with 16 hours in 300-400 level courses. An additional 8 hours of 300-400 level courses are required in the Natural Science area and 9 hours upper division from the Humanities or Social Science. Suggested program:

FRESHMAN YEAR	Credit Hours Fall	Spring
Chem. 121U, 122U	3	3
Chem. 121L, 122L	1	1
Eng. 101U, 102U	3	3
Hist. 201U, 202U	3	3
Math 161U, 162U	3	3
CS 121		3
PE or Air Sci.	1	1
UCOR 100U	1	
	15	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
Chem. 311, 312	3	3
Chem. 311L, 312L	1	1
Chem. 310		3
Chem. 310L		1
Bio. 111U, 112U	4	4
Eng. 211, 212	3	3
Soc. 211U	3	
Art. 133U, Mus 131U	2	2
PE or Air Sci.	1	1
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
Chem. 331, 332	3	3
Chem. 311L, 332L	1	1
MCB 240		4
Psy. 201, 202	3	3
Soc. Sci. Elect (400-400)	9	6
	16	17

SENIOR YEAR	Credit Hours Fall	Spring
Speech 220		3
Nat. Sci. or Soc. Sci. or Humanities (300-400)	14	13
Elect.	2	3
	16	16

Curriculum 5-Major in Chemistry with Teacher Certification

This program prepares a student for a career in secondary education with a major in chemistry with an endorsement in General Science. A total of 32 hours is required, of which 24 hours are 300-400 level courses. Suggested Program:

FRESHMAN YEAR	Credit Hours Fall	Spring
Chem. 121U, 122U	3	3
Chem. 121L, 122L	1	1
Eng. 101U, 102U	3	3
Hist. 201U, 202U	3	3
Math 161U, 162U	3	3
Mus. 131U; Art 133U	2	2
PE or Air Sci.	1	1
UCOR 100U	1	
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
Chem. 311, 312	3	3
Chem. 311L, 312L,	1	1
Chem. 310		3
Chem. 310L		1
Eng. 211U, 212U	3	3
EDCI 201	3	
Psy. 242; Soc. 211U	3	3
Geo. 101	4	
PE or Air Sci.	1	1
	18	15

JUNIOR YEAR	Credit Hours Fall	Spring
Chem. 331, 332	3	3
Chem. 331L, 332L	1	1
EDCI 301	3	
EDCI 463	2	
Phys, 211, 212	3	3
Bio. 111, 112	4	4
Astr. 110		4
HEA. (300-400)	2	2
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
Chem. 491, 492	1	1
Chem. 450	2	
Psy. 312	3	
EDRD 491		3
EDCI 371		3
EDCI 387	3	
EDCI 472s		9
EDSE 465	3	
EDCI 419	3	
	15	16

COURSE DESCRIPTIONS

CHEM 100 (3) and 100L (1). Basic Chemistry. A study of the fundamentals of chemistry and their application to biological nature. Offered for nursing students and other students with no high school chemistry. Three lectures and one three-hour laboratory per week.

CHEM 101 (3) and 101L (1). Fundamentals of Chemistry for Dental Hygiene Students Only. A study of the fundamentals of general chemistry, organic, and biochemistry. Three lectures and one three-hour laboratory per week.

CHEM 121U-122U (3-3) and 121L-122L (1-1). General Chemistry. Introduction to the fundamental concepts and basic principles of chemistry. Lectures deal with the basic theories of chemistry: atomic structure, kinetic theory, chemical stoichiometry, the chemical bond, oxidation-reduction solutions, chemical equilibrium. Prerequisites: High school chemistry or CHEM 100 and two years high school algebra or Math 111. Three lectures and one three hour laboratory per week.

CHEM 121H-122H (3-3) and 121A-122A (1-1). Introduction to Chemical Principles. For chemistry majors and honor students only. Three lectures and one three-hour laboratory per week.

CHEM 131-132 (3-3) and 131L-132L (1-1). General Chemistry. A course for non-science majors that covers the particle nature of matter, substance and chemical change, kinetic theory and selected topics from the fields of inorganic chemistry, biochemistry, and environmental chemistry. Must be taken in sequence. Three lectures and one three-hour laboratory per week.

CHEM 151 (3) and 151L (1). General Chemistry for Engineers. Fundamental concepts of General Chemistry including atomic and molecular structure, gas laws, liquids, solids, solutions, kinetics, equilibrium, thermodynamics and electrochemistry. Prerequisites: High school chemistry or Chem. 100 and two years high school algebra or Math 161. Three lectures and one three-hour laboratory per week.

CHEM 250 (3). Introduction to Pharmacology. An introductory study of mechanism, dosages, and side effects of pharmacological classes of medication. Prerequisite: Chem. 132. Three lectures per week.

CHEM 310 (3) and 310L (1). Introduction to Analytical Chemistry. Course covers qualitative and quantitative analysis. Prerequisite: Chem. 122U. Three lectures and two three-hour laboratories per week.

CHEM 311-312 (3-3) and 311L-312L (1-1). Organic Chemistry. A systematic study of the source, nomenclature, physical properties, and chemical behavior of aliphatic, aromatic and heterocyclic compounds of carbon. Prerequisite: Chem. 122U. Three lectures and one three-hour laboratory per week.

CHEM 320 (3) and 320L (1). Physiological Chemistry. Presents the fundamentals of human physiological chemistry. Required of majors in foods and nutrition. Prerequisites: Chem 360. Not available for students having credit for Chem 470. Three lectures and one three-hour laboratory per week.

CHEM 321-322 (3-3) and 321L-322L (1-1). Physical Chemistry. Properties of ideal and real gases, kinetic molecular theory of gases, chemical thermodynamics, chemical equilibria, solutions of electrolytes and non-electrolytes, electrochemistry, liquid and solid states. For the second semester: Rates and mechanisms of chemical reactions, introductory quantum mechanics, atomic and molecular spectroscopy and photochemistry. Prerequisites: Math 164, Phys 212, Chem. 310, and Chem. 312. Three lectures, one-three hour laboratory, and one two-hour problem session per week.

CHEM 321-322 (3-3) and 331L-332L (1-1). Fundamentals of Physical Chemistry. A non-calculus survey of physical chemistry. Includes properties of gases, liquids, and solids, elementary thermodynamics, kinetics and molecular structure. Prerequisites: Chem 310, Chem 312, and Math 162. Not available for students having credit for 321-322. Three lectures and one three-hour laboratory per week.

CHEM 341-342 (3-3) and 341L-342L (1-1). General Biochemistry. A comprehensive study of the chemistry and biochemistry of carbohydrates, lipids, proteins, enzymes, vitamins and minerals important in metabolism and nutrition of animals and plants. Prerequisite: Chem 310. Three lectures and one three-hour laboratory per week.

CHEM 360 (3) and 360L (1). Organic Chemistry Survey. Important classes of organic compounds are presented. Emphasis is placed upon the study of hydrocarbons and their principal derivatives: carbohydrates, proteins, fats, and oils, vitamins and dyes. Designed for majors in Agriculture, Home Economics, and Allied Health. Prerequisite: Chem 122. Not available for student having credit for Chem 311-312. Three lectures and one two-hour laboratory per week.

CHEM 400 (3). Special Topics. Students or faculty generated course. Scope of subject matter to be determined by students and instructor. Prerequisite: Permission of the instructor. Three lectures per week.

CHEM 410 (2). Chemical Bibliography. A study of how to use the chemical journals, reference books and other sources of chemical information. A systematic search in the chemical literature for information on several compounds and topics will be included. Prerequisite: Chem 322 or Chem 332. Two one-hour lectures per week.

CHEM 420 (3). Inorganic Chemistry. Deals with the principles and modern theories of inorganic chemistry including atomic and molecular structure. Pre- or corequisite: Chem. 322. Offered in alternative years during the Fall Semester. Three lectures per week.

CHEM 431 (3) and 431L (1). Advanced Analytical Chemistry. Advanced topics in analytical separations. Prerequisites: Chem. 310 and Chem. 322. Three lectures and one three-hour laboratory per week.

CHEM 432 (3) and 432L (1). Instrumental Analysis. Principles and application of analytical instrumentation including electrometric, spectrometric and chromatographic principles. Prerequisites: Chem. 310 and Chem. 322. Three lectures and one three-hour laboratory per week.

CHEM 440 (3). Organic Reaction Mechanisms. A selective treatment of theoretical and mechanistic aspects of organic chemistry—includes an introduction to molecular orbital theory and its application to bonding, aromaticity and pericyclic reactions, elimination and addition reactions and the reactive intermediates involves. Prerequisite: Chem. 322. Three lectures per week.

CHEM 450 (2). Senior Project. A special laboratory investigation is carried out under the direction of the instructor and the results are written up scientifically. Offered Spring Semester. Prerequisites: Chem. 322 or 332. Hours arranged.

CHEM 460 (3) and 460L (2). Organic Qualitative Analysis. A systematic study of the solubility and class reactions of the principal classes of organic compounds. It includes also identification of pure organic compounds and mixtures. Prerequisite: Chem. 322. Three lectures and two three-hour laboratories per week.

CHEM 461-462 (3-3). Introduction to Polymer Science. Organic Chemical reactions leading to high polymers, physical properties and physical behavior of polymers, polymer processing and end uses. Prerequisites: Chem. 322 or permission of instructor. Three lectures per week.

CHEM 470 (3) and 470L (2). Biochemical Analysis. Designed to familiarize the student with the principles and practices involved in the analysis of biological materials. Prerequisites: Chem. 310, Chem. 332, and Chem. 342. Three lectures and two three-hour laboratories per week.

CHEM 481-482 (3-3). Introduction to Quantum Chemistry. Introduction to fundamental principles of Quantum Chemistry including methods of calculation. Application to atomic, molecular, and nuclear chemistry and physics. Prerequisite: Chem. 322.

CHEM 491-492 (1-1). Chemistry Seminar. Required of all seniors. Prerequisites: Chem. 322 or 332. One lecture per week.

DEPARTMENT OF COMMUNICATION
Jamye Williams, Ph.D., Head

The Department of Communication, in addition to the general purpose of offering the student an overall view of the importance of the communication arts in contemporary society, has the following objectives:

1. To prepare students to become teachers of speech communication and theatre in high schools and colleges.
2. To prepare students for careers in educational, community, and professional theatre.
3. To prepare students for careers in broadcasting and journalism.
4. To prepare students for allied occupations such as public relations, sales, communication consulting, civil service, personnel work and counseling.
5. To provide assistance to students preparing for such professions as law and the ministry.
6. To prepare students for careers in parabroadcasting—business, industrial, educational and medical video communications.
7. To improve, by providing service courses, the speech proficiency of the student population in general.
8. To provide cultural enrichment for the University and community through extra-curricular activities in dramatics and forensics.

The Department of Communication offers programs leading to the degrees of Bachelor of Arts and Bachelor of Science with a major in Speech Communication and Theatre. The program also offers the options of a concentration in speech communication, in theatre, or in mass communication (radio, television, and journalism). A minor in Speech Communication and Theatre is also offered.

The programs for the Bachelor of Science and the Bachelor of Arts degrees require a minimum of 132 semester hours with 60 of these being on the 300-400 level. The Bachelor of Science degree with teacher certification requires, in addition to the General Education Core, a minimum of 24 semester hours in the major area and 33 semester hours in the professional core. For the Bachelor of Arts degree with teacher certification, an additional requirement is 8 to 14 semester hours in a modern foreign language. Students who have completed no units of a modern foreign language in high school are required to complete four semesters of work in a language. Students who have completed two units of a modern foreign language in high school are required to complete two semesters in the chosen language, beginning with the 200-level courses.

The Bachelor of Science program for the non-teaching major requires, in addition to the General Education Core and the minimum 24 semester hours in the major area, an additional 18 semester hours in that major area. The requirement for the Bachelor of Arts degree without certification is an additional 8 to 14 semester hours in a modern foreign language as described above.

The Department offers a minor in Speech Communication and Theatre, requiring 18 semester hours which may be distributed within each optional area. A minor with a concentration in Speech Communication includes Spch 210, 220, 320 or 420, 354, 350, 322 or Jour 301-302. A minor with a concentration in Speech Communication and Theatre includes Spch 210, 354, 360, Thea 340, 303, 341. The requirements for a minor in Mass Communication include Spch 200, 360, 364, 440, Jour 301, 302, 304.

Majors in the Department of Communication are encouraged to pursue a second major or a minor in such fields as English, Business, History, Government and Public Affairs, Modern Foreign Languages, Sociology, and Reading Education.

Students in this department are reminded that they are expected to show steady growth in the development of communicative skills, including reading, writing, speaking, and listening. They are urged to remember that they are preparing to become specialists or professionals in communication.

Students receiving a D or F grade in required major subjects must repeat those courses to obtain a C or above. In addition, students seeking certification in Teacher Education are required to maintain an average of 2.25 in the major courses.

The Department in its effort to encourage participation in national professional organizations has chapters of Theta Alpha Phi: National Theatre Honors Fraternity; Pi Kappa Delta: National Forensics Fraternity; Sigma Delta Chi: Society of Professional Journalists.

Students excelling in the various departmental activities are given awards by the T. E. Poag Players Guild, Theta Alpha Phi, and the Children's Theatre. In addition, the Jamye C. Williams Communication Award is given annually to a graduating senior who has maintained a high academic average, contributed to the extracurricular program, and demonstrated high standards of personal conduct. The Donald C. Page Mass Communication Award is given annually to a graduating senior who has excelled in mass communications. The Lawrence B. James Repertory Theatre and Forensics Award is given annually to a graduating senior who has excelled and made major contributions in the areas of dramatic and forensic performance.

The Department has one scholarship which is given annually by the American General Services Company to a student of the Nashville area who excells academically and who plans a career in broadcasting.

CURRICULUM FOR A BACHELOR OF ARTS DEGREE IN SPEECH COMMUNICATION AND THEATRE

This program follows the Bachelor of Science curriculum with the exception of the foreign language requirement as specified in the University Requirements for the Bachelor of Arts Degree. The required number of hours in a foreign language should be taken in place of electives.

BACHELOR OF SCIENCE DEGREE PROGRAM (With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
THEA 111, 112	2	2
ENG 101, 102U	3	3
SCI 121, 122U	3	3
SPCH 200; MATH 111U	2	4
HIST 201, 202U	3	3
PE or AERO	1	1
UC OR 101; CS 100; 100L	1	3
	15	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212U	3	3
EDCL 201; PSY 242	3	3
HEA 151; THEA 120U	2	2
ART 133 or MUS 131U		2
THEA 240; GPA 221	3	3
SPCH 210; SPCH 220	3	3
PE or AERO	1	1
Elective (300-400 level)	2	
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
EDCL 301, 387	3	3
PSY 312		3
SPCH 354; 322	3	3
THEA 401, 303	3	3
THEA 341; SPCH 430	3	3
THEA 351 or 352	3	
Electives (300-400 level)	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
THEA 303	3	
THEA 400	3	
SPCH 450	3	
SPCH 371		3
SPCH 491		3
EDCL 472		9
EDSE 465	3	
Electives (300-400 level)	6	
	18	15

BACHELOR OR SCIENCE DEGREE PROGRAM (Without Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
THEA 111, 112	2	2
ENG 101, 102U	3	3
SCI 121, 122U	3	3
SPCH 200; MATH 111U	2	3
HIST 201, 202	3	3
UC OR 101; CS 100; 100L	1	1
PE or AERO	1	1
	15	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212U	3	3
SPCH 210, 220	3	3
THEA 240; GPA 222	3	3
THEA 120U; ART 133 or MUS 131U	2	2
JOUR 301; SPCH 375	3	3
PE or AERO	1	1
Electives	3	3
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
SPCH 320, 354	3	3
SPCH 322, 356	3	2
SPCH 362, 324	3	2
THEA 401, 403	3	3
THEA 341, 342 or 343	3	3
THEA 351, 352	3	3
	18	16

SENIOR YEAR	Credit Hours Fall	Spring
SPCH 420, 434	3	2
THEA 400, 402	3	3
SPCH 450; THEA 432	3	3
Electives (300-400 level)	6	9
	15	17

NOTE: Students desiring one of the optional areas of emphasis will substitute the following courses in their junior and senior years. Optional courses for Teacher Certification: Spch 320, 360, 420, Thea 341, Jour 301

OPTION 1—SPEECH COMMUNICATION EMPHASIS

JUNIOR YEAR	Credit Hours Fall	Spring
SPCH 320, 354	3	3
SPCH 322, 324	3	2
SPCH 362, 364	3	3
Electives (300-400 level)	9	9
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
SPCH 420, 434	3	2
SPCH 430, 448	3	3
SPCH 450	3	
Electives (300-400 level)	6	9
	15	14

OPTION 2—THEATRE EMPHASIS

JUNIOR YEAR	Credit Hours Fall	Spring
THEA 303, 304	3	3
THEA 401, 403	3	3
THEA 351, 352	3	3
THEA 342; SPCH 354	3	3
SPCH 356 or SPCH 358		2/3
Electives (300-400 level)	6	3
	18	17/18

SENIOR YEAR	Credit Hours Fall	Spring
THEA 400, 402	3	3
THEA 431, 422	3	3
SPCH 450	3	
Electives (300-400 level)	6	9
	15	15

OPTION 3—MASS COMMUNICATION EMPHASIS

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, 102U	3	3
SCI 121, 122U	3	3
SPCH 200		2
HIST 201, 202	3	3
UC OR 101; ART 133 or MUS 131U or PHIL	1	2
PE or AERO	1	1
MATH 111U		3
THEA 111 or 112 or	2	
CS 100; 100L	3	
	16	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212U	3	3
SPCH 210, 364*	3	3
JOUR 301, 302	3	3
THEA 120U; SPCH 375 or Elective	2	3
SPCH 220; GPA 221 or SOC 211 or PSY 201	3	3
THEA 240 or GPA 222 or Elective	3	
PE or AFROTC	1	1
	18	16

*Journalism students may substitute Jour 420.

JUNIOR YEAR	Credit Hours Fall	Spring
SPCH 360-362 or Elective	3	3
GPA 315; 452 or Elective	3	3
SPCH 370 or JOUR 304; Elective	3	3
SPCH 448; JOUR 410 or Elective	3	3
THEA 352 or JOUR 420 or Elective	3	3
MG 302 or Elective, Elective	3	3
	18	18

JOUR 410 is required of journalism students.

Suggested Electives:

ECON 211, 212
Adv Typing
Adv Bus. Mng.
MK 301, 303, 415
PHIL 201, 202, 250
ART 132, 326 (Photography)
HIST 373
ENG 311
THEA 303, 304, 352
SPCH 375
SOC 212

**JOUR 410 is required of Journalism students.

SENIOR YEAR	Credit Hours Fall	Spring
SPCH 450, Elective	3	3
Electives	12	13
	15	16

All Mass Communication students must pass the typing test or the University's typing course with a grade of C or better.

COURSE OFFERINGS SPEECH (SPCH)

SPCH 200 Introduction to Mass Communication. (2) A survey of the mass media and their impact on the ideas, attitudes, and impressions of society.

SPCH 210 Fundamentals of Speech Communication. (3) A study of the fundamentals relating to the various types of speech communication.

SPCH 220 Public Speaking. (3) A study of the principles of speech composition and delivery with emphasis upon the preparing and presenting of the various forms of oral communication.

SPCH 220H Honors Public Speaking. (3) Honors section of SPCH 220.

SPCH 230 Business and Professional Speech Communication. (3) Designed specifically for the student with neither a major nor minor in the field of speech. Emphasis is placed on the following speech situations: business interviews, conferences, reports, and similar types of business conversations.

SPCH 230H Honors Business and Professional Speech Communication. (3) Honors section of SPCH 230.

SPCH 320 Argumentation and Debate. (3) A study of the principles and practices of argumentation, an analysis of propositions and evidence, brief making, and preparation and delivery of forensics, as well as participation in classroom discussions. Techniques governing round table, forum and panel discussions will be studied.

SPCH 322 Advanced Public Speaking. (3) A study of the standards of criticism and techniques involved in effective public address. Prerequisite: SPCH 220. (Formerly SPCH 420)

SPCH 324 Parliamentary Procedure. (2) A study of the rules and techniques of parliamentary practices.

SPCH 354 Oral Interpretation. (3) Introductory course to develop understanding of and appreciation for literature through the oral recreation of poetry, prose, and drama. Recommended for prospective teachers of literature.

SPCH 356 Choral Speaking. (2) Oral group interpretation of literature. Affords an opportunity for intensified and vital artistic expressions through the formation of a speaking choir. Values for both elementary and adult groups. Methods of conducting groups and selection of materials will be considered. (Class limited to 25)

SPCH 358 Readers Theatre. (3) Oral interpretation of dramatic texts. Prerequisite: SPCH 354.

SPCH 360 Broadcasting in America. (3) Overview of the history, form, content, and social impact of American radio and television. Examples of contemporary broadcasting are analyzed in these terms.

SPCH 362 Radio and Television Communication. (3) The course covers all types of non-dramatic broadcast performance. Practical application in a laboratory situation.

SPCH 364 Radio and Television Production. (3) An introductory course dealing with the basic principles of directing and producing radio and television programs. Practical application in a laboratory situation.

SPCH 370 Radio and Television Writing. (3) A study of the techniques and methods used in writing radio and television scripts. Students will be required to write a number of scripts for various types of programs. Prerequisite: SPCH 364 or consent of instructor.

SPCH 371 Methods of Teaching Speech Communication and Theatre. (3) A methods course in the teaching of speech, theatre, and communication on the secondary level. Field Experience required.

SPCH 372 (a,b). Communication Lab. (3) A practicum course involving radio production and broadcasting work at WTSU, the campus radio station. Students undertake a variety of broadcasting responsibilities under the supervision of the station manager. Prerequisites: Spch 364 and/or permission of instructor. May be taken twice for credit.

SPCH 375 Communicative Skills. (3) A course to improve the students' communicative skills, verbal and written, preparing them for the professional world.

SPCH 410 History of English Language. (3) Same as English 410.

SPCH 420 Small Group Communication. (3) A course with focuses on communication in small groups, emphasizing principles, practices, and patterns in practical situations (Spch 322).

SPCH 430 Psychology of Speech Communication. (3) A study of basic psychological factors and their relation to the various types of communicative processes with emphasis on interpersonal communication. The nature, origin, and purposes of speech are analyzed, as well as the development of language and speech in the individual.

SPCH 434 Contemporary Black Speakers. (2) A study of selected speeches of contemporary black leaders who have contributed to and made an impact on American life. The speeches are analyzed according to the principles of rhetoric, based on Aristotelian standards. Prerequisite: SPCH 210 or 220.

SPCH 436 Broadcast Audience Analysis. (3) Covers the principles behind and use of the standard broadcast rating services such as Nielsen and ARB. Design, implementation and use of specialized, in-depth surveys are also covered, and class members will help design and participate in at least one such survey.

SPCH 438 Broadcast Station Management. (3) Covers legal, social, programming and economic aspects of radio and television station management. Guest lectures by local station managers and department heads are an important feature of the course. Prerequisite: Spch 360 or permission of instructor.

SPCH 440 Radio and TV Programming. (3) Television and radio programming are considered in terms of content, social impact and artistic merit. News, documentary, public affairs, talk shows, light entertainment, serious drama, and advertisements, as well as program schedules as a whole, are analyzed. Prerequisites: SPCH 364 or permission of instructor.

SPCH 442 (a,b,c,) Communication Internship. (3) Internships are cooperative programs between TSU and local media, in which students undertake various duties. Specific internships available change from semester to semester. May be taken three times for credit but no more than twice in the same area. Prerequisites: Introductory courses in area related to internship and/or permission of instructor.

SPCH 444 Advanced Television Production. (3) Provides the student with experience in producing and directing television programs. Various aspects of production and direction are covered in greater depth. Prerequisite: SPCH 360.

SPCH 446 Radio and Television Advertising. (3) A study of the basic advertising techniques with emphasis on salesmanship in relation to the media. Prerequisite: SPCH 360.

SPCH 448 Principles of Public Relations. (3) A study of the development, scope, and roles of public relations in society.

SPCH 449 Speech and Theatre for the Elementary Teacher. (3) The course is designed for the elementary teacher with a minimum of training and experience in speech communication and theatre. The focus is on activities of a practical nature the elementary teacher may utilize in the classroom. Representative topics include speech development and disorders, speech activities, oral interpretation, creative dramatics and puppetry.

SPCH 450 Senior Project. (3) Individual research or project.

SPCH 452 Communication Law. (3) Law and regulation are analyzed in terms of the social, political and/or economic interests they were designed to protect, and in terms of their impact on the communication industry. First amendment, right of privacy, communication ethics are considered. Prerequisite: SPCH 360 or permission of instructor.

SPCH 458 Advanced Public Relations. (3) Practical exercises in public relations, stressing campaigns, schedules, budgets, and media strategies. Prerequisite: SPCH 448.

SPCH 472 Observation and Student Teaching in the Public School. (9)

SPCH 480 Independent Study. (1-3) Individual study and research under faculty guidance. May be taken twice for credit.

THEATRE (THEA)

THEA 111. Theatre Practice I. (2) A course introducing the student to theatre technology, stage terms, building of scenery. Laboratory experience.

THEA 112. Theatre Practice II. (2) A course dealing with such fundamentals as floor plans, perspective drawings, introduction to make-up, continuation of theatre technology with laboratory experience.

THEA 120 Appreciation of Drama. (2) Introduction to dramatic principles through the study of major periods and representative plays from the Greek period to the present.

THEA 120H. Honors Appreciation of Drama. (2) Honors section of THEA 120.

THEA 240 Elementary Acting. (3) Study and practice in the fundamentals of acting technique based on play and character analysis. The importance of voice, posture, gesture, and movement in theatrical expressiveness will be emphasized using speeches and short scenes from the world's best dramas.

THEA 303 Directing. (3) A course requiring the analyzing of scripts and the directing of one-act plays, with attention to casting, blocking and rehearsal styles through practicum. Prerequisite: THEA 111, 112, and 240.

THEA 301 Costume Design. (2) An analysis of historic and contemporary trends and practical problems in costume design; the art of dress as a cultural expression; basic design elements and principles applied to dress; problems to develop originality and techniques in costume design and illustration; costume rendering and layout. (Same as RA301; offered in Dept. of Home Econmics).

THEA 304 Playwriting. (3) A study of the theory and practice of writing one-act plays for the stage. Prerequisite: Thea 351 or Thea 352

THEA 341 Children's Theatre I. Creative Dramatics. (3) Study of a process used to help drama students develop more sensitive characterizations and to make them more aware of such demands of a drama as structure, pace, mood, and tensions. The same process may be used as a teaching tool in other areas, such as the Language Arts Program in elementary and secondary schools. The course is taught in a laboratory situation.

THEA 342 Children's Theatre II. Play Production. (3) Fundamental principles of crew and committee work for a children's play are taught by the student's actual participation in some phase of the productions, such as cast member, crew member, or committee member. Cast members may include people from the third grade through graduate level.

THEA 343 Children's Theatre III. Puppetry. (2) Study of the process in producing a simple hand-puppet show, with the emphasis on a method of building the script from fairy tales or folk plays. This process can be valuable to teachers or park supervisors, as well as to drama students.

THEA 344 Drama Workshop I. (1-2) Credit given for acting, crew, or committee work in a production. Admission by instructor's permission.

THEA 351 Classical Drama. (3) Study of western world's masterpieces from the Greeks to the Restoration. Readings and reports.

THEA 352 Modern Drama. (3) Extensive study of world-famous plays from 1880's to the present day. Readings and reports.

THEA 400 Scene Design and Stagecraft. (3) Advanced scene design and advanced stagecraft. Construction of three-dimensional scenery required. Practicum with current productions.

THEA 401 History of Drama I. (3) A course based on the development, literature, and staging practices of the theatre from the Egyptians to the Restoration Period. (Formerly THEA 301.)

THEA 402 Stage Lighting and Stage Make-up. (3) Advanced make-up and lighting practicum in major productions and laboratory productions.

THEA 403 History of Drama II. (3) A course based on the development, literature, and staging practices of the theatre from the Restoration through the 19th century. (Formerly THEA 302)

THEA 420 Advanced Acting. (3) Expansion of the techniques studied in Elementary Acting. Longer scenes from the world's best dramas will be studied and used as criteria for the course. Prerequisite: THEA 240 or permission of instructor.

THEA 422 Contemporary Black Drama. (2) A course based on the study of dramas by representative contemporary black playwrights.

THEA 431 Shakespeare. (3) Study of the principal plays of Shakespeare. (Same as English 431)

JOURNALISM (JOUR)

JOUR 301 Survey of Journalism. (3) A practical course in journalism with emphasis upon the organization and function of daily and weekly newspapers, community publicity, school publications, introduction to news writing.

JOUR 302 News Writing. (3) Introduction to reporting techniques, with emphasis on news writing.

JOUR 304 Advanced Reporting. (3) Practice in advanced newswriting with emphasis on news features and beat reporting. Prerequisite: JOUR 302.

JOUR 306 Investigative Reporting. (3) Special problems and assignments in in-depth investigative reporting. Prerequisites: JOUR 302 and 304.

JOUR 308 Press Photography. (3) Experience in professional press photography. Basic darkroom techniques in developing, enlarging, and printing. Principles and procedures in using pictures as an editorial medium.

JOUR 310 Mass Media Advertising and Audience. (3) Fundamentals of broadcast, print, and public relations advertising, promotion and sales, including market research, media buying, and campaigns.

JOUR 312 Advertising Copy and Layout. (4) Ideas and their translation into persuasive words and pictures. Principles and techniques of copy and layouts. Types and functions of advertising. Prerequisite: JOUR 302.

JOUR 405 News Editing. (3) Editing copy, writing headlines, designing newspaper layout. Prerequisite: JOUR 302.

JOUR 410 Editorial Writing. (3) Critical analysis of structure and content of newspaper editorials; practice in writing editorials and columns. Prerequisite: JOUR 405.

JOUR 412 Advanced Advertising Copy and Layout. (3) Continuation of study in copy and layout with emphasis on creative projects.

JOUR 420 Broadcast Journalism. (3) A course which deals with the preparation and production of news and documentaries for radio and television. Prerequisite: JOUR 302 and SPCH 364 or permission of instructor.

JOUR 440 Feature Writing. (3) Instruction and practice in writing feature articles. Prerequisite: JOUR 302 or permission of instructor.

JOUR 442 Magazine Writing. (3) Study and practice in writing nonfiction articles for consumer or trade magazines. Analysis of current magazine markets and trends. Prerequisite: JOUR 302 or permission of instructor. JOUR 440 recommended.

JOUR 452 Reviewing and Criticism. (3) Instruction and practice in reviewing entertainment and the arts. Emphasis on film criticism and one or more of the following: theatre, literature, music, dance, art. Prerequisite: JOUR 302.

JOUR 454 Specialized Publications. (3) Business and industrial publications. Writing and editing for special interest newspapers and magazines in such fields as agriculture, business and industry, engineering, home economics and music. Prerequisite: JOUR 302.

JOUR 460 Special Topics. (3) Scope of subject matter to be determined by students and instructor. Prerequisites: JOUR 302 and permission of instructor.

JOUR 470 (a,b,c). Campus Publications Workshop. (3) Practical experience in writing, editing, photography and layout for campus publications. Prerequisite: Upper-division status, permission of instructor, may be taken three times for credit.

JOUR 480 (a,b). Independent Projects. (3) Supervised individual study, media experience or research. May be taken twice for credit.

DEPARTMENT OF CRIMINAL JUSTICE
Bruce Mallard, Ph.D., Head

The Department of Criminal Justice offers a program leading to the degree of Bachelor of Science in correctional services. It focuses on the preparation of students to assume responsible positions in agencies and institutions in the area of crime prevention and treatment.

Through the research activities of faculty and students, the generation and dissemination of new knowledge is emphasized. The curriculum is designed to offer the student a substantial liberal arts education with emphasis on the behavioral sciences in general and criminal justice in particular. The present emphasis of the Department is in the area of corrections.

Any student admitted to undergraduate study at the University is eligible to major in Criminal Justice. In addition, special students and part-time in-service criminal justice personnel are welcomed. Special attention is given to those students already working in criminal justice agencies and institutions, and a broad range of courses is offered in the evening.

The Criminal Justice major requirements include a total of 44 semester hours with at least 33 semester hours at the 300-400 level. Included in this total is a field experience requirement of 12 semester hours for all majors. This course is optional for police officers who have completed basic training at a city or state policy academy. No minor is required for criminal justice majors since 18 semester hours of psychology (including any 9 semester hours beyond general psychology except education-oriented courses) and 15 semester hours of sociology (including any 9 semester hours beyond introduction to sociology) are required of all majors.

All students must complete a 3 semester hour course in statistics. This course may be taken in either the sociology or psychology department but does not count toward fulfillment of the substance sociology or psychology requirements.

All students will be expected to show evidence of satisfactory communications skills. Speaking or writing difficulties will necessitate extra compensatory work to eliminate the deficiency. In addition, all students will be required to complete successfully a course in criminal justice technical writing unless exempted by the head of the department of Criminal Justice.

Those wishing to minor in Criminal Justice will be required to complete successfully the introductory course (C.J. 200), the three core courses (201, 202, & 203), and any three approved upper level courses.

Since this department is relatively new at the University, all requirements are constantly under study and are subject to change from time to time. Students are therefore urged to keep in close contact with the Department through their advisers.

CAREER OPPORTUNITIES IN CRIMINAL JUSTICE

Criminal Justice majors enter a number of fields after graduation and have generally found a substantial demand for persons from their field of study. Many, of course, continue their studies in graduate school in the fields of law, psychology, social work, guidance and counseling, and criminal justice. Those students who begin working after graduation do so in areas like law enforcement, either federal, state, or local, corrections as prison or juvenile institution counselors or adult or juvenile provation and parole officers, or as counselors and case workers in other areas related to criminal justice like drug and alcohol counseling and treatment or in half-way houses or juvenile foster homes.

CURRICULUM FOR A MAJOR IN CRIMINAL JUSTICE

FRESHMAN YEAR	Credit Hours Fall	Spring
MATH 111-112U	3	3
ENG 101-102U	3	3
SCI 121-122U	3	3
HIST 201-202U	3	3
PSY 201		3
HUM		2
CJ 200	3	
PE and AFROTC	1	1
UC OR 101		
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
CJ 201-202	3	3
CJ 203		3
SOC 211, 330	3	3
ENG 211-212U	3	3
PSY 310	3	
PSY 321	3	
HUM		2
ENG 310		3
PE or AFROTC	1	1
CS 100; 100L		3
	16	18

JUNIOR YEAR	Credit Hours Fall	Spring
PSY 311 or SOC 300	3	
ENG 310		3
PSY 462	3	
PSY 341 or PSY 351	3	
SOC Elec. 300-400 Level	3	3
SOC Elec.400 Level	3	
CJ 300		3
CJ Elec. 300-400 level		3
Elec. 300-400 Level	3	3
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
CJ 400	12	
CJ 450	3	
CJ Elec. 300-400 level		6
CJ Elec. 300-400 level		3
CJ Elec. 300-400 level		3
Elec. 300-400 level	3	
Elec. 300-400 level		3
	18	15

COURSE OFFERINGS

Required Courses:

C.J. 200 Introduction to Criminal Justice Studies. (3) A preliminary examination of the entire criminal justice system. It emphasizes the understanding of basic concepts in police science, correctional services studies, the law and our legal system, and the elements of the scientific method and research techniques. It also functions as an introduction to the orientation and demands of the Tennessee State University Department of Criminal Justice.

C.J. 201 The American Police System. (3) An intensive study of findings and concepts in the area of police science. It covers law enforcement agencies, their procedures, and their problems. There is discussion of police-community relations and the FBI. History emphasized.

C.J. 202 The American Legal System. (3) An intensive study of the concepts and findings of research concerning the functioning and the structure of the American legal system. Its history and development are stressed, and its place in the entire criminal justice system is discussed. Elements of constitutional criminal law are introduced. Problems such as crowded dockets, plea bargaining, and bail are discussed.

C.J. 203 The American Correctional System. (3) An intensive study of the concepts and the findings of research in the area of corrections. In addition to consideration of the history and development of our correctional system, various techniques of correction are considered. The relationship of society and its norms to the operations of such systems will not be neglected.

C.J. 300 Research Methods. (3) An intensive survey of the various research methods appropriate to criminal justice studies. Special emphasis is given to the consideration of logic, design and importance of research for correctional practitioners. In addition to the development of research skills, a purpose of this course is to develop the student's ability to read critically and to evaluate proposals for change. Prerequisite: Math 111 and Psy 311 or Soc 300.

C.J. 400 Practicum. (12) This field experience consists of nearly full-time work in an appropriate institution of agency. It also involves intensive weekly discussions of problems that arise. Usual enrollment time is the student's senior year of study.

C.J. 450 Senior Project. (3) This course involves the preparation of an acceptable piece of research in the area of criminal justice. Prerequisite: C.J. 300.

ELECTIVE COURSES (e)

C.J. 301 Court Procedures and Mechanics. (3) An intensive study of courtroom case preparation, officer demeanor in court, effective presentation of evidence, trail procedure, use of written notes, officer appearance, and reaction to cross examination. (e)

C.J. 302 Constitutional Criminal Law. (3) Discussion of criminal law and procedure. Discussion of constitutional law as it impinges upon the legal system and the crime. Review of the relevant constitutional criminal cases before the various courts of Appeals and the United States Supreme Court. (e)

C.J. 303 Incidence of Crime. (3) Intensive discussion of the problems involved with crime statistics. Reviews UNIFORM CRIME REPORTS and discusses relevant studies. Careful attention is devoted to the concept of unreported crime. (e)

C.J. 304 Criminal Typology. (3) Intensive discussion of the types of crimes. Consideration will be given to the various bases for the division of crimes into different categories. In addition, there will be an intensive examination of the specific research findings regarding crimes such as rape, robbery, murder, etc. (e)

C.J. 305 Deviance and Control. (3) A sociological discussion of the nature and role of deviance in a society. The various types of deviance will be considered and the nature of the relationship between deviance and the controlling and producing forces of society will be discussed. The relationship of deviance to crime will also be considered. (e)

C.J. 306 Introduction to the Philosophy of Law. (3) The philosophical development of the concept of law from the Pre-Greek era to the present (Babylonian, Greek, Roman, Germanic, and English systems) with emphasis on the more important philosophical ideas that have led to the present American legal system. (e)

C.J. 307 The Study of Law. (3) An in depth analysis of the Socratic method and Case method of legal studies and the organization and function of law schools. The course is geared toward and should be taken by only those students interested in pursuing a career in law. (e)

C.J. 308 Police Patrol and Services. (3) A study of the organization, administration, and supervision of patrol function. Responsibilities, techniques and methods of police and patrol will be discussed. Various services and public assistance offered by police organizations will be emphasized. (e)

C.J. 309 Traffic Investigation and Control. (3) A study of the development and need for traffice laws with primary attention focused upon the Uniform Motor Vehicle Code and Model Traffic Ordinances, including use and implementation. The maintenance and preparation of an adequate records system relative to traffice safety is examined. (e)

C.J. 310 Criminal Theory. (3) A survey of the various theories which have been advanced over the years about the causation of crime. Biological, sociological, psychological, and other theories will be examined along with relevant research findings. (e)

C.J. 311 Police Systems. (3) Course entails police systems established in America and abroad with emphasis on functions and activities, divisions and subdivisions with responsibilities and functions of each. Contrasts in structure, with a view of transitions, are discussed. (e)

C.J. 313 Fundamentals of Guidance Counseling. (3) An intensive introduction to counseling with special emphasis upon the nature and problems of correctional guidance counseling. Attention is devoted to the recognition and diagnosis of psychological problems as well as development of acceptable counseling methodology. (e).

C.J. 321 Juvenile Delinquency. (3) An introductory course but is rather an intensive study of the basic ideas of criminology as applied to juveniles. Attention is devoted to the development and impact of the juveniie court system. (e)

C.J. 322 Penal Institutions and Treatment Methods. (3) Intensive discussion of the methods of corrections involving prisons, jails, and other places of incarceration. Special emphasis will be placed on the inmate of community, treatment-custodial conflicts, and the utility (or lack of utility) of such institutions. (e)

C.J. 323 Community Based Treatment Methods. (3) Intensive study of probation, parole, work-release, and other correctional methods which involve the inmate in his community rather than under incarceration. Merits and defects of such programs will be examined. (e)

C.J. 330 Police Administration I. (3) An examination of the principles of organization, administration, and functions of police departments. An evaluation of personnel policies, divisions, operations, command policies, and evaluation of department as a whole. (e)

C.J. 331 Police Administration II. (3) A detailed study of the organization, administration and function of the police department. The designing of policies and a study of the arrangement within a department of specific operations and commands will be emphasized. (e)

C.J. 401 Independent Study. (3) For the student who shows exceptional promise, this course will consist of a research project or intensive reading program especially designed for the student. It is anticipated that only those students whose papers show reasonable probability of a new contribution to knowledge will be enrolled. (e)

C.J. 405 Introduction to Criminalistics. (3) A course designed to give the student a basic knowledge of crime scene protection, collection, preservation, and identification of evidence, including proper search, dusting latent prints, casting, fingerprint classification, use of the crime laboratory and crime detection and prosecution. (e)

C.J. 420 Seminar in Law Enforcement. (3) Review and synthesis of basic principles, practices and procedures. Visitation to operating police organization. Includes final preparation for employment in the law enforcement area. (e)

C.J. 421 Sociology of Law. (3) A discussion of the role of the legal system in our society. There will be consideration of the actual effects of certain types of legislation. Other topics will include conflict resolution, the problem of a pluralistic society, the nature of the law, etc. (e)

C.J. 422 White Collar Crime. (3) A discussion of the incidence and problems with this major type of criminality. Topics will range from tax evasion and business crimes to political corruption and bribes. (e)

C.J. 430 Special Topics. (3) This course will be taught from time to time as faculty expertise and student interest warrant in such areas as police community relations, behavior modification in corrections, street laws, etc. (e)

DEPARTMENT OF ENGLISH

Clayton Reeve, Ph.D., Head

The Department of English provides general education in composition, language, and literature for all students enrolled in the University. In addition, it offers more advanced education in these areas to students who wish to become specialists in the field. The Department also offers a humanistic education in composition, language, and literature to students who plan to enter one of the professions, such as law, medicine, business, writing, or publishing, and who wish to acquire a liberal education along with their professional training. Four objectives have been established for students in the Department of English:

1. To acquire a command of the English language that enables the student both to read with understanding and enjoyment and to express ideas, in writing and in oral discussion, about that which is read.
2. To appreciate the ideas and experiences of the great literary figures of the world through a study of their work and their culture.
3. To evaluate literary material through a critical analysis of its structure and thought, as well as its more purely aesthetic qualities.
4. To acquire a foundation in those areas of composition, language, and literature required for the bachelor's degree.

The Department offers two undergraduate degrees, the Bachelor of Arts and the Bachelor of Science degree, in either of two distinct courses of study. The student may follow the general degree program, with a concentration in English, described in this section of the catalog under the heading, "Intra-Disciplinary Studies," or he or she may pursue the specialized course of study described below. In addition, the Department offers an interdisciplinary degree sequence in English-Journalism, which is described following the listing of English courses.

The major in English leads to either the Bachelor of Arts degree, with or without teacher certification, or the Bachelor of Science degree, with or without teacher certification. Each undergraduate major must complete a minimum of 132 semester hours of work for the bachelor's degree. In accord with University requirements, sixty of the 132 hours must be in 300- or 400-level courses.

Students who pursue the Bachelor of Arts degree with or without teacher certification and who have completed no units of a foreign language in high school must complete four semesters of work in one foreign language, beginning with the introductory course in that language. Students who earn the Bachelor of Arts degree with or without teacher certification but who completed two years of a foreign language in high school must complete two semesters in that language, beginning with the sophomore course in that language.

Those who seek the Bachelor of Science degree with or without teacher certification must complete two semesters of foreign language, regardless of whether they have had a foreign language in high school. The Department recommends that students begin the language in the freshman year.

Candidates for the Bachelor of Arts degree or the Bachelor of Science degree with or without teacher certification must complete, in addition to the foreign language requirements and the General Education Core, twenty-four semester hours of these required courses:

ENG 300 (Expository Writing)	3
ENG 361 and 362 (American Literature)	6
ENG 300-400 (Elective in British Literature, excluding Shakespeare)	3
ENG 400 (Senior Seminar)	3
ENG 410 (History of the English Language)	3
ENG 411 (Language Awareness) or 412 (Modern Grammar)	3
ENG 431 or 432 (Shakespeare)	3
	24

English majors must take English 211D and 212D, English Literature, as part of the General Education Core. If a student declares an English major after he has completed the sophomore literature requirement, and if he did not take 211D and 212D, he will be asked to take additional upper-division courses in British literature to compensate.

Candidates for the B.A. or the B.S. without teacher certification must take Speech 220, in addition to the twenty-four hours of upper-division English courses, the foreign language requirement, and the General Education Core.

Students who pursue the B.A. or the B.S. degree with teacher certification must complete the Professional Education Core for Secondary Majors, in addition to the twenty-four hours of upper-division English outlined above, the foreign language requirement, the General Education Core, English 372, and Speech 220. The Professional Education Core consists of Education 201, 301, 387, 465, 472, and 491; English 371; and Psychology 242 and 312. Candidates must also pass several tests required for teacher certification.

The Department encourages English majors to prepare for a wide variety of careers. To this end, it suggests that majors consider a second major or a minor in such areas as the following: Business, Communication, History, Modern Foreign Languages, and Psychology. Moreover, English is one of the most valuable majors for pre-law and pre-medicine students.

The Department also encourages students from other disciplines to choose a second major or minor in English, since English helps to develop many of the most useful skills in any professional area. A minor in English includes a minimum of eighteen hours in addition to English 101-102. The required courses for a minor are ENG 211-212 (any combination) and either English 361 or 362. Nine additional hours of upper-level work, to be selected in consultation with an advisor, are required.

To encourage both English majors and nonmajors to attain excellence in scholarship and leadership, the Department offers two scholarships and three awards, and administers the Crawford B. Lindsay Scholarship Assistance Awards, which the Tennessee Alumni Chapter gives two graduating seniors from Tennessee high schools who have elected to major in English at Tennessee State.

The Department awards are The Laura M. Averitte Award, the Robert J. Hudson and The Alma Dunn Jones Essay Awards. The Laura M. Averitte Award is given each spring to the freshman English major with the best record of scholarship and participation in University activities. The Robert J. Hudson Award is given to the graduating English major with the best record in scholarship and activities. The Alma Dunn Jones Essay Awards are given each spring to the three freshmen enrolled in Freshman English 102, majors or nonmajors, who write the best essays in the Alma Dunn Jones Essay Contest.

BACHELOR OF ARTS DEGREE PROGRAM (Without Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
French, German or Spanish	3	3
HIST 201-202U	3	3
MATH 111 or 161	3	
MUS 131 or ART 133U	2	2
PE (2-Digit) or AERO	1	1
CS 100		3
UCOR 100	1	
EDRD 100 (Reading, if necessary)	(3)	
	16	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211D-212D	3	3
French, German or Spanish	3	3
SPCH 220		3
SOC SCI Elective	3	
ENG 300	3	
SCI/ BIO/ CHEM	3	3
PE (2-Digit) or AERO	1	1
ENG 201 (if necessary)	(3)	
Electives (300 or 400 level)		3
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
ENG 361-362	3	3
ENG 410	3	
ENG 411 or 412		3
ENG 300 or 400 Elective (excluding Shakespeare)	3	
Electives (300 or 400 level)	6	12
	15	18

SENIOR YEAR	Credit Hours Fall	Spring
ENG 400	3	
ENG 431 or 432	3	
Electives (300 or 400 level)	12	15
	18	15

BACHELOR OF ARTS DEGREE PROGRAM (With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
French, German or Spanish	3	3
HIST 201-202U	3	3
MATH 111U or 161U	3	
HEALTH 151 (Personal Hygiene)		2
PE (2-Digit) or AERO	1	1
MUS 131 or ART 133	2	2
CS 100		3
UCOR 100	1	
EDRD 100 (Reading, if necessary)	(3)	
	16	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211D-212D	3	3
French, German or Spanish	3	3
SCI/BIO/CHEM	4	4
SPCH 220	3	
SOC SCI Elective		3
EDCI 201	3	
PSY 242		3
ENG 201 (if necessary)	(3)	
PE (2-Digit) or AERO	1	1
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
ENG 300	3	
ENG 361-362	3	3
ENG 410	3	
ENG 411 or 412		3
ENG 300 or 400 Elective (excluding Shakespeare)	3	
ENG 372	3	
EDCI 301	3	
EDCI 387		3
PSY 312		3
Electives (300 or 400 level)		6
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
ENG 400	3	
ENG 431 or 432	3	
ENG 371		3
EDSE 465	3	
EDRD 491		4
EDRD 419	3	
EDCI 472		9
Electives (300 or 400 level	3	
	15	16

BACHELOR OF SCIENCE DEGREE PROGRAM (Without Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
French, German or Spanish	3	3
HIST 201-202U	3	3
MATH 111U or 161U	3	
MUS 131 or ART 133	2	2
EDRD 100 (Reading, if necessary)	(3)	
CS 100		3
PE (2-Digit) or AERO	1	1
UCOR 100	1	
	16	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211D-212D	3	3
SCI/BIO/CHEM	3	3
ENG 300	3	
SPCH 220		3
SOC SCI Elective	3	
ENG 201 (if necessary)	(3)	
PE (2-Digit) or AERO	1	1
Elective (300 or 400 level)	3	9
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
ENG 361-362	3	3
ENG 410	3	
ENG 411 or 412		3
ENG 300 or 400 Elective (excluding Shakespeare)	3	
Electives (300 or 400 level)	6	12
	15	18

SENIOR YEAR	Credit Hours Fall	Spring
ENG 400	3	
ENG 431 or 432	3	
Electives (300 or 400 level)	12	15
	18	15

BACHELOR OF SCIENCE DEGREE PROGRAM (With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
French, German or Spanish	3	3
HIST 201-202U	3	3
MATH 111 or 161	3	
MUS 131 or ART 133	2	2
EDRD 100 (Reading, if necessary)	(3)	
CS 100		3
HEA 151		2
PE (2-Digit) or AERO	1	1
UCOR 100	1	
	16	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211D-212D	3	3
SCI/BIO/CHEM	4	4
ENG 300	3	
SPCH 220		3
SOC SCI Elective		3
EDCI 201	3	
PSY 242		3
ENG 201 (if necessary)	(3)	
Electives (300 or 400)	3	
PE (2-Digit) or AERO	1	1
	16	17

JUNIOR YEAR	Credit Hours Fall	Spring
ENG 361-362	3	3
ENG 410	3	
ENG 411 or 412		3
ENG 372	3	
ENG 300 or 400 Elective (excluding Shakespeare)	3	
EDCI 301	3	
EDCI 387		3
PSY 312		3
Electives (300 or 400 level)	3	6
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
ENG 400	3	
ENG 431 or 432	3	
ENG 371		3
EDSE 465	3	
EDRD 491		4
EDRD 419	3	
EDCI 472		9
Electives (300 or 400 level)	3	
	15	16

COURSE OFFERINGS
ENGLISH (ENG)

ENG 000 Writing Clinic (0). The Writing Clinic is open without charge to all students enrolled in the University who are having writing difficulties. Most instruction is on an individual basis.

***ENG 001U English Composition for Foreign Students (3).** An introduction to the formal aspects of written English in preparation for English 101. The course presupposes training in the English language. Some students will work on individualized modules in the Writing Clinic. Not offered for degree credit.

***ENG 098U Basic English Skills (3).** Development of language skills, with concentration on understanding sentences and paragraphs, spelling and vocabulary improvement. Some students will work on individualized modules in the Writing Clinic. Not offered for degree credit. Students who have previously passed English 099 or English 101 may not earn grade points in this course.

***ENG 099U Basic Composition (3).** Reading and writing sentences, paragraphs, and short essays; studies in sentence structure and grammar. Some students will work on individualized modules in the Writing Clinic. Not offered for degree credit. Students who have previously passed English 101 may not earn grade points in this course.

***English 001, 098U and 099U** carry institutional credit only. Grades earned in these courses (with the exceptions noted above) will be computed into the student's grade point average, but none of the courses earns hours towards a degree.

ENG 101U Freshman English (3). An introduction to the fundamentals of written composition and communication through the study of illustrative essays, as well as an introduction to the reading and critical analysis of essays. Grammar and mechanics, insofar as they are an integral part of developing proficiency in writing, are covered in the course. Those students who do not demonstrate satisfactory performance in the use of grammar and mechanics are required to attend the Writing Clinic. Successful completion of 101 is a prerequisite for English 102.

ENG 102U Freshman English (3). An introduction to more advanced techniques of composition through the study of literature. The analysis and explication of literature serve as topics for discussion, study, and writing of themes. Special attention is paid to the writing of the literary review and the research paper. Those students who do not demonstrate satisfactory performance in the use of grammar and mechanics are required to attend the Writing Clinic. Prerequisite: successful completion of English 101U.

ENG 101HU-102HU Honors Freshman English. (3-3). An Honors Course in Freshman English designed for students able to work at an advanced level. Class enrollment is restricted to students in the Honors Program.

ENG 201U Problems in Composition (3). Attention to materials that will help the student overcome his specific problems in written expression. Some students will work on individualized materials in the Writing Clinic. Required of all students who score beneath the cut-off point on the English Proficiency Examination (see Index.)

ENG 207 Best Sellers: Fiction and Nonfiction (3). Current and recent best sellers in fiction and nonfiction, considered as literature.

ENG 208 Film and Theater in Town (3) Analysis of current film and plays.

ENG 211U-212U Sophomore Literature (3-3). A study of literary works with a variety of foci and perspectives. All of the following 211-212 courses satisfy the sophomore literature requirement of the General Education Core. A student may take any combination of 211 and 212 courses, provided one course is a 211 and the other a 212. English 101 and 102 are prerequisites to all sophomore literature classes.

ENG 211U-212U American Literature (3-3). A survey of American literature from the first European settlements to the present time. The first semester covers from the beginning to the Civil War, and the second covers the period since the Civil War.

ENG 211AU-212AU World Literature (3-3). A survey of world literature from the beginnings in the Far East and Middle East until the present time. The first semester treats literature through the Renaissance, and the second treats the Renaissance to the present.

ENG 211BU-212BU Literary Genres (3-3). An approach to literature from the point of view of the genre, or type, of work to be studied. The first semester takes up the short story and the novel, the second poetry and drama.

ENG 211CU-212CU Black Arts and Literature. (3-3). A study of the contributions of Black artists and writers to world culture, especially American culture. The first semester treats oral traditions and music; the second semester takes up literature.

ENG 211DU-212DU English Literature (3-3). A survey of English literature from its origins until the present. The first semester concludes with the end of the eighteenth century, and the second semester covers the period since 1800. Required of English majors, but open to all students.

ENG 211HU-212HU Honors World Literature (3-3). An analytical reading of selected poetry, prose, and drama from the nations of the world. The subject matter of both semesters is arranged chronologically, with that of the first ranging from the Ancient Chinese through the Renaissance; and that of the second, from the Age of Classicism and Reason to the twentieth century. Limited to students in the Honors Program.

ENG 221 English Etymology (1). A study of the origin and derivation of words, including Greek and Latin stems most commonly found in the English language, with special attention to words in scientific and technical vocabularies.

ENG 300 Expository Writing (3). The reading and examination of essays representing the major expository types, with particular attention to rhetorical principles, style, and structure, resulting in the writing of essays illustrating these types. The final project is the preparation of the research report, with emphasis on the collection of materials, analysis, and organization.

ENG 310 Technical Report Writing (3). A study of fundamentals of written reports in a variety of professional fields, with emphasis on grammar, sentence structure, and style, as well as on specialized techniques. 310E focusses on reports required in professional engineering. 310S is the study and preparation of forms and reports required of social workers. 310CJ is the study and preparation of forms and reports required of students majoring in Criminal Justice. 310N treats reports required in the nursing profession. Acquaintance with documents of various agencies is stressed.

ENG 311 Creative Writing (3). A workshop is short story writing. The course examines the techniques and problems involved in writing short stories and places emphasis on the use of the senses.

ENG 312 Creative Writing (3). A workshop in writing poetry. The course examines the techniques involved in writing poetry, placing emphasis on the writing of varied poetic types and relating poetry to other forms of art.

ENG 314 Popular Fiction (3). A study of such popular fiction as the western, the fantasy, the thriller, and the historical romance. Emphasis is on form, appeal, and statements about society.

ENG 315 The Film (3). A study of movies, their techniques, their themes, and their appeal. Classic and contemporary films will be analyzed.

ENG 320 Children's Literature (3). A course offering prospective teachers of the primary grades an opportunity to become familiar with literature suited to the needs and tastes of children. Principles that underlie selection of children's literature for classrooms and libraries are considered.

ENG 331 British Literature from the Renaissance to the Restoration (3). A study of representative selections from 1500 to 1660 with concentration on non-dramatic literature.

ENG 332 Poetry and Drama of the Restoration and Eighteenth Century (3). A study of selected poetry and drama from the ages of Dryden and Pope.

ENG 333 Prose of the Eighteenth Century (3). A study of representative novelists, journalists, prose satirists, critics, and letter writers from Dryden to Johnson.

ENG 341 Literature of the Romantic Movement (3). A study of representative British selections from 1798 to 1832. Attention is given both to poetry and prose.

ENG 342 The Victorian Era (3). A study of nonfiction prose writers such as Carlyle, Mill, and Arnold; and of poets such as Tennyson, Browning, and Arnold. Some assignments will be made in the major novelists such as Dickens, Thackeray, and Eliot.

ENG 351-352 Twentieth-Century British Literature (3-3). A study of the major trends in poetry, drama, and the novel of the current century. Emphasis is placed on themes, techniques, and social criticism. Representative British, Irish, and Commonwealth writers are included.

ENG 353 Modern British Poetry (3). Selections from the works of Hopkins, Yeats, Eliot, Thomas, and others.

ENG 361 American Literature I (3). A study of major American writers and literary movements from the English settlement in the New World until approximately the Civil War.

ENG 362 American Literature II (3). Major American writers and literary movements from the Civil War to the present time.

ENG 363 The American Novel (3). A study of selected works designed to reflect formal developments in the novel, as well as intellectual and moral concerns of the American people.

ENG 364 Literature of Black Life in America (3). A study of Afro-American literature from its inception to current times. Emphasis is placed on biography, poetry, the essay, and short fiction.

ENG 365 The Contemporary Black Novelist (3). A study of novelists such as James Baldwin, Ralph Ellison, Margaret Walker, Toni Morrison, and John Killens, in terms of literary merit and social milieu.

ENG 367 The Short Story (3). Emphasis on the origin and growth of the American short story.

ENG 368 Contemporary American Poetry (3). Poetry from 1940 to present.

ENG 369 Contemporary American Fiction (3). Novels, short stories, and experimental fiction, 1940 to the present, by such authors as Ellison, Barth, Heller, Nabokov, and Pynchon.

ENG 371 Methods of Teaching High School English (3). A course in the methods of teaching English in the secondary school. Required of English majors in the Teacher Education Program. Field Experience required.

ENG 372 Adolescent Literature (3). A survey of literature relevant to the interests and concerns of young adults. Required of English majors enrolled in the Teacher Education Program.

ENG 380 African and West Indian Literature (3). An introductory course in the literature of Africa and the West Indies. Authors include Chinua Achebe, Wole Soyinka, James Ngugi, Mongo Beti, George Lamming, Camara Laye, and Jacques Roumain.

ENG 381 Greek and Roman Literature (3). Images of classical civilization from Homer to fifth-century Athens to Augustan Rome. Emphasis on epic and tragedy, with extensive readings in *The Iliad, The Odyssey*, the Greek tragedies, and *The Aeneid.*

ENG 382 The Literature of the English Bible (3). The Bible considered as literature, with attention to historical backgrounds and textual problems.

ENG 383 Superstition, Science and Mysticism (3). An analysis of man's attempts to explain experiences and phenomena from causal and intentional points of view. The course embraces three means used by man in his attempt to explain ultimate reality.

ENG 386 Women in Literature (3). A course designed to investigate the image of woman in literature as it relates to sexual roles, judgments, choices, and equality; and to broaden a student's knowledge of some of the values, life styles, goals and achievements of women—in the past and today.

ENG 400 Senior Seminar (3). Designed to complete the English major by inquiring into the purposes and methods of the liberal arts in general and literary study in particular. Attention is paid to the resources for literary scholarship and criticism. Required of all English majors.

ENG 401 Special Topics (3). Student- or faculty-generated course, with subject matter to be determined by students and instructor. May be repeated, for a maximum of six hours.

ENG 402 Special Topics in World Literature (3). Studies in world literature in translation. Subject matter to be determined by the instructor with the approval of the English faculty. May be repeated once, for a maximum of six hours.

ENG 410 History of the English Language (3). A study of the development of the English language from the beginning to modern times. Some attention is given to phonetics and to the elementary principles of linguistics. Required of all English majors.

ENG 411 Current English (3). New trends in teaching English and their relationship to significant trends in the past. Students will also develop projects that will be used as supplementary texts in the course.

ENG 412 Modern English Grammar (3). An introduction to the "new" theories of grammar and an application of those theories as a tool for analyzing literature and composition.

ENG 413 Advanced English Grammar (3). Traditional approaches to grammar.

ENG 420 Chaucer (3). An introduction to the works of Chaucer, with emphasis on the background of the age and on the development of Chaucer as a literary artist.

ENG 421 English Novel (3). A selection of English novels from the eighteenth century to the present.

ENG 422 The Continental Novel (3). A study of selected Continental novels with attention to the social background in which they were written.

ENG 423 Literature of the Middle Ages (3). Studies in the prose and poetry of the Middle Ages, including *Beowulf* and works of the Pearl poet, Langland, and Malory.

ENG 424 The Major Poetry of Edmund Spenser (3). A primary concentration on *The Faerie Queene*, with attention to other works.

ENG 426 The Contemporary Novel—from 1945 to The Present (3). An introduction to the major novelists and trends in the novel since 1945. Novelists forming the core of the course are Gunter Grass, Vladimir Nabokov, John Hawkes, Ralph Ellison, Samuel Beckett, William Styron.

ENG 431-432 Shakespeare (3-3). A study of the principal histories, comedies, and tragedies of Shakespeare, with attention to the cultural background of the Elizabethan period. 431 focuses on the comedies and 432 on the tragedies.

ENG 433 The Metaphysicals (3). A study of the work of Donne, Herbert, Crashaw, Vaughn, and other representatives of the "Metaphysical School of Poetry."

ENG 434 Milton and Bunyan (3). A study of John Milton's minor poems, important prose tracts, *Paradise Lost, Paradise Regained,* and *Samson Agonistes;* and of Bunyan's *Pilgrim's Progress.*

ENG 441 Nineteenth-Century English Novel (3). A selection from the major writers of the period, such as Scott, Dickens, Eliot, Thackeray, Trollope, the Brontes, Hardy and Galsworthy.

ENG 451 The English Novel: Twentieth Century (3). Selections from the works of Conrad, Forster, Lawrence, Joyce, Woolf, and others.

ENG 480 Introduction to Literary Criticism (3). Major critical doctrines from antiquity to the present, with emphasis on twentieth-century movements.

ENG 481 Southern Literature (3). Survey of Southern literature from William Byrd to the Fugitives to more recent figures such as Eudora Welty, Flannery O'Connor, and Walker Percy.

ENG 482 Literature of the New Journalism (3). An examination of the literary impact of the New Journalism and the use of novelistic techniques in reporting events. Attention to such practitioners as Capote, Wolfe, Mailer, and Hunter S. Thompson.

ENG 490 Undergraduate Readings and Research (3). Individual study and research under faculty guidance. May be repeated once, for a total of six hours.

ENGLISH-JOURNALISM CURRICULUM

The English-Journalism sequence is a career-oriented curriculum designed for students whose primary interest is writing (either fiction or nonfiction) and who hope to be employed in journalism or publishing. English-Journalism students receive either a Bachelor of Arts or Bachelor of Science degree in Arts and Sciences, with a concentration in the Humanities. They follow the degree requirements described under the heading, "Intra-Disciplinary Studies," within the School of Arts and Sciences.

Working within general degree requirements, students select appropriate courses, primarily from the Departments of English and Communication, to design a program leading to careers in writing, editing, publishing, advertising, public relations, or newspaper reporting. Flexibility and development of diverse

skills are encouraged. Students are urged to include courses in at least two complementary fields. For instance, students whose main interest is nonfiction writing might take advanced courses in editing and newspaper reporting in addition to relevant courses in literary criticism, feature and magazine writing, literature of the new journalism, and reviewing and criticism. Students interested mainly in fiction writing might add any of the above courses to courses in creative writing as a means of broadening their scope. In addition, students interested in advertising or public relations will find appropriate combinations of writing courses, both fiction and nonfiction, indispensable for success in their chosen field.

Students should have a minimum of eighteen upper-division hours in English and eighteen upper-division hours in Journalism. Three of the upper division journalism hours should be earned through media experience in Journalism 480 (Journalism Project).

DEPARTMENT OF GOVERNMENT AND PUBLIC AFFAIRS (Formerly Department of Political Science) Hoyt A. King, Ph.D., Head

The Department of Government and Public Affairs is distinguished from other professional and academic departments and faculties of the University by a central focus on public affairs and public service more comprehensive than that of other academic departments. Yet the department's main concern is the academic preparation of undergraduate political science and public administration majors.

GENERAL POLITICAL SCIENCE

The curriculum in political science is designed to promote the broad purposes of the School of Arts and Sciences as well as to provide more intensive preparation for advanced study. The courses aim to help students acquire knowledge and attitudes which contribute to more intelligent and responsible political behaviors in a society and in a world undergoing rapid change.

A major consists of a minimum of 42 semester hours with a minimum of 36 hours on the 300 and 400 levels. Students may pursue one of two Baccalaureate degrees: the B.A. degree or the B.S. degree. Students in the B.S. degree program may choose to qualify for teacher certification. A major in Political Science provides the student with an opportunity to acquire a broad education that equips one to adapt to a wide variety of careers. The program is designed to encourage the student to analyze the theories, institutions, and processes of political systems in the context provided by the social sciences: to provide preparation for careers in government, planning, public administration, etc; and to stimulate student interest in graduate and professional study.

PUBLIC ADMINISTRATION

The department also offers an undergraduate concentration in Public Administration. It is designed to prepare students for responsible intellectual and dynamic leadership in the modern world. It seeks to equip undergraduates with sufficient knowledge of the political world and skills in public administration so as to enable them to be productive members of society.

PRE-LAW

GPA provides one of the most frequently recommended curricula designed for students who wish to enter law school and ultimately the legal profession. Fifteen hours. GPA 221-American Government (3); GPA 430-Introduction to American Law (3); GPA 431-32-Constitutional Law Part I, Part II (6), GPA 434-Legal Research and Writing; should be taken during the four year period. The case method is used in instructing the pre-law courses.

URBAN AFFAIRS

In addition to the Bachelor of Science and Bachelor of Arts programs, the Department of Government and Public Affairs also offers an undergraduate interdisciplinary concentration in Urban Affairs.

In this era of rapid urbanization and technological sophistication there is a need for a complete and thorough understanding of urban dynamics which allows one to be able to view the city as a phenomenon. This requires an amalgamation and synthesis of subject matter between and among the various social and professional disciplines of the University.

The development of an Urban Affairs concentration is a response to this challenge. It is designed to broaden the horizon and thus enhance the marketability of students matriculating in the Department of Government and Public Affairs. Since public policy is essentially a response to the needs of society which is comprised of both urban and rural publics, it is incumbent upon the potential developers of those policies to be abreast of the social, political and economic intricacies of those environments as well as their interactions and interdependencies thereof. The Urban Affairs concentration is drawn from Government, Sociology, Psychology, Business Administration, and Geography and History.

The entire concentration consists of thirty-three (33) credit hours administered with joint as well as multi-faceted collaboration.

URBAN AFFAIRS CONCENTRATION

A. Core Concentration

GPA/UA	221—American National Government	3
SOC/GPA/UA	451 or 310—Research Methods	3
GPA/UA	390—Introduction to Urban Affairs	3
SOC/UA	460—Urban Sociology	3
GPA/UA	440—Introduction to Public Administration	3
SOC/UA	305—Uses of the Computer in the Social Sciences	3
		18 Semester Hrs.

B. Students will be required to select one course from each of the following discipline groupings:

Psychology
PSY/UA 434 (3)—Community Therapy: Social Training Program Development
PSY/UA 341 (3) Social Psychology

Social Welfare
SW/UA 320 (3) Human Behavior and Social Environment
SW/UA 460 (3) Social Work with Minorities and Women

Communications
SPCH/UA 210 (3) Fundamentals of Speech Communications
SPCH/UA 375 (3) Communicative Skills
SPCH/UA 448 (3) Principles of Public Relations

Geography/History
GEOG/UA 382 (3) Urban Geography
GEOG/UA 310 (3) Cartography
HIST/UA 364 (3) History of Urban America

Most of the courses will be taught by utilizing the resources of the Social Science Laboratory in which gaming and simulation innovations will be emphasized.

INTERNATIONAL RELATIONS

The concentration in International Relations rests on two basic premises: (1) the concept of professional study for careers in international affairs is a valid one. Changes in the scope of international Relations, their increasingly complex and multi-dimensional characters, and the growing interdependencies in the international system, all make the rigorous study of international relations more compelling and challenging than ever; and (2) recent and profound changes in the nature of the world structure have made it essential to reassess and redefine the knowledge and skills which policy-makers will need to cope with international problems and challenges in the decade ahead and to restructure professional education to provide the requisite information. Both governmental and private decision-makers, in short, will require a much broader and deeper understanding than they have hitherto needed of the nature of the political, legal, economic, psychological and socio-cultural process in their own and other countries.

CURRICULUM FOR A MAJOR IN GOVERNMENT AND PUBLIC AFFAIRS (B.S. Degree with Certification in Social Studies)*

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101U-102U	3	3
HIST 201U-202U	3	3
UCOR 100U	1	
GEOG 171U-172	3	3
MATH 111U-SOC 211U	3	3
PE (11-91) or AERO SCI	1	1
GPA 101/HEA 151U	3	2
EDCI 201		3
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212	3	3
SCI 121U, 122U	3	3
ANTH. 230, PSYCH 201 or 240	3	3
P.E. (011-091) or AERO SCI	1	1
ART 133U-MUS 131U or SPCH COMM	2	2
GPA 221U-222	3	3
ECON 211U-212	3	3
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
HIST 121-122	3	3
EDCI 301, 387	3	3
GPA 300, 310	3	3
GPA 360, 368	3	3
GPA Electives	6	6
	15-18	15-18

SENIOR YEAR	Credit Hours Fall	Spring
GPA (300-400), 450	6	3
GPA (300-400 elective), 392	9	
EDSE 465	3	
GPA 371		3
EDRD 491		3
EDCI 472S		9
	18	18

*Note: 138 hours required for graduation with teacher certification

CURRICULUM FOR A MAJOR IN GOVERNMENT AND PUBLIC AFFAIRS (Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101U-102U	3	3
HIST 201U-202U	3	3
UCOR 100U	1	
ART 133U-MUS 133 or SPCH COMM	2	2
MATH 111U-ELECTIVE	3	3
PE (011-091) or AERO SCI	1	1
GPA 101, ELECTIVE	3	6
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211U-212U	3	3
SCI 121U-122U	3	3
SOC. SCI. ELEC., ELECTIVE	3	3
PE (011-091) or AERO SCI	1	1
CSI 100U/100L, ELECTIVE	3	2
GPA 221U-222	3	3
ELECTIVE	2	
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
GPA 300, 310	3	3
GPA 300, 368	3	3
EDRD 310, Elective	1	3
GPA 300-400 ELECTIVES	3	3
300-400 ELECTIVES	5-8	3-6
	15-18	15-18

SENIOR YEAR	Credit Hours Fall	Spring
GPA (300-400), 450	3	3
GPA (300-400 Elective)	12	
300-400 Electives	3	15
	18	18

CURRICULUM FOR A MAJOR IN GOVERNMENT AND PUBLIC AFFAIRS (Bachelor of Arts Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101U-102U	3	3
HIST 201U-202U	3	3
UCOR 100U	1	
ART 133U, MUS 133U or SPCH COMM	2	2
MATH 111U-ELECTIVE	3	3-4
PE (011-091)or AERO SCI	1	1
GPA 101, ELECTIVE	3	3
MFL 101, 102	2	2
	18	17-18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211U-212U	3	3
SCI 121U-122U	3	3
SOC. SCI. ELECT., ELECTIVE	3	3
PE (011-091) or AERO SCI	1	1
GPA 221U-222	3	3
CSI 100U-100L, ELECTIVE	3	2-5
MFL 201-202	2	
	18	15-18

JUNIOR YEAR	Credit Hours Fall	Spring
GPA 300, 310	3	3
EDRD 310	1	3
GPA 300-400 ELECTIVES	6	6
300-400 ELECTIVES	5-8	3-6
	15-18	15-18

SENIOR YEAR	Credit Hours Fall	Spring
GPA (300-400), 450	3	3
GPA (300-400 Elective)	12	
300-400 Electives	3	15
	18	18

COURSE DESCRIPTIONS

GPA 101 Introduction to Political Science (3). An introduction to the crucial ideas, questions, problems and methods involved in man's attempt to achieve order, justice and welfare in politics. The ideas, institutions processes and behavior associated with modern democratic political systems are emphasized. The meaning of such concepts as freedom, authority, equality and constitutionalism are explored in depth. Consideration is given to the elaboration or adaptation of values through the workings of political institutions and processes.

GPA 221 American National Government (3). An introductory course which deals with the foundation, organization and principles of national government. Attention focused on the relations of the citizens to the government and the rights, duties and obligations of citizens. GPA 221 is PREREQUISITE TO ALL UPPER DIVISION COURSES

GPA 222 State and Local Government (3). An analysis of the structure, principles, and operation of the state and local units of government and the nature of intergovernmental relations in the American Federal System. Illustrative material is drawn largely from Tennessee.

GPA 300 History of Political Philosophy (3). Selected political philosophers from classical Greece to 1900, including Plato, Aristotle, Machiavelli, Locke and Rousseau.

GPA 301 Contemporary Political Philosophy (3). Recent works on the central issue in political philosophy, economic justice, rights, political authority. Prerequisite GPA 300.

GPA 310 Research Methodology (3). An introduction to social science research methodology which involves data collection and processing procedures, computer usage, surveys, statiscal analysis and research design. Prereqisite GPA 101, 221, 222.

GAP 311 Statistics for Social Sciences (3). A basic course designed to teach the major statistical concepts, procedures, techniques and

interpretations to beginning students in the behavioral sciences.

GPA 315 Public Opinion & Voting Behavior (3). An analysis of the process by which opinions are formed and of the purposes and techniques of propaganda and the functions and expression of public opinion.

GPA 320 Patterns of Tennessee Government (3). Study of Tennessee Government from the functional point of view emphasizing political activities, taxation, education, social welfare and economic services of the Government. Prerequisite GPA 222

GPA 360 Introduction to Comparative Government and Politics (3). This is a prerequisite for all comparative government in this department. It is therefore necessary to take this course before taking any other comparative course. Throughout the course, the central question of what constitutes a valid comparison will be considered.

GPA 361 Comparative Government and Politics of Selected Areas (3). The course sets out to do two things—to construct a theoretical framework that makes possible a comparative method of analysis for political systems of all kinds. Secondly, to offer a comparative analysis of the political system of those areas of the world in which dramatic social and political changes are taking place in Asia, Africa, Latin America. Prerequisite GPA 360

GPA 363 International Organization (3). Designed to examine the nature of international organization and that of regional organizations. Materials include military economic, cultural and political regional integration experiences, with emphasis on the United Nations and its Agencies, European Economic Community, North Atlantic Treaty Organization (NATO); Organization of American States, (OAS); Organization of Africa; Unity (OAU); Economic Community of West African States (ECOWAS), etc.

GPA 365 International Relations (3). An examination of the present-day relations and problems among states of the world and the major factors which underlie and influence these relations. Prerequisite. GPA 360

GPA 367 American Foreign Policy (3). A study of the forces and factors involved in American foreign policy and of the processes through which it is developed.

GPA 368 Third World Politics (3). An introductory course on political-economic change in the Third World to provide an understanding of some of the major problems confronting Third World nations and to give insight into the various tools and strategies that Third World political leaders can use in dealing with those problems. Investigates some of the major avenues toward political development and will briefly assess the costs and benefits of the approaches discussed.

GPA 371 Teaching Political Science Education in Secondary Schools (3). The theory, methods and materials for teaching and disciplines in the social science area will be dealt with. Attention is given to the inter-relatedness of the various disciplines or discipline combinations as they are taught in secondary schools.

GPA 390 Introduction to Urban Affairs (3). This interdisciplinary course between Government and Public Affairs and Sociology will examine the interaction among government, the economy, both social and physical environments as it relates to urban life. An understanding of the complexity of urban life (i.e., social, political and economic needs) will be emphasized.

GPA 391 Urban Politics (3). Surveys principal urban problems, their causes and public policies that deal with them. Designed to acquaint the students with the ideas of the major writers on such aspects of urban communities as the role and development of cities; their government administration and finance, urban planning and design; poverty and slums; ethnic, race and class relations; the administration of justice; urban mass transit; and the quality of urban life in the urban environment.

GPA 392 Black Politics (3). An analysis of the past, present and future role of Blackes in the American Political System. The social, economic, and political position of Blacks are related to that of the larger population will be explored. Major work by and about Black Americans will be utilized.

GPA 393 Political Economy (3). This course discusses the impact of economics on political systems. Various economic philosophies such as capitalism, communism, dependency are discussed as to how valid their theorized impact on the political stability of nations are.

GPA 400 Internship in Public Administration (3-12). Designed to intensify preservice (graduate) public administration students knowledge of the institutions involved in the governing processes. It should enable a student to learn in an actual setting while providing a service for the agency where he/she is interning. The needs and opportunities vary by agency so every program is different from others. Certain features are beneficial to any program and these are combined in the department's service learning internship program model.

GPA 405 Special Topics (3). Student or faculty generated course. Scope of subject matter to be determined by students and instructor. Prerequisite: Permission of the instructor.

GPA 420 Legislative Process (3). An examination of the structure and methods of transacting business in the American Congress and State Legislature and the role of legislatures in the American Political System.

GPA 421 Judicial Process (3). An analysis of the court systems in the United States, both their role in the political system and the procedures by which they make decisions.

GPA 422 Parties and Elections (3). Structure and functions of the party system-nominations campaigns and elections. The role of parties in the political process.

GPA 423 The Presidency (3). The course is concerned with the Office of the President of the United States in terms of both the institution and the men who have held that office. The origins, incumbents, responsibilities, and evaluations of the Presidency are considered in depth. Particular emphasis is placed on the study of the modern presidency as it has developed in the last half century.

GPA 424 Government, Public Opinion and the Press (3). Relations of executive, legislative, judicial and regulatory bodies and the press. Role of the press in expressing and influencing public opinion and governmental policy.

GPA 430 Introduction to American Law (3). The course is divided into three parts: Part I has three purposes: (1) to acquaint the student with English Common Law; (2) provide the student with an understanding of the close affinity which the development of American Law has to English Common Law; and (3) to trace the historical development of the American Law from the colonial period up to the twentieth Century. Part II has two purposes (1) to acquaint the student with basic legal concepts and doctrines; (2) to familiarize the student with both state and federal court systems. Part III has two purposes: (1) to provide the student with a general survey of the law in modern American Society as it determines the basic rights and liabilities of private persons and (2) to examine basic principles of law with which most of us are confronted in daily interaction with business and each other.

GPA 431 Constitutional Law-Part I (3).

GPA 432 Constitutional Law-Part 2 (3). These courses are devoted to a study of the sources, principles and powers of government in the United States as embodied in the Constitution and Judicial decisions inleading cases. They cover judicial decisions in leading cases. They cover judicial review, the power of the legislative executive and judiciary, the relation between the national government and states, freedom of speech, press and religion, due process and equal protection.

GPA 434 Legal Research and Writing (3). The purpose of this course is to acquaint the student with the major types of federal court reports, digests, citators, annotated reports, encyclopedias, treaties, restatements and law reviews. A fact situation will provide the basis for a legal research problem.

GPA 435 International Law (3). This course will cover the basic legal concepts and principles governing state behavior in the international order the nature and sources of international law, international agreements, sovereignty of states and recognition of statehood jurisdiction, immunities and state responsibility.

GPA 440 Introduction to Public Administration (3). Principles of public administration structure, and organization, financial management, administrative responsibility and the relation between the administration and other branches of government in the United States. GPA 440 is prerequisite to all other courses in the 400's series.

GPA 441 Public Personnel Administration (3). Concerned with the administrative procedure at all levels of government with due reference to structural and environmental factors. The aim is to develop skills in analyzing administrative problems.

GPA 442 Selected Topics in Organization Theory (3). Critical survey of existing models/schools/approaches to the design of organization, planning, budgeting and control. Emphasis on recent developments in the theory and its relevancy to current problems in the public sector.

GPA 443 Human Relations and Management (3). Deals with the different aspects of employee-employer relations, organizational communication, coordination and motivation of employees.

GPA 444 Organizational Development, Innovation and Planned Change (3). Review of different strategies and approaches to organizational development, planning of change reducing the resistance to change.

GPA 445 Policy Sciences (3). This is an introduction to the tools and skills that can be used to analyze the policy-making process in the United States. It provides an analysis of the policy-making process of the national level in the United States focusing on the role of the three branches of government, political parties, citizens and the press.

GPA 446 Intergovernmental Relations and Regionalism (3). Survey of the relations among government agencies throughout the sectors of government, i.e., local, state and national includes an examination of the impact of these relations on policy development and level and quality of citizen participation. Prerequisite GPA 222.

GPA 447 Research Seminar and Workshop in Public Management (3). Consists of field work and class discussions on selected issues, e.g., zero-based budgeting sunset legislation, community action, etc. Working as a group and on individual basis with the instructor. Student analyze empirical data and compile a final report.

GPA 450 Senior Project (3). A directed research project upon a specific problem. The purpose of the project is to use conceptual knowledge and skills learned in research methodology and knowledge about particular area of political science.

GPA 451 Independent Study (1-3). This class is designed to afford students the opportunity to engage in a course of study of greatest interest to him or her. The student has latitude in deciding the nature and type of project to be done. However, faculty approval and supervision is required. Course may be repeated with advice of faculty to six credits. Prerequisite. SENIOR STATUS AND AT LEAST 24 HOURS OF UPPER DIVISION POLITICAL SCIENCE

DEPARTMENT OF HISTORY AND GEOGRAPHY

Phyllis K. Leffler, PhD., Acting Head

The Department of History and Geography offers courses of study at the undergraduate level leading to the Bachelor of Arts and the Bachelor of Science degrees. Students may earn either degree with a major in history; or they may follow the requirements for the interdisciplinary degree as described under the School of Arts and Sciences section of the catalog.

The curriculum in history is designed to provide students with a broad vision of past and present civilization. Emphasis is placed on social, economic, and political trends in the development of civilization, but institutional, cultural, diplomatic and religious aspects of man's experience are also included. One aim of the curriculum is to enable students to read historical literature critically. Instructional methodologies in history are varied, including the use of lectures, audio-visual materials, and computer packages. The curriculum in history and geography helps prepare students for graduate study, the study of law, and for careers in government, archives, foreign service, teaching, libraries, map making, meteorology, industry, insurance, and in the administration of historical societies, sites, and museums.

The requirement for a history major is a minimum of thirty-one (31) semester hours, including a minimum of eighteen (18) semester hours in 300 and 400 level courses. The program of study includes the following major courses:

History 121-122	History 450
History 201-202	History 499

Students taking a B.A. degree in history must complete Geography 171-172. They should also complete a minimum of twelve (12) semester hours in a foreign language. Only "C" grades are acceptable for transfer students.

Students may wish to define a minor field in conjunction with their specific interests. For example, students interested in pursuing law might consider a minor in Government and Public Affairs or English; students selecting the *Public History Administration* concentration could consider a minor in Business; students seeking Teacher Certification should consider a minor in some Social Science area; students interested in foreign affairs might consider Government or Geography minors. Students are not required, however, to define a minor. Courses of study must be designed in consultation with an advisor in the department.

The Department of History and Geography offers a variety of programs for undergraduate majors. Options include a concentration in Public History, a minor in Afro-American studies, and Teacher Certification in History. Curricula suggestions in each of these areas are outlined below.

HISTORY MINOR

A minor in history consists of eighteen (18) semester hours of course work. It is suggested that each student tailor the history minor to his or her major. For example: business majors should take economic and industrial history; Government and Public Affairs majors should take diplomatic and constitutional history, among other history courses. English majors should take social and cultural history, *etc.*

GEOGRAPHY MINOR

The program for a minor in geography consists of a minimum of eighteen (18) semester hours of credit in geography courses. Geography 171-172 or Geography 271-272 are prerequisites for upper level geography courses.

PUBLIC HISTORY CONCENTRATION

Students majoring in History may elect an undergraduate concentration in the area of Public History. This option will help prepare students for careers in archives, libraries, industry, museums, historical sites, *etc.* Available courses include Public History Administration, Archival Administration, Historical Editing, Community History, and other special topics offerings.

AFRO-AMERICAN STUDIES

The Department of History and Geography offers enough courses for a minor (18 semester hours) in Afro-American history and culture. Available courses include Geography 372, 382, and 412 and History 491, 492, and 385.

CURRICULUM FOR A MAJOR IN HISTORY (Bachelor of Arts Degree) 132 semester hours

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
HIST 121-122U	3	3
SCI (Bio, Chm, Nat Sci)	3	3
GEOG 171U		3
MATH 111U	3	
PE or AERO	1	1
HUMANITIES		4
CS 100	1	
UCOR 100	1	
	15	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
MODERN FOREIGN LANGUAGE	3	3
GEOG 172/SOC SCI	3	3
HIST 121-122	3	3
PE or AERO	1	1
ELECTIVES (200 level)	3	3
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
ELECTIVES	9	6
HIST ELECTIVES	6	9
MODERN FOREIGN LANGUAGE	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
ELECTIVES (300-400)	12	18
HIST 450	3	
HIST 499		18
	16	18

BACHELOR OF SCIENCE DEGREE IN HISTORY (132 semester hours)

FRESHMAN YEAR	Credit Hours Fall	Spring
HIST 201-202U	3	3
ENG 101-102U	3	3
SCI (Bio, Chm, Nat. Sci)	3	3
HUMANITIES	2	2
MATH 111U	3	
GEOG 171		3
PE or AERO	1	1
ORIENTATION	1	
	16	15

SOPHOMORE YEAR	Credit hours Fall	Spring
HIST 121-122	3	3
ENG 211-212	3	3
SOC SCI ELECTIVES	6	9
MUS 131		2
GEOG 172	3	
PE or AERO	1	1
	16	18

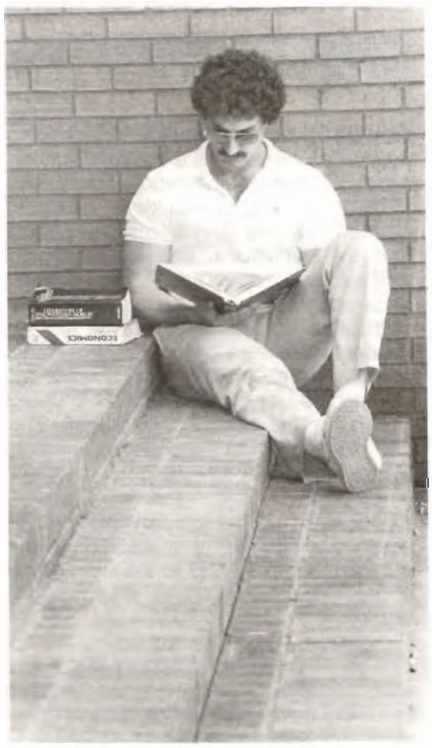
JUNIOR YEAR	Credit Hours Fall	Spring
HIST ELECTIVE	9	9
NON-HIST. ELECTIVES	9	6
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
HIST ELECTIVES	9	6
NON-HIST. ELECTIVES	6	9
HIST 450	3	
	18	15

BACHELOR OF SCIENCE DEGREE (With Teacher Certification) (132 semester hours)

UNIVERSITY REQUIREMENT
General Education Core — 45 Hours
Professional Education Core (Secondary) — 30 Hours

DEPARTMENTAL REQUIREMENTS
General Education
Professional Education
32 Hours



FRESHAMN YEAR	Credit Hours Fall	Spring
Physical Ed/AFRO	1	1
Humanities		2
History 201-202U	3	3
Geography 171U	3	
Science 121-122U	3	3
Mathematics 111U		4
English 101-102	3	3
UCOR 100	1	
CS 100	1	
	15	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
History 121-122	3	3
Geography 172		3
English 211-212	3	3
Education 201	3	
Psychology 242/201		3
Gov & Pub. Afrs 221	3	
Humanities		2
Physical Ed/AERO	1	1
Sociology 211/Anthro 230	3	3
	16	18

JUNIOR YEAR	Credit Hours Fall	Spring
History Electives: 300-400s	3	6
History 341	3	
Electives 300s-400s	3	3
Education 301	3	
Psychology 312		3
EDSE 465	3	
EDCI 387		3
Gov & Pub Afrs 222	3	
Economics 211		3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
History 371		3
History 450	3	
History Electives 300's-400's	3	
Social Science 300-400	3	
EDRD 491		3
EDCI 472		9
Electives	9	
	18	15

B. Secondary Majors
Education

EDCI 201	History and Foundations of Education	3
EDCI 301	School Organization, Management and Community Relations	3
EDCI 387	Curriculum Development	3
EDSE 465	Introduction to Special Education	3
Psychology 242	Human Growth and Learning	
Psychology 312	Measurement, Evaluation and Guidance for Classroom Teachers	3

SEMESTER BLOCK
First Half

Education 371	Methods and Materials in Secondary Education	3
EDRD 491	Reading and Study in the Secondary School	3
EDCI 472	O—Student Teaching Orientation	0

Second Half

EDCI 472	Directed Teaching	9
	TOTAL	30

BACHELOR OF SCIENCE DEGREE (Public History Concentration)

FRESHMAN YEAR	Credit Hours Fall	Spring
TYPING OM 121-122	3	3
ENG 101-102U	3	3
GEOG 171U	3	
ORIENTATION	1	
MATH 111		4
PE and AERO	1	1
SCIENCE	4	4
HIST. 201-202U	3	3
	18	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
BUSINESS PRIN. Mg 101	3	
ENG. 211-212	3	3
HIST. 121-122	3	3
HIST. 203		3
GEOG. 172	3	
PE and AERO	1	1
HUMANITIES	2	
ELECTIVES	3	6
	18	16

JUNIOR YEAR	Credit Hours Fall	Spring
HIST. 433 (A-B-C-D)	3	3
HIST. ELECTIVES	3	3
NON-HIST. ELECTIVES	9	12
	15	18

SENIOR YEAR	Credit Hours Fall	Spring
HIST. 458	3	
HIST. 499	1	
ELECTIVES	12	15
	16	15

COURSE DESCRIPTIONS
HISTORY (HIST)

HIST 121-122 Growth of Civilization (1500-present) (3-3). A survey of the contributions made by all the races of the world to civilization and mankind. From ancient times to the age of absolutism to the present.

HIST 121H-122H Honors: Growth of Civilization (1500-present) (3-3). The major social, economic, political, religious, and intellectual developments in European and world history from medieval times to 1815. Reserved for advanced students.

HIST 201-202 American History (3-3). This course is a study of the development of cultural, economic and political institutions in American from pre-Columbian times to the present. History 201 covers the period from pre-Columbian times to 1877. History 202 covers the period from 1877 to present. Required of all University graduates.

HIST 201H-202H Honors American History (3-3). An intensive and extensive study of American History, pre-Columbian times to present. Reserved for gifted, high potential, high academically ranked students.

HIST 203 Introduction to Public History (3). An introductory course focusing on the distinctions between academic and public history. Examines the methodology and process of historical work, with specific concentration on the unique focus of public historians. For each section of the course, career choices will be presented. Practicing public historians will participate through guest lectures.

HIST 301-302 Foundations of Modern Europe (3-3). The first part traces the major political, social, economic, and intellectual development of Europe from 1500 to 1815. The second part, 302, is a study of Europe from 1815 to the present.

HIST 331 American Colonial History (3). The economic, social, religious, cultural, and political development of the American nation from 1492 to 1789.

HIST 332 Early National Period (3). An in-depth study of the American Republic from 1789 to 1836. The focus is on national-political growth of the Republic from the beginnings under Washington through the presidency of Jackson.

HIST 333 The Early National Period (3). A political, economic, and cultural analysis of the American republic, 1836-1860. Topics include sectional animosities, Mexican War, debate and slavery, the coming of the Civil War.

HIST 334 Civil War and Reconstruction (3). A study of the sectional disputes dividing the nation, the course of the Civil War, the constitutional problems of Reconstruction times, the condition of the freedmen after the war, and the political history of the nation to 1877.

HIST 335 U.S. 1877-1920 (3). An analysis of the political, economic, and cultural evolution of the United States. Key issues include the end of Reconstruction, end of frontier America, rise of big business, imperialism, the Spanish-American War, Progressive era, and World War I.

HIST 336 U.S. 1920-1945 (3). A study of the political, economic, and cultural development of the American people. Topics include the Roaring Twenties, the Great Depression, the New Deal, and World War II.

HIST 341 History of Tennessee (3). A study of the state from geological time to 1865. It includes a survey of social, cultural, economic, and political developments which impact on Tennessee's growth and development.

HIST 342 History of Tennessee (3). A survey of the state from 1865 to the present. Social, cultural, economic, and political developments are emphasized as we approach the beginning of our third century of statehood.

HIST 361 Introduction to the Philosophy of History (3). A study of the philosophy of history and historical literature of major European and American thinkers from the time of the Greeks to the present. Includes Thucydides, Herodotus, Tacitus, St. Augustine, Vico, Voltaire, Hegel, von Ranke, Marx, Turner, Beard, Toynbee, and others.

HIST 363 History of Science and Technology (3). This course acquaints the student with selected topics and sources in the historical development of modern science and technology from the Renaissance to the present. It includes the philosophies of science, mathematics, physical sciences, earth sciences, biological science, medicine, technology, and pseudo science.

HIST 365 Constitutional History of the United States (3). Attention is focused on the factors which have influenced constitutional changes and historic cases in which the provisions and principles of the Constitution of the nation have been interpreted and applied. A study of the evolution of constitutional law.

HIST 367 History of Urban America (3). Interdisciplinary in character, the course will focus attention on the political, economic, sociological, demographic, and geographical influences which transform the nation from an agrarian to an urban culture.

HIST 369 Economic History of the U.S. (3). An investigation of selected economic issues in American History from the colonial period to the present. Possible topics include mercantilism, capitalism, industrialism, labor-management relations, corporatism, and multinational organizations.

HIST 371 The Teaching of Social Sciences (3). The theory and materials for the teaching of history, geography, sociology, political science, and other social sciences. A methods course required of social science and history majors who plan to teach on the secondary school level and who opt for the B.S. with certification.

HIST 373 The Family in History (3). Exploration of selected family patterns and issues in both European and American history. Study of domestic life, women's roles, sexual ideologies and child-rearing patterns. If possible, students will apply their learning to their own family patterns and will examine these patterns in an historical context.

HIST 384 Ancient History (3). An examination of ancient civilizations, including Egyptian, Roman, Hellenic, and Helenistic cultures. Materials in this course will include archaeological evidence, philosophical writings, and the study of political institutions.

HIST 385 History of North Africa and the Middle East (3). Primary focus is on the 19th and 20th century. Selected topics include European imperialism, struggles for African independence, the role of Israel and Arab nations in international affairs in the 20th century.

HIST 386 Middle Ages and Renaissance (3). A intensive study of Western Europe from 500 to 1600. The focus is on political, economic, social, and cultural developments in the Middle Ages, the 12th Century Renaissance, the Italian and Northern Renaissance.

HIST 391 Russian History (3). An examination of Russian history from Czarist days to the present. Explores political, economic, social, and cultural issues. The impact of the Russian Revolution of 1917, the creation of the Soviet State, and the emergence of the Eastern bloc are some of the topics to be explored.

HIST 411-412 European Social and Cultural History (3-3). History 411 focuses on such topics as Greco-Roman art and culture, Christian thought, and medieval social and cultural values. History 412 begins at the Renaissance and continues to the present. Focuses on such topics as humanism, religious reform, enlightenment, industrialism, romanticism, and totalitarianism.

HIST 421-422 Diplomatic History of the U.S. (3-3). An analysis of American foreign affairs, 1776 to the present. History 421 begins with the diplomacy surrounding the emergence of the United States as a nation, and concludes with the nation's growth into a world power by 1900. History 422 treats the further expansion of the United States' role as a dominant world power by covering the years 1900 to the present, and investigating topical areas such as dollar diplomacy, foreign policies preceding and during the world wars, containment and anti-communist policies, the Vietnam dilemma, and Nixion detente.

HIST 425-426 Social and Cultural History of the U.S. (3-3). Analysis of social, cultural, and intellectual thought. Focuses on such topics as Puritanism, the Enlightenment, romanticism, individualism, Social Darwinism, urbanism, and

popular culture. History 425 covers the period from 1600 to 1865; History 426 covers the period from 1865 to the present.

HIST 427-428 History of the South (3-3). History 427 focuses upon the years 1607-1865. It covers the periods of colonialism, Revolutionary War, slavery and the cotton kingdom, and Civil War and Confederacy. History 428 surveys the period from 1865 to the present. Industrialization and racial desegregation—so important to a redefinition of the South—will receive attention.

HIST 431 America Since 1945 (3). An intensive investigation of the American nation since World War II. Includes domestic politics, America's involvement in post-war world affairs, and economical, cultural, and social developments.

HIST 432 Vital Topics in History (3). Selected topics and issues that are not covered specially in other courses. An indepth analysis of a narrow or special focus subject.

HIST 433, A or B Vital Topics in Public History (3-3). Selected topics in Public History Administration which represent and introduce students to career-identifiable positions in the field. Possibilities include: A-Community History; B-Historical Editing and Publishing.

HIST 433, C or D Vital Topics in Public History (3-3). Selected topics in Public History Administration which represent and introduce students to career-identifiable positions in the field. Possibilities include: C-Archival Administration; D-Historical Preservation.

HIST 441-442 Special Readings in History (3-3). Designed for the individual student who requests supplementary study in an area not ordinarily covered intensively or otherwise in regular course offerings. Topics are arranged with the instructor in charge.

HIST 450 Senior Project: Introduction to Historical Literature and Methodology (3). Primarily for seniors majoring in history. Combines use of computer assisted instructional packages with readings in classical historical literature. Focuses both on European and American History. Limited to upper-division juniors and seniors.

HIST 451-452 Latin American History (3-3). An examination of the general history of the civilization of Latin America from Indian times through the Portuguese-Spanish colonization period. History 452 covers the period from 1800 to the present, including revolution, independence, nationhood, and world interdependence.

HIST 458 Public History Internship (3). A practicum or internship with a history-related agency (public or private) to provide the student with on-the-job experiences. The details of the internship will be negotiated with student, agency, and instructor. A major paper is required by student for successful completion of course as well as a satisfactory evaluation by both instructor and internship agent.

HIST 491-492 Afro-American History (3-3). A study of the integral role and contributions of black-Americans in the history and development of the United States. History 491 covers the period from the history of African kingdoms to the end of southern American slavery. History 492 covers the period from 1865 to the present. Both sections include the study of black history by using computers and other modern techniques of research and instruction.

HIST 493 Afro-American History: Special Topics (3). Designed to cover intensively the topics of special interest in contemporary times. Topics are selected by the instructor upon scheduling the course or seminar.

HIST 495 History of the American Indian Before 1860 (3). A study of the history and culture of Indian peoples on the American continent. Focuses upon Indian nations in the Ohio Valley, the eastern costal plains, and the Southeast.

GEOGRAPHY (GEOG)

GEOG 171-172 World Regional Geography (3-3). Study of geographic regions of the world. Regional surveys include a special consideration of the physical character of the land, resources, economics, and cultures. It is designed to provide general education in geography for Education and Social Science majors.

GEOG 173-174 Elements of Physical Geography (3-3). Study of weather and climate, flora and fauna, soils, landforms, mineral resources of value to man, major surface waters, ground water regions, and different types of coastlines. Included are the cause and distribution of these elements and their impact on man, and a general geographic analysis of a selected area to emphasize these elements and their impact on society. Suitable for business Administration and Science majors.

GEOG 271-272 Economic Geography (3-3). Emphasis on world distribution of economic and business activities, stressing factors of location and economic concepts of locational change.

GEOG 310 Cartography (3). An introductory course in the nature and use of maps, the construction of map projections and their uses, and the preparation and use of maps for various types of analysis. Includes lecutre and laboratory work.

GEOG 333 Geography Field Trip (3). A spring and summer excursion to selected areas. Library studies and a report required. Prerequisite: 3 semester courses (9 hrs.) in geography and consent of the instructor.

GEOG 351 Meteorology (Elements of Weather) (3). Properties and conditions of the atmosphere; instruments used in weather observation; emphasis upon applications.

GEOG 361 Principles of Geomorphology (4). See Geology 480.

GEOG 371 Geography of the United States and Canada (3). Recognition, analysis and interpretation of the basic physiographic features, resources, and human adjustments within its several regions.

GEOG 373 Geography of South America (3). Regions and resources of South America beyond the Caribbean with special study of the distinctive role of each country according to its geographic significance. Problems of future development will be emphasized.

GEOG 381 Geography of Europe (3). A regional analysis of Europe west of the Soviet Union, which is designed to study the cultural, physical, and economic character and problems of European nations.

GEOG 382 Urban Geography (3). Study of cities as geographic units, including functions and structures with particular references to urban growth patterns, socio-economic functions and problems, rural-urban relationships, and contemporary trends.

GEOG 391 Political Geography (3). Analyzes the structure and function of political regions with emphasis on the sovereign state. Focus on sources of national strength, internal conflict, geopolitics as it relates to power, strategy, and international relationships among sovereign countries. Illustrated by recent developments and current situations.

GEOG 402 Geography of the South (3). A regional study of Southeastern United States with emphasis on physical and human resources, settlement and population, agriculture, extractive industries, transportation, and present urban settlements. Contemporary problems and progress stressed.

GEOG 403 Geography of Tennessee (3). A detailed study of Tennessee and its subdivision into natural and economics regions. Ideal for Elementary Education and Engineering majors.

GEOG 410 Geography of Asia (3). Regional analysis of cultural and physical geography of Asia including land utilization, settlement, raw material, population characteristics and distribution as each relates to economic and political problems. Emphasis on Middle East, India, Pakistan, and Indo-China.

GEOG 412 Geography of Africa (3). A study of the regions and resources of the African continent with special consideration given to Africa south of the Sahara desert, including its development and potential.

GEOG 415 Geography of Australia and Oceania (3). A geographical analysis of the physical environment and cultural occupancy of the Australian continent, New Zealand, and the Pacific islands.

GEOG 420 Geography of the Soviet Union (3). A geographical analysis of the topography, resources, and economic development of the Union of Soviet Socialist Republics (Russia).

GEOG 421 Geography of China (3). Regions and resources of the Republic of China, with special emphasis on the differences and the similarities of each cultural and physical region. The final objective of the course is to place China as a whole unit into the proper continental and world framework.

GEOG 425 Historical Geography of the United States and Canada (3). The changing physical and cultural geography of Anglo-America during four centuries of settlement and development.

GEOG 430 Social Geography (3). A study of the geographical perspectives of crime, ghettoization, environmental deterioration, poverty, interurban mobility, class, population growth, riots and violence. Ideal for Sociology and Social Welfare majors.

GEOG 462 Climatology (3). Regional analysis of the world's weather and climate with emphasis on climatelogical processes and their geographical implications.

GEOG 492 Theory and Methodology (3). The objectives of this course are to give students a historical as well as a contemporary background concerning men and their writings in geography; to integrate all phases of geography into seminar-type discussion; to introduce students to pertinent concepts and theories; to tie all periods of time to spatial phenomena; to indicate geographical evolution. Specially for minors.

GEOG 499 Special Problems in Geography (3). Indepth study of selected areas of geography, through selected readings, independent topics, and oral and written presentations. By consent of the instructor.

THE HONORS PROGRAM
McDonald Williams, Ph.D., Director

In the fall, 1964-1965, the Honors Program was begun for the four-year baccalaureate student; and in the fall, 1978-1979, a comparable program was established for the two-year associate degree student in the School of Nursing. The Honors Program is administered by a Director, who is assisted by an Advisory Committee which is composed of faculty and student representatives.

The basic premise of the Honors Program is that the academically superior student needs the challenge and the opportunity to achieve academic excellence. The Honors Program proposes to provide this challenge and this opportunity. Honors courses, which are restricted to students in the Honors Program and to those with a "B" average who may be recommended by their University College advisors or teachers, are designed to require a higher level of achievement than those in the regular curriculum. These classes are small in size, thereby allowing for a close teacher-student relationship. Other courses from the regular curriculum which may be taken for Honors credit require additional assignments of those Honors students who are enrolled.

The basic premise resulted in the formulation of the following goals of the Honors Program:

1. To offer a program or programs designed to stimulate the gifted student and enable him or her to do a quality of work in keeping with his or her potential,
2. To identify the academically superior student in the University,
3. To publicize and emphasize the Honors Program,
4. To give proper guidance to the student in the Honors Program,
5. To advocate and to assist in the creation of an academic climate that will stimulate all students at the University to perform to their intellectual capacity,
6. To attract to the University those students whose educational records show evidence of superior intellectual ability,
7. To encourage the students in the Honors Program to participate in all of the various activities at the University.

Students are admitted to the University Honors Program in several ways. The Honors Office, particularly during the spring and the summer following the student's graduation from high school, obtains through the Office of Admissions and Records the student's performance on the American College Test (ACT) and his high school grade-point average. Dependent upon the student's composite score, and/or his or her high school academic record, and, for nursing students, the recommendation of the Admissions Committee for the School of Nursing, the Honors Office writes the student to advise him/her that he/she has been placed in the Honors Program. Included with this letter is an Information Blank the student is asked to execute and return.

Admission to the Honors Program is made on the basis of the student's ACT score, and/or the high school record, as mentioned above. All students who participate in the Honors Program must, however, make separate application for admission to the University.

Baccalaureate students who do not participate in the Honors Program as entering freshmen may be admitted later by recommendation of a university faculty member. Following receipt of such recommendations, the Honors Office invites all students so nominated to appear for an interview. Each student is ordinarily interviewed by two faculty members, whose evaluations, together with his or her grade-point average, will determine his or her acceptance. The latest point for a four-year student to enter the Honors Program is the first semester of the sophomore year.

Other students who have not been placed in the Honors Program but who are interested and feel that they meet the requirements should see or write:

Dr. McDonald Williams, Director
Honors Program
Tennessee State University
Nashville, TN 37203

When a student enters the Honors Program, he or she is advised by the University College and by the Honors Program. During his or her either two or four years at the University, the Honors student will take courses both from the regular curriculum and from the offerings of the Honors Program. Ordinarily, the freshman and sophomore four-year students will take two Honors courses each semester, with Honors Freshman Composition and Honors World or American Literature being required. Further requirements are the colloquia—Junior and Senior. It is expected that the Junior and Senior Colloquia will fit into the student's schedule as "electives." A final requirement is the Honors senior thesis, which is to be defended before a committee, or a recital or the like for those students in the performing arts.

The two-year nursing students will take during their freshman year Honors Freshman Composition; and during their sophomore year they will take either the Junior or the Senior Colloquium and either Nursing 201H or Nursing 202H and Nursing 220H. In Nursing 220H Honors students will write a paper dealing with some such subject as the ethical implications of nursing. This paper will be presented orally before a committee.

Four-year nursing students will meet the minimum requirement of twenty-four hours in Honors work, to include Eng. 101H, 102H, 211H, 212H, and HP 300H and 400H. Nursing 422-423 will be accepted in lieu of HP 410H, with an oral examination to be scheduled for the project written in the latter course.

The Honors Program does not require additional courses beyond those required of other students. Four-year students admitted to the Program later than the first semester of their freshman year will be exempted from whatever requirements are expected prior to their entrance.

With the exception of the Honors Colloquia, grades awarded in Honors courses coincide with those given for courses in the regular curriculum. In the Colloquia, however, the grades are:

H Honor
4 quality points per semester hour
P Passing
3 quality points per semester hour

To remain in good standing in the Program, a student must maintain a minimum cumulative grade-point average of 3.0, based on all course work. A student may withdraw from the Program at any time, but he should first notify the Honors Office.

Also important in the retention of a student is the semestral evaluation of him by his Honors teachers, who determine whether he is of Honors calibre and whether he is working up to his potential.

In an effort to encourage Honors students to achieve academic excellence throughout their undergraduate years, the Honors Program sponsors an Annual Honors Banquet, at which various awards are made. The awards—the recipients of which are determined by the Honors Advisory Committee—and their criteria are: the McDonald Williams Senior Award, the Prem S. Kahlon Junior Award, the Joseph A. Payne Memorial Sophomore Award, and the Harold R. Mitchell Freshman Award, each of which is based upon academic performance, personal qualities, and service both to the Honors Program and the University; the Jo Helen Railsback Honors Sophomore Literature Award, to an Honors student in good standing who is enrolled in English 212H in the spring semester and who meets standards of scholarship, inquisitiveness, and service to humanity; the Washington Industries Awards, to all seniors and the outstanding junior, based upon requirements for the Program and cumulative average; the Junior-Senior Honors key, based upon cumulative average, hours in Honors courses, classification; and the Outstanding Freshman, Sophomore, Junior, and Senior Class Awards, based upon faculty recommendations, cumulative average, campus and other activities, campus awards and recognition, membership in honor groups, grades in Honors courses, and contributions to the Honors Program. At the Banquet, all students who are in good standing receive Certificates of Achievement, signed by the Director of the Program, and Vice-President for Academic Affairs, and the President of Tennessee State University.

Two-year and four-year students who complete the requirements of the Honors Program will, at commencement, be graduated with "Associate Honors" and "University Honors," respectively.

These requirements include, for the two-year student:

1. Taking a minimum of 18 hours of Honors work
2. Writing and defending a paper growing out of Nursing 220H
3. Attaining a cumulative average of at least 3.25

For the four-year student:

1. Taking a minimum of 24 hours of Honors work, or 18 hours if the student enters at the beginning of the sophomore year.
2. Giving a recital or writing and defending a senior thesis. The student will select a topic for the Honors thesis with the approval of his or her major adviser and the instructor of the course. The topic may be related to his major field of interest or to a colloquium. Insofar as possible, advisers for the Honors thesis will be members of the Honors faculty. The student will select the topic in the fall semester of his or her senior year, complete the thesis before or during the spring semester, and defend it before the Honors Advisory Committee and such other persons who may be invited to sit with the Committee.
3. Attaining a cumulative average of at least 3.25.

Students being graduated with "Associate Honors" or "University Honors" are distinguished in the academic procession by a scarlet cord with gold tassels.

The Honors Office offers its assistance to Honors students as they make application for fellowships and for admittance to graduate or professional school.

HONORS COURSES

Two-year Students

FRESHMAN YEAR Name of Course	SEMESTER Credit Hours I	II
English 101-102H	3	3
SOPHOMORE YEAR **Name of Course**	**SEMESTER Credit Hours I**	**II**
Senior Colloquium 400H	3	
or		
Junior Colloquium 300H		3
Nursing 201H	9	
or		
Nursing 202H		9
Nursing 220H		1

Four-year Students

FRESHMAN YEAR Name of Course	SEMESTER Credit Hours I	II
English 101-102H	3	3
Biology 111-112H	4	4
Mathematics 111-112H	3	3
Theatre 120H	2	
Bio-Physical Sciences 121-122H	3	3
Chemistry 121-122H	4	4
Chemistry 151H	3	
History 121-122H	3	3
History 201-202H	3	3
Art 133H		2
Economics 211-212H	3	3
Govt Pub. Affairs 221H		3

SOPHOMORE YEAR Name of Course	SEMESTER Credit Hours I	II
Education 201H	3	
English 211-212H	3	3
Sociology 211H	3	
Speech 220H	3	
Psychology 242H		3
English 310H	2	
Speech 230H		3
JUNIOR YEAR **Name of Course**	**SEMESTER Credit Hours I**	**II**
Junior Colloquium 300H		3
Sociology 300H	3	
English 361-362H	3	3
Education 387H	3	
SENIOR YEAR **Name of Course**	**SEMESTER Credit Hours I**	**II**
Honors Senior Colloquium 400H	3	
Honors Senior Thesis 410H	3	
Honors Sociology 451H		3
Honors Clothing and Textiles 462H		3
Honors Foods and Nutrition 462H	3	
Honors Child Development and Family Relationships 467H	3	
Honors Home Economics Education 474H		3
Honors Social Welfare 480H		3
Honors Sociology 490H	3	

COURSE DESCRIPTIONS

Eng 101-102H Honors Freshman English (6). An Honors course in Freshman English designed for students with special competence in English to work at an advanced level. Class enrollment is limited and restricted to students notified as having qualified for the English Honors section.

Bio 111-112H Honors Animal Biology (8). A course designed for students of exceptional caliber. Emphasis placed on individual critical and original thinking based on recent research findings dealing with animal biologic principles. As such the student will be expected to do extensive reading of literature, make special reports, and participate in guided discussions. Laboratory problems are so designed as to challenge the ingenuity and creativity of the student. Lecture: 2 credits; Laboratory: 2 credits per semester.

Math 111-112H Introduction to College Mathematics I and II (6). A review of fundamental operations of algebra and arithmetic: linear and quadratic equations, trigonometry, probability and statistics. This sequence will consider the more theoretical aspects of each of the above topics. The course is intended for students enrolled in the University Honors Program. Prerequisite for Math 112H is 111H.

Thea 120H Appreciation of Drama (2). Introduction to dramatic principles through the study of major periods and representative plays from the Greek period to the present.

Sci 121-122H Honors Introduction to Bio-Physical Sciences (6). An interdisciplinary course involving the principles of mathematics, chemistry, physics and biology. The objective of the course is to integrate the applicable areas as they are related to living organisms. Lecture: 2 credits; Laboratory: 1 credit per semester.

Chem 121-122H Honors Chemistry (8). Lectures deal with the basic theories of chemistry, atomic structure, kinetic theory, chemical stoichiometry, the chemical bond, oxidation-reduction, solutions, and chemical equilibrium. Examples may be taken from all fields of chemistry and its applications. Laboratory during the second semester is devoted to analysis, including quantitative anion and cation analysis, with an introduction to quantitative analysis. A good mathematical background is required.

Chem 151H Honors General Chemistry for Engineers (3). Fundamental concepts of general chemistry, including atomic and molecular structure, gas laws, liquids, solids, solutions, kinetics, equilibrium, thermodynamics and electrochemistry. Prerequisites: High school chemistry or CHEM 100 and two years high school algebra or Math 161. Three lectures per week. Limited to students in the Honors Program.

Hist 121-122H Honors Growth of Civilization (1500-present) (6). The major social, economic, political, religious, and intellectual developments in European history from medieval times to the Age of Metternich. History 122 is the continuation of 121.

Hist 201-202H Honors American History (6). An intensive and extensive study of American history from pre-European period to the present. Great emphasis is placed upon oral and written exercises. These courses are open to students with recognized high potential and academic rating. This course is in lieu of History 201, 202 for those qualified.

Art 133H Honors Art Appreciation (2). A comprehensive survey of the art of prehistory: Egypt, Greece, Rome, and the Romanesque and Gothic periods; the art of the Renaissance, Baroque, and Rococo periods. Emphasis is on comparing these periods historically as well as stylistically.

Educ 201H Honors Foundations of Education (3). This course is designed to challenge the abilities of exceptional students toward a clear understanding of the historical, philosophical, and sociological aspects of education and how these areas of education have relevancy to the work of contemporary schools. The method will include presentation of basic theoretical and methodological principles essential to the investigation and solution of problems of education. Emphasis will be placed on aiding and encouraging creative thinking.

Econ 211H Honors Principles of Economics I (3). Methodology of economics, fundamentals of macroeconomics, fiscal policy, and fundamentals of monetary policy. Prerequisite: Math 111. Limited to students in the Honors Program and such others as may be recommended.

Econ 212H Honors Principles of Economics II (3). Economic growth, and microeconomics, some domestic and international applications of economics and comparative economic systems. Prerequisite: EC 211H or EC 211 (with approval). Limited to students in the Honors Program and such others as may be recommended.

Eng 211-212H Honors World Literature (6). An analytical reading of selected poetry, prose, and drama from the nations of the world. The subject matter for both semesters is arranged chronologically, with that of the first ranging from the Ancient Chinese through the Renaissance; and that of the second, from the Age of Classicism and Reason to the 20th Century.

Soc 211H Honors Introduction to Sociology (3). This course presents to students a comprehensive study of social thought, concepts, and social change. Students are expected to analyze and interpret man in society and man in culture. The course is designed to give the student a basic understanding of himself in relationships to others.

Nursing 201H Family-Centered Approach with Long-Term Illness (9). Through application of the nursing process, the student learns to assist the individual with long-term illness, and his family, to cope with commonly occurring changes in health status which require a variety of skills, psychological support, prevention and rehabilitation, and health teaching. Includes Psychiatric Nursing. Pre- or co-requisite Sociology 211.

Nursing 202H Family-Centered Approach to Acute and Short-Term Illness (9). Utilizing the nursing process, the students learn to assume increasing responsibility for self-directive judgments in patient situations which require depth of understanding of concepts and principles related to man and his adaptation to the environment during crisis. Includes Obsterical Nursing. Pre- or co-requisite, Microbiology 250.

Nursing 220H Nursing Seminar (1). Current issues and trends in the practice of nursing and the relationships with past events. This course includes legal aspects, nursing ethics, and those aspects of professional adjustments related to making the transition from student to graduate practitioner. Co-requisite with Nursing 202.

Spch 220H Honors Public Speaking (3). A study of the principles of speech composition and delivery with emphasis upon the presenting of the various forms of oral communication.

Spch 230H Honors Business and Professional Speech Communication (3). Designed specifically for the student with neither a major nor minor in the field of speech. Emphasis is placed on the following speech situations: interviews, conferences, reports, and similar types of business conversations.

GPA 221H Honors American National Government (3). This is an introductory course which deals with the foundation, organization, principles, and behavior of the national government. Attention is also focused on the relations of citizens to the government, and on the rights, obligations, and political behavior of Americans. Topics covered include institutional descriptions; public opinion; political participational recruitment; interest groups; parties; legislative, judicial, and executive behavior; public policy; and democratic theory. There are no prerequisites.

Psy 242H Honors Human Growth and Learning (3). A critical examination of the physiological, psychological, emotional, sociological development of the human organism from conception through senescence, and a study of the relationship between growth and learning. The learning process will emphasize the modified case study approach in the analyzation of the stages of growth and development, individual and group interest projects, seminars, and examination of contemporary research and related experiences.

HP 300H Honors Junior Colloquium (3). Lectures, discussions, and student writing based upon a central theme—such as "The Twentieth Century"—which may vary from year to year. Original work and interpretations and adaptations of original works are bases for discussions. The faculty member who conducts the colloquium may invite outside experts to participate when he or she deems it advisable.

Soc 300H Honors Social Statistics (3). A course designed to introduce sociology and social welfare majors to simple statistical methods using social data. Emphasis is placed on learning to interpret and construct tables, charts, and graphs; using social survey data, census materials, and other governmental reports involving social data.

Eng 310H Honors Technical Report Writing (2). A study of the fundamentals of written reports required in modern engineering (310E), with emphasis on grammar, sentence structure, and style, as well as on specialized techniques.

Eng 361H Honors American Literature of the Nineteenth Century (3). A study of major American writers and literary movements, including such writers as Emerson, Thoreau, Hawthorne, Twain and Crane, and such movements as romanticism, transcendentalism, realism, and naturalism.

Eng 362H Honors American Literature of the Twentieth century (3). A study of literary trends in the present century, with emphasis on such major figures as Dreiser, Frost, Eliot, Faulkner, Fitzgerald, Ellison, Lowell, Baldwin, and Bellow.

EDCI 387H Honors Curriculum Development (3). The course is designed (1) to give students an opportunity to study critically the major stages of development of the school curriculum in public education in the United States, (2) to study in depth those forces and factors in our culture which have brought about major changes in the structure, content, and methodology in public education, (3) to participate in elementary research through interpretation of available data bearing on curriculum revision, and (4) to give practice in identifying and discussing current issues, problems, pracuces, innovations, and trends in the total area of the development of curriculum theory.

HP 400H Honors Senior Colloquium (3). Lectures, discussions, and student writing based upon a central theme—such as "The Educated Person"—which may vary from year to year. Original work and interpretations and adaptations of original works are based for discussions. The faculty member who conducts the colloquium may invite outside experts to participate when he or she deems it advisable.

HP 410H Honors Senior Thesis (3). The student will be allowed freedom of choice in selecting a topic for his Honors thesis. The topic may, for example, be related to his major field of interest or to a colloquium. Insofar as possible, advisors for the Honors thesis will be members of the Honors faculty. The student will select his topic in the fall semester of his senior year, complete his thesis before or during the spring semester, and defend it before the Honors Advisory Committee and such other persons who may be invited to sit with the Committee.

Soc 451H Honors Introduction to Social Research (3). A study of the theory and methods of social research, including the structure and use of the questionnaire, the schedule, the interview, case histories, sociograms sampling, etc.

CLT 462H Honors Clothing and Textiles (3). An intensive study of the sociophysiological, technological, and anthropological aspects of clothing and textiles.

NTR 462H Honors Foods and Nutrition (3). Directed study and investigation involving techniques used in nutrition research.

CDFR 467H Honors Child Development and Family Relationships (3). An intensive investigation of a special area in Child Development or Family Relationships. Open to advanced juniors and seniors showing special ability in CDFR and to students enrolled in the University Honors Program.

HEEd 474H Honors Home Economics Education (3). Directed study and investigation based on theoretical principles, philosophy, and research in Home Economics Education.

SW 480H Honors Social Welfare (3). An opportunity for students through seminar and field trip experiences to examine more analytically current social problems such as health, income maintenance, social relationships, etc., that are related to the social work profession and the social welfare system. Students will independently study a specific problem and are required to submit a senior essay. Limited to students with a 3.0 average. Prerequisites 330, 331, and 340.

Soc 490H Honors History of Sociological Theory (3). Major sociological theories as represented by Comte, Spencer, Durkeim, Weber, Simmel, *et al.*, including those of the contemporary period.

DEPARTMENT OF MODERN FOREIGN LANGUAGES

Joan C. Elliott, Ph.D.
Head

The offerings of the Department of Modern Foreign Languages are designed to meet the needs of those who are (1) preparing for careers as secondary teachers of foreign languages, (2) desiring positions in business, industry or government, (3) planning to attend graduate school, or (4) satisfying degree requirements for other departments of the university.

The curricula encompasses courses leading to the Bachelor of Arts degree in Foreign Languages, with options in French or Spanish and Accounting, Business Administration or Office Administration, and Latin American Area Studies. An interdisciplinary program, leading to the Bachelor of Science degree in Arts and Sciences, is also available to students who follow the degree requirements listed under the heading: "General Degree Program."

"C" is the lowest acceptable grade for the departmental major and minors in any required foreign language course. Courses in which majors or minors receive "D" or below must be repeated. Moreover, a student in the certification program is required to maintain an average of 2.25 in the major courses.

The department offers a minor in French, Spanish, or German. Other courses to satisfy degree requirements in Accounting, Business Administration, or Office Administration are as follows:

ALL ELEMENTARY AND INTERMEDIATE COURSES MUST BE TAKEN IN SEQUENCE.

A. French or Spanish option with Certification

A student who elects an option in French or Spanish, in addition to the Teacher Education professional core requirements, must complete a minimum of twenty-five hours in courses numbered above 202 in the target language to include 300, 301-02, 311-12, 400, 401, 410 and 450. It is desirable that the student complete a minor in a second foreign language.

B. French or Spanish option without Certification.

A student who chooses an option in French or Spanish must complete a minimum of thirty hours in the target language in courses numbered above 202 to include 300, 301-02, 311-12, 400, 401-02, 410, 420 and 450. It is desirable that the student complete a minor, preferably in a second foreign language.

C. French or Spanish and Business Administration

Required courses in a foreign language are 101-02, 201-02, 300, 301-02, 400, 420, 450, and 480. The business core includes—QM201, QM215, MG301, 302, MK301, ACCTG 211-212, ECON 211-12, and BE 315.

D. Latin American Area Studies

The required courses in Spanish are 101-02, 201-02, 300, 301-02, 400, 401-02, 410, 420, and 450. A minor concentration in Government and Public Affairs will be completed along with appropriate courses in Economics, Geography and History.

E. French, German, or Spanish Minor

For students who are in the Teacher Education Program, the courses required are 101-02, 201-02, and any three courses above the 200 level. In addition to the requirements just outlined, students who are not in the certification program should also complete one additional course above the 200 level.

F. Honor Societies

1. Eta Sigma Chapter of Alpha Mu Gamma, National Foreign Language Honor Society welcomes into membership qualified lower level students in French, German and Spanish.
2. Beta Omicron Chapter of Phi Delta Phi, National French Honor Society for outstanding students in upper level French.
3. Gamma Eta Chapter of Sigma of Delta Pi, National Spanish Honor Society for students who excel in upper level Spanish.

CURRICULUM FOR INTERDISCIPLINARY OPTIONS IN FRENCH OR SPANISH AND BUSINESS ADMINISTRATION

FRESHMAN YEAR	Credit Hours Fall	Spring
FOR LANG 101-2U	3	3
ENG 101-2U	3	3
MATH 111-112U	4	3
HIST 201-2U	3	3
ORIENTATION 100U	1	
ART 133U		2
PE or AERO	1	1
COMPUTER SCIENCE 100U	3	
	17	15

CURRICULUM IN FRENCH
(With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
FR 101-2U	3	3
ENG 101-2U	3	3
HIST 201-2U	3	3
MATH 111U	3	
EDCI 201		3
ORIENTATION 100U	1	
HEA or NTR		2
ART 133U		2
PE or AERO	1	1
COMPUTER SCIENCE 100U	3	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
FR 201-2	3	3
FR 300		2
ENG 211-2	3	3
SCI	3	3
Minor or Electives	3	3
PSY 242	3	
MUS 313		2
PE or AERO	1	1
	18	15

JUNIOR YEAR	Credit Hours Fall	Spring
FR 301-2	3	3
FR 311-12	3	3
FR 400	3	
EDCI 301	3	
PSY 312		3
Minor or Electives	3	3
Minor or Electives (300-400)		3
GEOG 172		3
EDSE 465		3
	15	21

SENIOR YEAR	Credit Hours Fall	Spring
FR 401	3	
FR 410	3	
FR 450	3	
EDCI 387	3	
Minor or Electives (300-400)	6	
MFL 371		3
EDRD 491		3
EDCI 472S		9
	18	15

CURRICULUM IN SPANISH
(With Teacher Certification

FRESHMAN YEAR	Credit Hours Fall	Spring
SPN 100-2U	3	3
ENG 101-2U	3	3
HIST 201-2U	3	3
MATH 111U	3	
EDCI 201		3
ORIENTATION	1	
HEA OR NUTR		2
ART 133U		2
PE or AERO	1	1
COMPUTER SCIENCE 100U	3	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
SPAN 201-2	3	3
SPAN 300		2
ENG 211-2	3	3
SCI	3	3
Minor or Electives	3	3
PSY 242	3	
MUS 131		2
PE or AERO	1	1
	16	17

JUNIOR YEAR	Credit Hours Fall	Spring
SPN 301-2	3	3
SPN 311-12	3	3
SPN 400	3	
EDCI 301	3	
PSY 312		3
Minor or Electives	3	3
GEOG 172	3	
EDSE 465		3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
SPN 401	3	
SPN 410	3	
SPN 450	3	
EDCI 387	3	
Minor or Electives (300-400)	3	
Minor or Electives (300-400)	3	
MFL 371		3
EDRD 491		3
EDCI 472S		9
	18	15

CURRICULUM IN FRENCH
(Without Teacher Certification)

FRESHMEN YEAR	Credit Hours Fall	Spring
FR 101-2U	3	3
ENG 101-2U	3	3
HIST 201-2U	3	3
MATH 111U	3	
EDCI 201		3
ORIENTATION 100U	1	
HEA or NTR		2
ART 133U		2
PE or AERO	1	1
COMPUTER SCIENCE 100U	3	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
FR 201-2U	3	3
FR 300		2
ENG 211-12U	3	3
SCI	3	
PSY 242	3	
MINOR OR ELECTIVES	3	3
MUS 131U		2
PE or AERO	1	1
	16	17

JUNIOR YEAR	Credit Hours Fall	Spring
FR 301-2	3	3
FR 311-12	3	3
FR 400	3	
MINOR OR ELECTIVES 3	3	
MINOR OR ELECTIVES (300-400)		3
ELECTIVES (300-400) Humanities and Social Sciences	6	6
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
FR 401-2	3	3
FR 410-20	3	2
FR 450	3	
MINOR OR ELECTIVES (300-400)	3	3
MINOR OR ELECTIVES (300-400)	3	3
ELECTIVES (300-400)	3	4-6
	18	15-17

CURRICULUM IN SPANISH
(Without Teacher Certification)

FRESHMEN YEAR	Credit Hours Fall	Spring
SPN 101-2U	3	3
ENG 101-2U	3	3
HIST 201-2U	3	3
MATH 111U	3	
EDCI 201		3
ORIENTATION 100U	1	
HEA or NTR		2
ART 133U		2
PE or AERO	1	1
COMPUTER SCIENCE 100U	3	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
SPN 201-2U	3	3
SPN 300		2
ENG 211-12U	3	3
SCIENCE	3	3
PSY 242	3	
MINOR OR ELECTIVES	3	3
MUS 131U		2
PE or AERO	1	1
	16	17

JUNIOR YEAR	Credit Hours Fall	Spring
SPN 301-2	3	3
SPN 311-12	3	3
SPN 400	3	
MINOR OR ELECTIVES	3	3
MINOR OR ELECTIVES (300-400)		3
ELECTIVES (300-400) HUMANITIES AND SOCIAL SCIENCES)	6	6
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
SPN 401-2	3	2
SPN 410-20	3	2
SPN 450	3	
MINOR OR ELECTIVES (300-400) 3	3	
MINOR OR ELECTIVES (300-400)	3	3
ELECTIVES (300-400)	3	4-6
	18	14-16

CURRICULUM IN LATIN AMERICAN AREA STUDIES

FRESHMEN YEAR	Credit Hours Fall	Spring
SPN 101-102U	3	3
GPA 100-221	3	3
MATH 111-112U	3	3
PE or AERO	1	1
ENG 101-102U	3	3
ART, MUS, DRAMA, PHIL		2
ORIENTATION 101	1	
COMPUTER SCIENCE 100U	3	
	17	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
SPN 201-202U	3	3
SPN 300		2
SCI, BIO, CHEM 101-2U	4	4
PE OR AERO	1	1
ENG 211, 212U	3	3
HIST 201, 202U	3	3
SOC 310	3	
ART, MUS, SPCH, PHIL MFL		2
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
SPN 301-302	3	3
SPN 400	3	
GPA 300, 315	3	3
HIST 451, 452	3	3
GEOG 372, 373	3	3
EC 211, 212	3	3
ELECTIVE (300-400)		3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
SPN 401, 402	3	3
GPA 363-367	3	3
SPN 410, 420	3	2
MFL 450	3	
EC 410	3	
ELECTIVES (300-400)	3	6
	18	14

COURSE DESCRIPTIONS FRENCH

Elementary French 101-102 (3,3). The development of the ability to understand, speak, write and read French.

Conversational French 100 A-B (2,2). Includes basic elements, vacabulary and structures of French for every day use. This course may be selected as an humanities elective.

Intermediate French 201-202 (3,3). Grammar review and further development of the ability to understand, speak, write and read French. Prerequisites: 101-102 or the equivalent.

Pronunciation and Diction 300 (2). The development of good articulatory habits through perception and imitation of French sounds, with secondary emphasis on theoretical knowledge of the phonetic symbols. Prerequisite: French 201.

Advanced Oral and Written Composition 301-302 (3,3). Vocabulary building and intensive analysis of French grammar with practical application in oral and written compositions. Prerequisite: French 202.

Survey of French Literature 311 (3). Literary philosophies, types, major authors and their contributions. Middle Ages through the Eighteenth Century. Prerequisite: French 202.

Survey of French Literature 312 (3). Literary philosophies, types, major authors and their contributions. The Nineteenth and Twentieth Centuries: Prerequisite: French 202.

Foreign Language Pronunciation and Diction 320 (3). Basic rudiments of the sound systems in three or four languages.

Methods of Teaching Foreign Languages 371 (3). This course acquaints the student with methods, materials, and texts. Bi-weekly classroom observations in secondary schools of the community are required. Prerequisite for those who wish to obtain teacher certification.

Francophone Civilizations 400 (3). The development of Francophone civilizations from their origins to the present: geography, historical, political, social, economic and cultural life.

French Conversation 401-402 (3,3). Intensive conversational practice with group discussion and laboratory drills on selected topics. Analysis and correction of individual problems. Prerequisite: French 202.

Black French Writers: Past and Present 410 (3). An introduction to the works of various Black authors of French expression, with emphasis on Alexandre Dumas, Rene Maran, Leon Damas, Alme Cesaire, Leopold Senghor and Frantz Fanon.

Introduction to Explication de Textes 420 (3). Designed to acquaint the student with the French approach to analyzing poetry and prose.

French Literature of the Twentieth Century 425-426 (3,3). Prose, poetry, theatre, criticism, their theories and trends, from the Symbolist movement to contemporary period. Prerequisite: French 400.

Senior Project 450 (3). Individual research and project writing.

Independent Study 470 (1 to 30 hours per semester)

Commercial French 480 (3). Designed to train students to write effective business letters in correct styles and languages. Prerequisite: French 302.

COURSE DESCRIPTIONS GERMAN

Elementary German 101-102 (3,3). Aims to develop the ability to speak, understand, write, and read simple German. A functional vocabulary is built up and the essentials of grammar are stressed. It is also supplemented with graded reading.

Conversational German 100 A-B (2,2). Includes idioms, conversational patterns and structures of the German language for daily conversation. This course may be selected as an humanities elective.

Intermediate German 201-202 (3,3). Consists of intensive and extensive reading of graded German works (literary and scientific). Fluency and accuracy of comprehension are the primary objectives. Prerequisite: German 101-102.

Survey of German Literature 311-312 (3,3). Consists of selected readings to acquaint the student with outstanding writers, ideas and movements from the eleventh century to the present.

Foreign Language Pronunciation and Diction 320 (3). Basic rudiments of sound system in three to four languages.

COURSE DESCRIPTIONS SPANISH

Elementary Spanish 101-102 (3,3). The development of the ability to understand, speak, write and read Spanish.

Conversational Spanish 100 A-B (2,2). Includes every day conversational Spanish with emphasis on idioms and the spoken word. This course may be selected as an humanities elective.

Intermediate Spanish 201-202 (3,3). Grammar review and further development of the ability to understand, speak, write, and read Spanish. Prerequisite: Spanish 101-102.

Pronunciation and Diction 300 (2). The development of good articulatory habits through perception, imitation, and intensive drill with secondary emphasis on theory and phoentic symbols. Prerequisite: Spanish 201.

Advanced Oral and Written Composition 301-302 (3,3). Vocabulary building and intensive analysis of Spanish with practical application in oral and written composition. Prerequisite: Spanish 202.

Survey of Spanish Literature 311 (3). Literary philosophies, types, major authors and their contributions from the earliest extant works through the sixteenth century. Prerequisite: Spanish 202.

Survey of Spanish Literature 312 (3). Literary philosophies, types, major authors and their contributions from the seventeenth century through the contemporary period.

Foreign Language Pronunciation and Diction 320 (3). Basic rudiments of the sound system in three to four languages.

Methods of Teaching Foreign Languages 371 (3). This courses acquaints the student with methods, materials, and texts. Bi-weekly classroom observations in secondary schools of the community are required. Prerequisite for those who wish to obtain teacher certification. Field Experience Required.

Hispanic Civilization 400 (3). The history and development of the civilization, culture and institutions of Spain and the Spanish American countries.

Spanish Conversation 401-402 (3,3). Intensive conversational practice with group discussions and drills on selected topics. Analysis and correction of individual problems. Prerequisite—Spanish 202.

Readings in Spanish-American Literature 410 (3). Involves selected readings to give the student a panoramic view of representative authors, works, and movements from the colonial period to the present.

Applied Stylistics 420 (2). An intensive course in composition to aid the student in developing an individual style of writing in the Spanish language. Prerequisite: Spanish 302.

Spanish Literature of the Nineteenth Century 421-422 (3,3). Principal literary movements and cultural highlights studied by analysis of the most representative authors of the period. Prerequisite: Spanish 400.

Spanish Literature of the Twentieth Century 425-426 (3,3). Reading and analysis of the works of the "Generación del '98" and of the post-war generation. Comprehensive study of all literary genres, especially of the novel and lyric poetry. Prerequisite: Spanish 400.

Senior Project 450 (3). Individual research and project writing.

Independent Study 470 (1-1-1).

Commercial Spanish 480 (3). Designed to train students to write effective business letters in correct styles and language. Prerequisite: Spanish 302.

DEPARTMENT OF MUSIC
Ralph R. Simpson, PhD., Head

The Department of Music is organized to service the State's music education structure through teacher education, leadership, and statewide cooperation; to provide sound guidance and thorough training for the gifted student whose career goal is professional music; and to bring the gift of music in exhibits, lecture demonstrations, concert offerings, and participation opportunities to all its people, as its contribution to the cultural enrichment of the campus, the community, and the state.

The courses are designed to provide experiences leading to general culture, a mastery of fundamental tools, adequate performance ability, and for those seeking certification in the area of music, the science and art of teaching.

The Department of Music holds full membership in the National Association of Schools of Music. The Department offers undergraduate programs in music leading to the Bachelor of Science degree in music with or without certification. The minimum number of semester hours required for the Bachelor Science degree is 132. Minimum number of semester hours required in music courses is 53 for the Bachelor of Science degree. The minimum number of semester hours in 300-400 level courses is 60 for all bachelor degree programs.

APPLIED MUSIC

Applied music is defined as individual instruction and preparation in voice and the various instruments. Courses are offered in voice, piano, organ, violin, viola, violoncello, string bass, flute, oboe, clarinet, bassoon, saxophone, French horn, cornet (trumpet), trombone, tuba and the percussion instruments. Each student must declare a major applied area of performance and must concentrate in this area for the equivalent of four years, and must present a senior recital during the senior year. It is expected that each student will make appearances on seminars and student recitals during the sophomore and junior years. For all students majoring in some instrument other than piano, it is expected that piano will be the minor performance area. In most instances the choice of the major applied area and curriculum will be governed by the proficiency that the student has achieved prior to entering the University.

ENSEMBLES

Membership in music ensembles is open to all students of the University who qualify for admission and participation. Each music major is required to participate in a major ensemble group for the entire four years of his matriculation. Membership is not limited to one ensemble, but instrumental majors must participate in University Band and vocal majors must participate in University Choir. One credit per semester is offered for each group.

The following ensembles are offered: University Choir, University Band, Brass Choir, Jazz Ensemble, Meistersingers, and String Ensemble. These groups are organized to study and perform the standard repertoire for various combinations of voices or instruments.

CONCERTS AND RECITALS

Organized music groups, small ensembles, faculty and student soloists offer concerts and recitals frequently in the Recital Hall. These are open to the public without charge, and students are particularly encouraged to attend.

DEGREE PROGRAMS

The Department of Music offers three curricula leading to the Bachelor of Science degree in Music. The first of these is the degree without certification, for those with career goals other than teaching. The other two programs lead to certification in the areas of vocal or instrumental music.

CURRICULUM FOR A MAJOR IN MUSIC WITH CERTIFICATION (Vocal or Instrumental Concentration)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
HIST 201-202U	3	3
MUS 120, 121	4	4
MATH		3
MUS 11a, 11b	1	1
MAJ APPLIED	1	1
MAJ ENSEMBLE	1	1
PE or AERO or MARCH BAND	1	
MUS 131, Art 133	2	2
UCOR	1	
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212U	3	3
EDCI 201, PSY 242	3	3
SCI	3	3
MUS 221, 220	3	3
MUS 21a, 21b	1	1
MAJ APPLIED	1	1
MAJ ENSEMBLE	1	1
PE, AERO, or MARCH BAND	1	1
INSTR TECH		1
HEALTH 151	2	
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
EDCI 301, EDSE 465	3	3
MUS 337, 338	3	3
MUS 302, 320	3	3
MUS 371a, EDCI 387	3	3
MAJ APPLIED	2	2
MAJ ENSEMBLE	1	1
INSTR TECH; PSY 312	1	3
INSTR TECH	1	
EDCI 419	1	
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
MUS 371b, or c		3
MUS 420, 421	3	3
MUS 430, 472S	3	9
MAJ APPLIED	2	
MUS 451	2	
INSTR TECH	1	
MAJ ENSEMBLE	1	
SOC Elective	3	
EDRD 491		3
	15	18

CURRICULUM FOR A MAJOR IN MUSIC WITHOUT CERTIFICATION

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
HIST 201-202	3	3
MUS 120, 121	4	4
MUS 11a, 11b	1	1
MAJ APPLIED	1	1
MAJ ENSEMBLE	1	1
MATH 111, HEALTH 151	3	2
PE, AERO, or MARCH BAND	1	1
MUS 131		2
UCOR 100	1	
	18	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212U	3	3
MAJ APPLIED	1	1
MUS 21a, 21b	1	1
MAJ ENSEMBLE	1	1
MUS 220, 221	3	3
SCIENCE	3	3
INSTR TECH		1
Electives-300-400 level	3	3
PE, AERO, or MARCH BAND	1	1
ART 133	2	
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
MUS 337, 338	3	3
MAJ APPLIED	2	2
MAJ ENSEMBLE	1	1
MUS 434, 320	3	3
Electives-300-400 level	3	3
-To include Sociology Comp. Science		3
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
MUS 305, 430	3	3
MUS 420, 421	3	3
MAJ APPLIED	2	2
MUS 451		2
MAJ ENSEMBLE	1	
ELECTIVES 300-400 level	6	3
	15	13

CURRICULUM FOR MAJOR IN MUSIC WITH CERTIFICATION (Piano Concentration)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
HIST 201-202U	3	3
MUS 120, 121	4	4
MUS 131, Art 133	2	2
MUS 11a, 11b	1	1
MAJ ENSEMBLE	1	1
PE, or AERO, or MARCH BAND	1	1
HEALTH 151	2	
COMPUTER SCIENCE		3
INSTR TECH	1	
	18	19

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212	3	3
EDCI 201; PSY 242	3	3
SCI	3	3
MUS 220, 221	3	3
MUS 21a, 21b	1	1
MAJ ENSEMBLE	1	1
PE, or AERO, or MARCH BAND	1	1
MATH		3
HEALTH, INSTR TECH	2	
	18	16

JUNIOR YEAR	Credit Hours Fall	Spring
EDCI 301, EDSE 465	3	3
INSTR TECH	1	
MUS 337, 338	3	3
MUS 371a	3	
MUS 312, 314	1	3
MUS 31a, 31b	2	2
MUS 331, 430	3	3
MAJ ENSEMBLE (300 level)	1	1
EDCI 387		3
	17	16

SENIOR YEAR	Credit Hours Fall	Spring
SOC SCI	3	
PSY 312	3	
MUS 41A	2	
MUS 451, 371C	2	3
MUS 420, 421	3	3
MAJ ENSEMBLE	1	
EDRD 491		3
MUS 472S		9
EDSE 465		3
	14	18

COURSE OFFERINGS
MUSIC (MUS)
APPLIED MUSIC COURSES

The laboratory fees, unless otherwise stated, are for each semester.

Mus 11A, B First Year Piano (1-1). Some of the easier works of Bach, Haydn, Mozart, Beethoven, and others whose works are of equivalent technical value together with purely technical materials including all majors and minor scales. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee $15.00.

Mus 21A, B Second Year Piano (1-1). Selected works Bach, and other composers. Prerequisite: Permission from the Office of the Music Department, and Piano 11B. Two one-half hour periods. Laboratory fee $15.00.

Mus 31A, B Third Year Piano (2-2). Larger compositions, and other exacting materials requiring excellent musicianship, skills and techniques are used. Prerequisite: Music 21B. Two one-half hour periods. Laboratory fee $15.00.

Mus 41A, B Fourth Year Piano (4). The study of advanced piano materials. Prerequisite: Music 41B. Two one-half hour periods. Laboratory fee $15.00.

Mus 12A, B First Year Organ (2). Pedal studies, major and minor scales, legato studies, little preludes and fugues of Bach, trios by Stainer Rheinberger, and others selected books of Guilmant, Mendelssohn and other reputable composers. Prerequisite: The highest non-credit level of piano lo, and permission from the Office of the Music Department. Two one-half periods. laboratory fee $15.00.

Mus 22A, B Second Year Organ (2). Advanced pedal studies and scales. Prerequisite: Music 12C. Two one-half hour periods. Laboratory fee $15.00.

Mus 32A, B Third Year Organ (4). A continuation of technical studies and major works some from modern composers. Prerequisite: Music 22B. Two one-half hour periods. Laboratory fee $15.00.

Mus 42A, B. Fourth Year Organ (4). A continuation of Music 32B with special emphasis on representative works from the various schools of composition including 20 Century composers. Two one-half hour periods. Laboratory fee $15.00.

Mus 13A, B First Year Violin (2). Instruction with standard elementary violin or viola materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee $15.00.

Mus 23A, B. Second Year Violin or Viola (2). Instruction with standard elementary violin or viola materials. Prerequisite: Music 13B. Two one-half hour periods. Laboratory fee $15.00.

Mus 33A, B Advanced Violin or Viola. Mus 43A, B (4). Instruction with standard advanced violin or viola materials. Prerequisite: Music 23B. Two one-half hour periods. Laboratory fee $15.00.

Mus 14A, B First Year Voice (2). The study of breath control, and voice placement in tone production. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee $15.00.

Mus 24A, B Second Year Voice (2). The study of voice drills in voice placement intonation, breathing, phasing, diction, etc. Prerequisite: Music 14B. Two one-half hour periods. Laboratory fee $15.00.

Mus 34A, B Third and Fourth Year Voice, Mus 44A, B (4). The study of drills in vocal techniques. Prerequisite: Music 24B. Two one-half hour periods. Laboratory fee $15.00.

Mus 15A, B. First Cornet (Trumpet or French Horn) (4). Instruction with standard elementary materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee $15.00.

Mus 25A, B Second Year Cornet (Trumpet or French Horn) (2). The study of standard intermediate materials. Prerequisite: Music 15B. Two one-half hour periods. Laboratory fee $15.00.

Mus 35A, B Third and Fourth Year Cornet (Trumpet or French Horn), Mus 45A, B. (4). Instruction with standard advanced materials. Two one-half periods. Laboratory fee $15.00.

Mus 38A, B Third and Fouth Year Oboe (or Bassoon) (2-2). Individual instruction Mus 48A, B with standard advanced materials. Two one-half hour periods. Laboratory fee $15.00.

Mus 19A, B First Year Saxophone (2). The study of standard elementary materials. Prerequisite: Permission from the Office of the Music Department. two one-half hour periods. Laboratory fee $15.00.

Mus 29A, B Second Year Saxophone (2). The study of standard elementary materials. Prerequisite: Saxophone 19C. Two one-half hour periods. Laboratory fee $15.00.

Mus 39A, B Third and Fourth Year Saxophone (2-2). Introduction with standard advanced materials. Two one-half hour periods. Laboratory fee $15.00.

Mus 10A, B First Year Percussion (2). An intensive study of elements of percussion technic. Accent will be on snare drum rudiments. One full hour, or two half hour lessons per week. Permission of Department of Music. Laboratory fee $15.00.

Mus 20A, B Second Year percussion (2). Continuation of above. Attention to bass drum and tampani. One full-hour instruction per week. Laboratory fee $15.00.

Mus 30A, B Third Year Percussion (2-2). Intermediate materials for percussionist. Review of all rudiments, introduction of solo and ensemble materials for percusson. Attention to tuned percussion instruments. One full hour instruction per week. Laboratory fee $15.00.

Mus 40A, B Fourth Year Percussion (2-2). Advanced technic and literature for solo percussion instruments and percussion ensembles. Emphasis on recital literature in preparation for Senior Recital. Laboratory fee $15.00.

Mus 305, 306 Orchestral Conducting (3-3). A study of the technic of conducting with particular emphasis on the use of the baton, score reading, program planning, and rehearsal procedures. An evaluation of orchestral and other instrumental music suitable for use in secondary schools. Prerequisite: Junior standing in Department of Music. Three lectures.

Mus 310 Brass Technics (1). Fundamentals of care, construction, minor repair and performance.

Mus 311 Woodwind Technics (1). Fundamentals of tone production, technic, care construction, and minor repair. Prerequisite: Permission of the Office of the Music Department. Two periods.

Mus 312 Vocal Technics (1). The study of technics of vocal tone production, breathing, articulation, enunciation and pronunciation as applied to the training of choral groups.

Mus 313 String Technics (1). The study of the fundamentals of bowing, fingering, construction and care of string instruments. Two periods.

Mus 314 Percussion Technics (1). Fundamentals of care and minor repair; study of technic of performance on most percussion instruments with emphasis on the snare drum. Two periods.

Mus 316 Opera Workshop (3). An introduction to operatic performance to include acting, movement, and staging various opera and operatic scenes. Three sessions per week. Enrollment by permission of instruction.

MAJOR ENSEMBLES

Mus 002 String Ensemble (1). The study of the performance of representative literature for string ensemble and small orchestra with special emphasis on material suitable for beginning string programs for the public is required for all string majors, open to all students with proficiency on a string instrument. Two (2) rehearsals per week.

Mus 003 University Choir (1). The study of a variety of the finest choral literature. Prerequisite: Permission from the director of the university choir. Three or more periods.

(FALL SEMESTER)

Mus 004A University Marching Band (1). Admission by audition and permission of the Director of Bands. The study and performance of marching routines, performance styles designed for live, film and televised performances. Meet daily 3:00-5:00 p.m. Extra rehearsals as called.

(SPRING SEMESTER)

Mus 004B Concert Band (1). Admission by permission of the Director of Bands. A concerting group made up of those bandsmen who exhibit traits of outstanding musicianship, and an interest in performing the finest of literature for concerting bands. This ensemble will conduct tours, broadcast, record, and appear in formal concerts on the campus. Meets daily—3:30-5:00 p.m.

Mus 005 Stage Band (Jazz Ensemble) (1). Membership open to all University students by audition and competition. Activities include a study of playing techniques necessary for the performance of contemporary music for stage and recording, popular dance shows, show music, experimental music, and traditional and contemporary jazz-black music. Music majors must maintain concurrent membership in University Marching and Concert Bands. Two (2) rehearsals per week.

MUSIC EDUCATION

Mus 301 Introduction to Public School Music (3). An introductory course in music for students in elementary education. Consists of a thorough study in music fundamentals, terminology, scales, keys, rhythms, and sight singing drills and dictation. No prerequisite.

Mus 371A Music Education (3). A study of principles, methods, materials, objectives, and procedures for teaching music in secondary schools. Prerequisite: Junior standing in Department of Music. Three lectures. Field experience required.

Mus 371B Choral Methods and Materials (3). A study of principles and problems of teaching voice, managing and directing choral organizations, and analysis and evaluation of choral materials. Prerequisite: Permission from the Office of the Music Department. Three lectures. Field experience required.

Mus 337-8 Music History and Literature. (3-3). General information concerning the history of music. Embodies an analytic approach to music history, its growth and development. Prerequisite: Permission from the Office of the Music Department. Three lectures.

THEORY AND COMPOSITION

Mus 120-1 Freshman Theory (4-4). Basic notation, intervals, scales and modes, rhythms, contrapuntal hormony, written and keyboard, sight singing and ear training, hormonic and form analysis. Prerequisite: Pass the basic Theory Test. Five lectures.

Mus 220-1 Sophomore Theory (3-3). Aural and written harmony; keyboard harmony; figured bass; counterpoint; sight singing; ear training; analysis. Prerequisite: Music 122. Three lectures.

Mus 320 Counterpoints (3). A study of the techniques underlying the principles used in writing good melodies and their association without losing independence. Prerequisite: Music 122. Three lectures.

Mus 401 Practicum in Arranging (2). Individual projects supervised by a practicing professional arrange. Prerequisite: Consent of Instructor.

Mus 420-21 Form and Analysis (3-3). A study of compositions in the smaller and larger forms. Prerequisite: Music 321. Three lectures.

Mus 428 Physics of Music (3). Theoretical and applied consideration to sound production and promulgation; the tempered scale, and other scales; the acoustical basis of wind and stringed instruments; analysis of complex tones produced by human voice and certain wind instruments. Prerequisite: Music 222. Three lectures.

Mus 430 Orchestration (3). A systematic study and application of the techniques for utilizing the capabilities of orchestral and band instruments in Music Composition. Prerequisite: Music 321. Three lectures.

Mus 433 Composition (3). A study of composition and the application of creative ability along systematic lines in writing original larger forms. Prerequisite: Permission from the Office of the Music Department. Three lectures.

Mus 451 Senior Recital (2). Credit given only upon successful completion of public senior recital. Prerequisite: Permission of major applied instructor.

Mus 000 Performance Seminar (0). Required for all music majors each quarter of matriculation during regular school year. For a satisfactory grade (S) each music major must attend 75+ of all scheduled recitals and seminars presented by student and faculty performers. First and third Thursday of each month.

COMMERCIAL MUSIC

The program in Commercial Music is designed for serious students of craft of songwriting to learn with and from each other the techniques of melodic composition, harmonic structure and lyric writing within standard and deviant song forms.

Music 140 Fundamentals of Music Theory (3). Theory and practice of basic elements of music.

Music 141-42 Elements of Popular Song (3,3). Study of form, rhythm, melody, harmony, and lyrics in popular song. Analysis and Creative Writing. Must be taken in sequence. Prerequisite: Music 110 or equivalent.

Mus 155-255 Solo Guitar (1-2). Instruction in guitar playing. These course represent progressive development. Each course may be repeated a maximum of three times.

Music 241-42 Intermediate Songwriting (3,3). Skills and techniques of crafting original material. Creative writing, analysis of standard songs, and critiquing works performed in class. Prerequisite: Music 142.

Mus 371C Instrumental Methods (3). A studyof methods, philosophies, materials, and objectives for teaching instrumental music from grade four (4) through grade twelve (12). Prerequisite: Junior Standing Department of Music. Three lectures.

Mus 434 Seminar in Jazz (2). A study of the history of jazz and an analysis of the styles and major contributors. Two lectures.

MUSIC HISTORY, LITERATURE, AND APPRECIATION

Mus 131 Music Appreciation (2). Emphasis on the development of the student's appreciation for the finest musical literature, and a constant extension of his listening repertoire. Only that history which will serve to make what he hears more meaningful to him is included. Three lectures.

Mus 321 History of Opera (3). Dramatic, vocal and orchestral elements in opera of Italian, French, and German schools from 1750 to present.

Mus 340 Folk Music (3). Folk Music with emphasis upon that of the Southeastern United States.

Mus 335 Introduction to Afro-American Music (3). History of blues, Gospel music, jazz, and African music with emphasis on black artists and their contributions.

Mus 424-34 American Music (3-3). 4241-from Colonial Times through the music of Ives; 4251-from 1930 to the present.

Mus 331 Introduction to Music Literature. (3). An introductory course in Music Literature of all periods for Music Majors only. Course will consist of reading assignments covering the various periods of music with extensive outside listening experiences required. Three lectures per week.

Mus 16A, B First Year Trombone (Baritone Horn or Tuba.) (2). Instruction with standard elementary materials. Prerequisite from the Office of the Music Department. Two one-half hour periods. Laboratory fee $15.00.

Mus 26A, B Second Year Trombone (Baritone or Tuba.) (2). The study of standard intermediate materials. Prerequisite: Trombone 16B. Two one-half hour periods. Laboratory fee $15.00.

MUS 36A, B Third and Fourth Year Trombone (Baritone or Tuba) (2-2). Instruction Mus 46A, B with standard advanced materials. Two one-half hour periods. Laboratory fee $15.00.

Mus 17A, B First Year Clarinet (or Flute) (2). Instruction with standard elementary materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee $15.00.

Mus 27A, B Second Year Clarinet (or Flute) (2). The study of standard intermediate materials. Prerequisite: 17B. Two one-half hour periods. Laboratory fee $15.00.

Mus 37A, B Third and Fourth Year Clarinet (or Flute), Mus 47A, B, (2-2). Instruction with standard advanced materials. Two one-half hour periods. Laboratory fee $15.00.

Mus 18A, B First Year Oboe (or Bassoon) (2). The study of standard elementary materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee $15.00.

Mus 28A, B Second Year Oboe (or Bassoon) (2). Instruction with standard intermediate materials. Prerequisite: Oboe 18C. One-half hour periods. Laboratory fee $15.00.

Mus 300 Seminar in Songwriting (3). Individual creative and analytical projects in songwriting. May be repeated for credit; no more than 9 hours may be applied toward a degree. Prerequisite: 142 and consent of instructor.

DEPARTMENT OF PHILOSOPHY AND RELIGIOUS STUDIES

Dr. John Arthur, Ph.D., Head

"Philosophy," said Kant, "is primarily concerned with three questions: What can I know? What ought I to do? What may I hope?" These broad questions suggest many problems that have puzzled some of the greatest thinkers in human history. Is belief in God rationally defensible? What is a just society? Can we know the truth? Is a human being more than a body and brain? Are we free? These, and many more, are the traditional problems of philosophy.

There are other philosophical problems whose origins are more recent. Advances in medical care have forced us to reconsider the definition of death. Advances in computer technology have stimulated a great deal of thought about artificial intelligence, and so led to a deeper understanding of the mind-body problem. The philosophy of natural and social science has also mushroomed, partly as a result of the successes of these disciplines. Discoveries in science, including evolution, computers and relativity theory, have had an impact on more traditional philosophical problems and have raised many new problems. Philosophy is thus a mixture of the old and new; many topics have been discussed since well before Christ, but others have their impetus in events as recent as the development of modern biomedical technology and computers.

The study of philosophy benefits students in many ways. It encourages them to reflect critically on their own most basic beliefs and values, it helps develop the capacity to think critically and carefully, and it provides a sense of the evolution of man's thinking about himself and his world.

Students who wish to concentrate in philosophy may do so by fulfilling the requirements for the General Degree Program in Arts and Sciences. Besides fulfilling these requirements, students should also take at least 24 upper division hours in philosophy. Student should include in those 24 hours both the History of Philosophy sequence (Phil 310, 311, 312) and Logic and Critical Thinking (Phil. 250). Other courses should be selected so that the student acquires a background in a variety of areas of philosophy. Students wishing to minor in philosophy are required to take 12 upper division hours. All students interested in concentrating or minoring in philosophy are encouraged to discuss their plans with an advisor.

The department also offers selected courses in religious studies. While these are not now sufficient to constitute a major or a minor, there are courses in many of the most popular fields of religious thought, including the Old Testament, the New Testament, world religions, and theology.

COURSE DESCRIPTIONS
PHILOSOPHY (PHIL)

****201U Introduction to Philosophy—Contemporary Moral Issues (3).** This course addresses many of the most pressing ethical issues we face, including euthanasia, abortion, preferential hiring, sex, animal rights, starvation, punishment, violence, pacifism, and civil disobedience.

****202U Introduction to Philosophy—Enduring Problems (3).** This course includes historical and recent sources on the perennial issues in philosophy, including the justification and significance of religious beliefs; knowledge and truth; materialism; human nature; free-will and determinism.

210 Introduction to Film (3). Aesthetic and philosophical issues in film theory and criticism; principles of film criticism; film and other art forms; and the relation to the audience to film experience. Aims toward understanding and appreciation of a major art form. Films exemplifying particular techniques and movements are viewed and discussed.

211 History of Film (3). An historical study of the development of film as an art medium.

****250U Logic and Critical Thinking (3).** Informal fallacies in ordinary life; e.g., politics, editorials, advertising; language and its uses; analyzing extended arguments; introduction to deductive logic.

*Courses under the rubnic of University College

251 Symbolic Logic (3). Modern deductive logic: propositional, and quantificational; philosophy of logic.

310 History of Philosophy, Ancient (3). Development of philosophic thought from the Greeks to the Thirteenth Century.

311 History of Philosophy, Modern (3). Modern philosophy from Descartes through Kant.

312 History of Philosophy, Contemporary (3). Contemporary philosophy from Hegel to the present.

320 History of Political Philosophy (3). Selected political philosophers from classical Greece to 1900, including Plato, Aristotle, Machiavelli, Locke, and Rousseau.

321 Contemporary Political Philosophy (3). Recent works on the central issues in political philosophy: economic justice, rights, political authority.

322 Marx and Socialism (3). Traditional and contemporary communist political philosophers, including Marx, Lenin and Mao; historical materialism, exploitation; socialism and democracy.

330 Ethical Theory (3). Traditional and contemporary ethical theories; the meaning and justification of ethical language.

335 Business Ethics (3). Survey of major ethical issues arising in business; corporate social responsibility, corporate loyalty, government regulation and public interest, advertising, environmental responsibilities, preferential hiring, free-enterprise and social welfare.

336 Medical Ethics (3). A detailed consideration of various ethical issues in medicine and health care, including death and patients' rights, abortion, truth telling, experimenting on humans, religious conflicts, and the right to medical resources.

340 Philosophical Ideas in Literatures (3). Philosophical issues, problems and assumptions in major literary works.

341 Existentialism (3). Contemporary and traditional Existential thinkers, including Sartre, Camus, and Kierkegaard.

342 Aesthetics (3). Problems in the philosophy of art and art criticism; aesthetic experience; truth and art; aesthetic value.

400 Philosophy of Mind (3). Consideration of various topics related to the existence and nature of mind: Mind-body identity, dualism, behaviorism, action theory, free-will and determinism.

410 Philosophy of Religion (3). The rationality of religious beliefs and practices; religious experience; the role of faith, religious language.

420 Philosophy of Law (3). Problems in the nature and justification of legal systems; natural law and legal positivism; theory of punishment.

430 Philosophy of Science (3). Problems in the nature of science and its relation to other human concerns, e.g., religion, politics, and ethics; the character of scientific theories and explanations in both natural and social science, scientific progress and truth.

440 Special Topics (3). Student of faculty generated course. Scope of subject matter to be determined by students and instructor.

450 Undergraduate Readings and Research (3). Individual study and research under faculty guidance. Prerequisite: 12 hours of upper division philosophy and permission of instructor.

RELIGIOUS STUDIES (RS)

200 Introduction to Religious Studies (3). Current issues in Religious Studies: ethics, theology, history of religion.

201 World Religions (3). Introduction to selected themes in world religions, Eastern and Western.

210 The Old Testament (3). Origins, literature and beliefs of the Old Testament.

211 The New Testament (3). Origins, literature and beliefs of the New Testament. (Formerly Phil. 301).

212 Jesus in History (3). Ancient and modern portrayals of Jesus understood in their cultural contexts.

330 Religion in America (3). The role of religious institutions and practices.

410 Contemporary Religious Thought (3). Major themes, issues and thinkers. (Same as Philosophy 410).

DEPARTMENT OF PHYSICS MATHEMATICS (COMPUTER SCIENCE)

Raymond Richardson Ph.D., (Head)

The objectives of the Department are as follows: (1) To provide programs of study for those who desire to pursue an undergraduate major or minor in computer science, mathematics or physics; or who desire to pursue the general degree program with a concentration in one of these disciplines, (2) To provide courses designed to satisfy the computer science, mathematics and physics requirements for the several schools of the University, and (3) To provide services to the University and wider community which are required and appropriate. The Department offers curricula leading toward two undergraduate degrees in mathematics and physics: Bachelor of Arts and Bachelor of Science. The Department also offers a Bachelor of Science in computer science and a General Degree with Concentrations in any of the three above named disciplines.

Objectives of the Computer Sciences Courses:

Objectives of the computer science Courses are (1) To provide the training to enable graduates to be employed by any of a number of private industries, government, business, educational and scientific organizations requiring computing education in the areas of computer hardware, computer software, information systems and computer-applied mathematics, (2) To develop skills in applying the algorithmic method of general problem-solving to write efficient, well organized and documented computer programs, (3) To provide the training to enable graduates to enter graduate school in computer science or related areas, (4) To provide majors from army other academic areas the prerequisite knowledge in computer science required to complete their various programs of study, (5) To provide computer literacy and related computer training to members of the university and community-at-large required to keep pace with the charges brought about by computers in the workplace, homes and schools.

Objectives of the Mathematics Courses:

The objectives of the mathematics courses are (1) To provide the training to enable graduates to be employed by any of a number of private industries, government agencies, foundations and institutions requiring high level qualitative skills and a highly developed ability to think critically and logically, (2) To provide the training to enable graduates to enter graduate school in mathematics or related areas, (3) To provide the training to enable graduates to assume careers as teachers of mathematics in secondary schools. (4) To develop efficiency in the basic mathematical operations; develop skills in the use of formulas for the solution of problems; and gain the ability to translate some of the simpler problems of the real world into the symbolic language of mathematics. (5) To provide for science and engineering majors the mathematical skills required as prerequisites in their various programs of study.

Objectives in Physics Courses:

The objectives of the physics courses are (1) To provide the training to enable graduates to be employed by any of a number of private industries, government agencies, foundations and institutions requiring its professional staff members to have (a) a scientific picture of the physical world involving the relationship between matter and energy, and (b) the ability to think critically and logically, (2) To provide the training to enable graduates to enter graduate school in physics or related areas, (3) To provide for science and engineering majors the prerequisite knowledge in physics required to complete their various programs of study, (4) To provide the training to enable graduates to assume careers as teachers of physics and/or physical sciences in secondary schools.

Curriculum in Physics:

Majors in physics are required to complete a minimum of 34 (33 for teacher education) semester hours of course work in physics, with a minimum of 25 (27 for teacher education) hours selected from physics courses numbered 300 and above. Students who minor in physics must complete a minimum of 12 semester hours selected from physics courses numbered 300 or above.

Curriculum in Mathematics:

Majors in mathematics are required to complete a minimum of 35 semester hours of course work in mathematics exclusive of Mathematics 191-2, 161-2. Of those 35 semester hours a minimum of 27 semester hours must be selected from mathematics courses in the 300 and 400 levels, exclusive of Mathematics 342, 371 and 472. Students who minor in mathematics must complete a minimum of 12 semester hours selected from mathematics courses numbered 300 and 400 levels, exclusive of Mathematics 341, 342, 371 and 492. Also, ENGR 303, Stat 311, 312, 421 and 422 and CS 390 and 470 may be included on the mathematics major or minor program.

Required Courses:

Mathematics 163-164, 341, 351, 361, 364, 450 and either the sequence 464-5 or 441-2 constitute the required core for all majors in the area of mathematics. Math 371 is required of all majors in the area who are certifying to teach. A minimum grade of "C" must be earned in each of the required courses. In addition to successfully completing thirty five (35) semester hours of course, work the major must pass a written comprehensive examination on the core requirements.

Options:

The mathematics program offers four options for specialization.

a) The pure mathematics option includes Math 331, 362, 453, as well as both the sequences Math 441-442 and 464-465 in the required core.

b) The applied mathematics option includes Engineering 303 (or Math 303) Math 362, 456-457 as well as Math 441-442 in the required core.

c) The statistics option would allow the student to replace six (6) hours in Math with Stat 311-312 and includes Stat 421-422 as well as Math 441-442 in the required core.

d) The secondary mathematics teacher option includes Math 362 as well as Math 441-442 in the required core.

Curriculum in Computer Science:

The curriculum for a B.S. in computer science consists of a minimum of 132 semester hours, of which a minimum of 48 semester hours must be taken in computer science. These 48 semester hours in computer science are broken down into a computer science core and a computer science specialization each requiring 24 semester hours. The computerscience core consists of courses in computer organization, computer programming, data structures and algorithmics, files and operating systems, programming languages, and discrete mathematical structures. The computer science specialization consists of courses in the areas of computer hardware, computer software, computer applied mathematics, or information systems. Six additional semester hours are required as technical electives, which may be selected from the areas of computer science, physics, mathematics, business, or engineering. The curriculum for a general degree B.S. in arts and sciences with a computer science concentration in information systems consists of a minimum of 128 semester hours, in which a minimum of 33 semester hours must be taken in computer science. These 33 semester hours in computer science consists of courses in general and business programming, computer organization, files and operation systems, data structures, and algorithms, systems analysis, design and implementation, and database systems.

Career Opportunities with a B.A. or B.S. degree in Mathematics

Persons holding the Bachelors degree in mathematics have career opportunities in widely diverse fields. For immediate employment after graduation it is strongly recommended that the major have a related minor such as economics, statistics, physics, computer science, chemistry or engineering. If the student wishes to pursue a career more closely aligned to mathematics, graduate work in mathematics is recommended.

Career Opportunities with B.S. Degree in Physics

Physics has such a broad scope and plays such a basic role in a science and engineering disciplines that the range of careers in physics probably exceeds that of any science degree major area. Some of the broad categories into which physics careers fall are listed below. Within each category, there are numberous fields of specialization.

Solid-State Physics
Nuclear Physics
Optical Physics
Elementary-Particle Physics
Atomic, Molecular, and Electron Physics
Fluid and Plasma Physics
Space and Planetary Physics
Acoustical Physics
Biophysics
Medical Physics
Astrophysics
Environmental Physics

With a bachelor's or master's degree in physics, one is more likely to engage in design and development work, teaching, or administration than in research. In design and development work, employment would most likely be with an industrial firm, a government laboratory, or a non-profit research center to apply already-developed theories to specific problems. Listed below are examples of specific government agencies and industries providing career opportunities for students in physics.

Bureau of Mines
National Bureau of Standards
Cost and Geodatic Survey
Department of Defense (Army, Navy, Air Force, Marine Corps)
National Laboratory (ARGONNE ORNL)
Union Carbide
IBM
South Central Bell Telephone Company
Honeywell
General Motors

In teaching, with a bachelor's or master's degree, one would probably teach at a high school or junior college. Administrative positions are available with all types of work and employers, but for these positions one usually needs first either an on-the-job training program or experience in the field.

Since physics training provides such a broad scientific background and the development of an analytical approach to the solution of problems, it is also excellent preparation for a variety of fields including:

Electronics
Engineering
Computer Science
Communications
Energy Research and Development
Medicine
Law
Business

Career Opportunities with B.S. in Computer Science

Computer Science majors are among the most sought after and the highest paid of recent college graduates. The demand from government, private industry and business, educational and scientific organizations for persons with computer expertise is far greater than the supply. A B.S. degree with a computer science major or concentration can open doors to many careers, such as systems analyst, database administrator, applications and systems programmer, operations researcher, statistical analyst, hardware designer or researcher in artifical intelligence, fiber optics, video discs or voice recognition, to name only a few. All of this makes for lucrative opportunities for well-trained persons in computer science.

CURRICULUM FOR MAJOR IN PHYSICS

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-02U	3	3
MATH 163-164U*	4	4
HIST 201-02U	3	3
CHEM 121-22U	4	4
PHY 191	1	
PE or AERO	1	1
UC OR 100	1	
	17	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-12U	3	3
MATH 341-42	3	3
PHY 221-22	4	4
CS 121, 220	3	3
HUM ELECT	2	2
PE or AERO	1	1
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
PHY 311-12	3	3
PHY 321-22	3	3
PHY 331-32 or 341-42	2	2
MATH Elective	3	
MATH 462-63	3	3
FOR LANG (For B.A. only)	3	3
SOC SCI Elect (300 level)		3
	17	17

SENIOR YEAR	Credit Hours Fall	Spring
ENG 300	3	
PHY 412-13	3	3
PHY 450		3
APP Elect (300-400 level)	12	10
	18	16

*Mathematics 161 and/or Mathematics 162 are to be taken first if need is indicated.

CURRICULUM FOR MAJOR IN PHYSICS (Teacher Education)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-02U	3	3
MATH 163-164*U	4	4
HIST 201-02U	3	3
CHEM 121-22U	4	4
PE or AERO	1	1
PHY 191	1	
PHIL 201		2
UC OR 100	1	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-12U	3	3
MATH 341-4	3	3
PHY 221-2	4	4
CS 121, 220 or 222	3	3
PSY 242	3	
EDCI 201	3	
EDCI 301		3
PE or AERO		2
	19	18

JUNIOR YEAR	Credit Hours Fall	Spring
BIOL 111-112	4	4
PHY 311	3	
PHY 412-13	3	3
EARTH/SPACE SCI	3	3
SOC SCI (300 level)	3	
HUM ELECT		2-3
PSY 312	3	
SOC SCI (300 level)		3
	19	15-16

SENIOR YEAR	Credit Hours Fall	Spring
ENG 300	2	
PHY 450	3	
EDCI 387	3	
HEA 301 or 305	2	
PHY Elect (300-400 level)	3	
PHY 371		3
EDSE 465	3	
EDRD 391		3
EDCI 472o		0
EDCI 472N		9
	16	15

*Mathematics 161 and/or Mathematics 162 are to be taken first if need is indicated.

CURRICULUM FOR A MAJOR IN MATHEMATICS

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
*MATH 163-164U	4	4
CS 121-220 or 222	3	3
Bio 111-112U or Chem 121-222U	4	4
PE or AERO	1	1
UC 100 & MATH 191	1	1
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212U	3	3
MATH 341, 351	3	3
PHYS 221-22	4	4
French or German 101-102	3	3
HIST 201-2U	3	3
P.E.	1	1
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
MATH 361-362	3	3
MATH 364		3
So Sc Elec	3	
ENG 300	3	
Humn Elec	2	2
APPR Elect (300-400)	6	9
	17	17

SENIOR YEAR	Credit Hours Fall	Spring
MATH 450	3	
MATH 464-465 or 441-442	3	3
MATH Elect (300-400)	3	3
APPR Elect (300-400)	8	9
	17	15

*Mathematics 161 and/or Mathematics 162 are to be taken first if need is indicated.

CURRICULUM FOR A MAJOR IN MATHEMATICS (TEACHER EDUCATION)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
*MATH 163-164U	4	4
CS 121, 220 or 222	3	3
BIO 111-112U or CHEM 121-222U	3	3
PE or AERO	1	1
UC 100, Math 191	1	1
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-2U	3	3
MATH 341, 351	3	3
MATH 361, 362	3	3
EDCI 201		3
PSY 242	3	
PHY 221-222	4	4
PE or AERO	1	1
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
MATH 441-442	3	3
MATH 364		3
History 201-202	3	3
ENG 300	3	
PSY 312		3
German or French 101-2	3	3
Appr Elec (300-400)	2	
Math Elec (300-400)	3	
	17	15

SENIOR YEAR	Credit Hours Fall	Spring
MATH 450	3	
MATH 371		3
Hea 301 or 305	2	
EDCI 387	3	
EDCI 301	3	
So Sc Elec (300)	3	
EDCI 472S		9
EDCI 4720		0
EDRD 491		3
EDSE 465	3	
	17	15

*Mathematics 161 and/or Mathematics 162 are to be taken first if need is indicated.

CURRICULUM FOR A MAJOR IN COMPUTER SCIENCE (CORE CURRICULUM)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENGLISH 101-2	3	3
*MATH 163-4	4	4
CS 211, 212	3	3
HISTORY 201-2	3	3
HUM Elective	2	3
PE or AFROTC	1	1
UC OR 100	1	
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENGLISH 211-310E	3	3
MATH 311	3	
CS 240, 245	3	3
CS 301, 304	3	3
SOC SCI Elective: (300 level)		3
ENG 310E	3	
Open Elective		3
PE or AFROTC	1	1
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
CS 305, 320	3	3
CS Elective: (300-400 level)	3	6
MATH 361	3	
Open Electives: (300-400 level)	4	3
PHYSICS 221-22 or	4	4
	17	16

SENIOR YEAR	Credit Hours Fall	Spring
CS Elective (300-400)	6	9
TECHNICAL Elec: (300-400)	3	3
OPEN Electives: (300-400)	8	4
	17	16

*Math 161 and/or Math 162 are to be taken first if need is indicated. CS 121 must be taken in first if need is indicated.

Technical Electives are from the areas of computer science, mathematics, physics, business, or engineering.

Open Electives are from any area.

There are presently three areas of specialization within computer science. The first is computer hardware, which is intended for students interested in such courses as telecommunications, microcomputing, and details of computer architecture and assembly language programming.

The second specialization area is computer software which is intended for students interested in details of systems software, such as operating systems, compilers, databasement systems, and assembly language programming.

The third area of specialization has been designated computer-applied mathematics which is intended for students interested in numerical analysis and solution of differential equations, simulation and operations research.

For students interested in information systems, computer applications and data processing, there is a General Degree (B.S.) with a computer science concentration in information systems, including business programming, databases and systems analysis and design. It should be noted that the General Degree option in computer science requires fewer mathematics and science courses, allowing for a broad general education with an emphasis on information systems, which is a thriving career area applicable in a variety of organizations.

COURSE DESCRIPTIONS PHYSICS

PHY 191-192 Fundamentals of Physics (1,1). A freshman course designed to give the beginning physics major (1) a descriptive account of the classical and modern concepts in physics; (2) a brief review of trigonometry, vector algebra, and problem solving techniques.

PHY 211-212 College Physics (3,3). Mechanics; Heat, Sound and Light; Electricity and Magentism and Modern Physics. A course in which the basic principles are presented. Required of biology, pre-med, and allied health profession majors. Prerequisite: Mathematics 161. Successful completion of physics 211 is the prerequisite for physics 212.

PHY 211L-212L College Physics Laboratory (1,1). One two hour laboratory per week designed to be taken concurrently with PHY 211-2.

PHY 221-222-223 General Physics (3,3,3). Mechanics; Heat, Sound and Light; Electricity and Magnetism; and Modern Physics. The course is intended for students with majors in engineering, mathematics, or a physical science. Prerequisite: Math 164 (or taken concurrently). These courses must be taken in sequence.

PHY 221L-222L General Physics Laboratory (1,1). One two hour laboratory per week designed to be taken concurrently with PHY 221-2.

PHY 301 Qualitative Biophysics (3). A qualitative approach to introductory biophysics; skeletal muscle dynamics, assessment of bone structure by measurement of the speed of sound and bone-mineral content, hydrodynamic analysis of the cardiovascular system. Prerequisite: one year of college physics.

PHY 311-312 Electricity and Magnetism (3,3). This course presents the fundamentals of theoretical electricity and magnetism. Considerable emphasis is placed upon the solution of problems. Prerequisite: Math 341, PHY 222 with a grade of C or better. Three lectures per week.

PHY 314 Optics (3). A brief review of geometrical optics and a study of physical optics including spectroscopy. Prerequisite: Physics 211-212 or Physics 221-222; Math 164. Three lectures and one laboratory period per week.

PHY 320 Heat and Thermodynamics (2). A study of the fundamentals of heat and an introduction to thermodynamics with applications to chemistry. Prerequisite: Physics 221-222, Mathematics 164. Three lectures per week.

PHY 321-322 Mechanics (3,3). Statics and dynamics of particles and rigid bodies, Lagrange's and Hamilton's equations; Fluid Statics, and vibrations. Prerequisite: Physics 211-2 or Physics 221-2; Mathematics 164. Three lectures per week.

PHY 331-332 Electrical Measurements (2,2). The theory of electrical circuits is studied and discussed. The laboratory is intended to give experience and facility in the handling of electrical measuring instruments employed, together with measurements of capacity inductance, and ferro-magnetism. Prerequisites: Physics 211-2 or Phy 221-2; Mathematics 164. Two laboratory periods per week.

PHY 341-342 Advanced Laboratory (2,2). This course is designed to permit the student to develop a variety of laboratory skills and techniques by performing experiments of an advanced nature selected from areas of Mechanics, Heat, Sound, Light, and Modern Physics. Prerequisites: Physics 221-2; Mathematics 164. Three lectures per week.

PHY 361 Solid State Physics (3). A physical interpretation of the conductive properties of metals and semi-conductor materials based on the periodic nature of the crystalline solid is presented with applications including the transistor. Primarily for electrical engineering or computer science students with junior standing.

PHY 371 Teaching of Physics in the Secondary Schools (2). Emphasis is placed on the materials and methods suitable for use in secondary schools Techniques of caring for apparatus, tools, and materials are studied.

PHY 401 Seminar for Modern Physics (2). A course designed as a elective suitable for liberal arts students as well as science and mathematics students. Selected topics in modern physics; concepts discussed from the standpoint of the effects these concepts have had on man and his environment.

PHY 402 Modern Health Physics (2). An introduction to medical and health physics with descriptive emphasis on modern instrumentation, X-rays as a dignostic tool, ultrasonics, electron-microscopy, optical and accoustical holography, laser surgery. Prerequisite: One year of college physics.

PHY 410-411 Introduction to Quantum Mechanics (3,3). Introduction to fundamental principles of quantum mechanics and methods of calculation. Application to atomic, molecular and nuclear physics. Prerequisite: Physics 221-2 Math 164.

PHY 412-413 Modern Physics (3). The Classical and modern concepts of the atom and radiation are developed; introduction to molecular structure, the chemical bond, nuclear physics; fission, isotopic tracers; medical radiology; cosmic rays. Prerequisites: Physics 211-2 or Physics 221-2; Mathematics 164. Three lectures per week.

PHY 450 Senior Project (3). Individual study and presentation of a special topic in physics or the teaching of physics. Required of all prospective graduating seniors in the department.

PHY 460 Undergraduate Readings and Research (3,3). Individual study and research under faculty guidance. Prerequisite: 12 hours of upper division physics and permission of instructor.

PHY 490 A through I. (Up to 9 hours total). These courses are offered to the preference and needs of the student. The credits for each course vary from two to three semester hours, with a total of nine credit hours the maximum from this group permitted toward the physics degree.

Principal Topics Covered:

A. (I, II) Advanced Laboratory Studies. (2, 2.)
B. (I, II) Analytical Mechanics. (3, 3).
C. (I, II) Electricity and Magnetism. (3, 3).
D. (I, II) Modern Physics. (3, 3).
E. Optics. (3).
F. Quantum Mechanics. (3).
G. Research Projects. (3).
H. Solid State Physics. (c).
I. Thermodynamics and Statistical Mechanics. (3).

COURSE DESCRIPTIONS
COMPUTER SCIENCE

CS 100U Computer Literacy. (3). A computer literacy course for students not enrolled in technical courses. Emphasizes the influence of computers on modern life and introduces students to the fundamentals of programming in BASIC. Prerequisites: one year of high school mathematics (some knowledge of the typewriter keyboard helpful). Two lecture hours and one laboratory hour per week.

CS 121 Introduction to Computing (3). Algorithms, programs and computers. Organization and characteristics of computers. Survey of computers, languages, systems and applications. Emphasis on design solutions to problems. Prerequisite: High School Algebra.

CS 211 Computer Programming I (3). Introduction to computer units and their functions, problem-solving process and algorithms; data types and storage, input/output, arithmetic and logical operations and loops. Prerequisite: CS 121 or consent of instructor.

CS 212 Computer Programming II (3). Structured programming and data types, arrays, records, sets and files; subprograms (functions and procedures), extended input/output operations; simple data structures (lists, stacks, queues). Prerequisite: CS 211.

CS 215 Computer Programming—BASIC (3). BASIC programming, program structure, testing, debugging and veification; data representation. Program applications are emphasized. Prerequisite: CS 121 or consent of instructor.

CS 220 Computer Programming—FORTRAN. (3). Fortran or another high-level language used for solving problems in science and engineering. Prerequisites: CS 212 or permission of instructor.

CS 221 Computer Programming—COBOL (3). Cobol or other data processing language. Prerequisite: CS 212 permission of instructor.

CS 222 Computer Programming—PASCAL (3). Pascal of high-level language of interest to students in the Humanities. Prerequisite: CS 212 or permission of instructor.

CS 240 Computer Organization 1 (3). Assembly language programming including addressing methods, representation of information, information, instruction executing and 1/0 programming. Prerequisite: CS 212.

CS 255 Introduction to Digital Systems (3). Basic electronics in computer and communication circuits lamplifiers, timers, regulators, rectifiers, power supplies, modulators/demodulators, . . .) Prerequisite. MATH 161. corequisite: CS 240.

CS 260 Assembly Language I (3). Assembly language programming in computer systems; machine architecture and instructions, instruction sets and types macros, addressing, subroutine linkages, control and I/O operations. Prerequisite: CS 240.

CS 301 Files and Operating Systems (3). File organizations (sequential, indexed, direct, hybrids, . . .) and file processing (sequential and random access); support for language and operating system; memory and process management, operation system design (modules, kernels, levels, . . .), recovery, scheduling, operating system relationship to architecture. Prerequisites: CS 240.

CS 304 Data Structure and Algorithms (3). Data structures and algorithms for their manipulation. A rays and lists, stacks, queues, rings, doubly-kinked lists, trees, dynamic storage allocation; organization of files. Prerequisite: CS 212.

CS 305 Programming Languages (3). Comparison and analysis of programming languages, their characteristics and implementation. Languages to be discussed will include ADA, ALGOL, LISP, APL, PASCAL, PL/1, and PL/2 subsets. Prerequisite: CS 304.

CS 310 Advanced Programming—FORTRAN, Pascal, BASIC (3-9). Advanced Control structures, functions and subroutines, I/O methods, Prerequisite: First course in related programming language.

CS 315 Advanced COBOL (3). Application of COBOL to business problems. Topics include file processing, sorting, subroutines and structured programming. Prerequisite: CS 221.

CS 320 Discrete Mathematical Structures (3). Sets, relations, Boolean algebra, propositional logic, functions and compatibility; graph theory and its applications to computer science; set theoretical characterizations of computing machines and computing languages. Prerequisites: CS 212.

CS 323 Information Systems Analysis (3). Information analysis and logical design concepts for business information systems. Programmed decision making, planning for information needs, integrating systems, the system development life cycle, determining system specifications and the economics of alternative systems. Prerequisite: CS 301 and a programming language.

CS 330 Telecommunications (3). Communications System Organization and Structure; data transmission and control; computer networks, software protection communication media, carriers and hardware. Prerequisites: CS 245 and a structured programming language.

CS 335 Advanced Digital Systems (3). Design and analysis of digital systems, including logic circuits, flip-flops, arithmetic circuits, counters, integrated circuit logic families, interfacing and memory devices. Prerequisites: CS 255.

CS 340 Logic Design (3). Switching algebra, logic design of combinational circuits, minimization methods; sequential circuit analysis and synthesis. Prerequisite: CS 245.

CS 345 Analog Computers (3). Analog computing; problem set-up and scaling; multipliers, function generators; operational amplifiers, stabilization; and accuracy. Prerequisite: CS 245.

CS 360 Assembly Language II (3). Assembly language programming, indexing macro writing and libraries, file I/O procedures, program segmentation and linkage, assembler construction, advanced architecture and interpretive routines. Prerequisite: CS 260.

CS 365 Microcomputers (3). Design and use of microcomputers, including architecture, programming, applications and software support. Prerequisites: CS 240 and a structured programming language.

CS 370 Introduction to Database Systems (3). Database-file system relationships, data independence, data models, data (schema) definition and manipulation (query) languages, security and database administration. Prerequisite: CS 301 or consent of instructor.

CS 375 Voice Technology (3). Voice communication system organization and design, networks, telephone instruments and systems, private branch exchange (PBX) systems, analog Prerequisite: CS 240.

CS 380 Introduction to Operations Research (3). Introduction to various methods of system optimization. Simplex methods; search techniques, programming geometeric programming. Applications from management science, engineering, economics and physical sciences. Prerequisites: CS 212, MATH 361.

CS 385 System Stimulation (3). Discrete simulation models, queueing theory, and stochastic processes. Comparison of simulation languages. Simulation methods including Monte Carlo techniques. Prerequisites: CS 245 and a programming language.

CS 390 Numerical Analysis (3). Interpolation and approximation, numerical differentiation and integration, roots of equations. Prerequisites: CS 212, MATH 361.

CS 395 Numerical Solution of Differential Equations (3). Ordinary differential equations; Taylor Series Method, Runge Kutta Method, systems of ordinary differential equations, boundary value problems for ordinary differential equations. Prerequisites: CS 390, MATh 463.

CS 410 Operating Systems I (3). Hardware interrupt systems and concurrence of I/O operations. Multiprogramming systems, memory management, protection, resources allocation and control job management and task management; real time systems time sharing systems; paging; virtual memory, scheduler, reliability, file management services and system accounting. Prerequisite: CS 245, CS 301.

CS 411 Operating Systems II (3). Continuation of the topics of CS 410, including a case study of a specific operating system. Prerequisite: CS 410.

CS 415 Systems Design and Implementation (3). Principles and Techniques of design including types and levels of design, documentation techniques, hardware and software evaluation, software design concepts, data base concepts, implementation and testing procedures and long run MIS planning. Prerequisite: CS 323.

CS 420 Compiler Construction (3). Review of program language structure translation, loading, executing and storage allocation. Compilation of simple expressions and statements. Organization of a compiler including compile-time and run-time symbol table, lexical scan, syntax scan, object code generation, error diagnostics, object code optimization and overall design. Prerequisite: CS 305.

CS 425 Computer Automation (3). Classical and modern control systems design and analysis; transfer and response of systems, sensitivity, stability, feedback, non-linear control, control theory and robotics. Prerequisite: CS 245.

CS 430 Software Engineering (3). Design of reliable software; error causes and consequences; software testing methodologies, including test case design, tools, path testing and transactions flow; data validation and program correctness. Prerequisite: CS 304.

CS 435 Teleprocessing (3). Requirements and fundamentals of telephocessing system design, programming requirements, transmission capabilities and control, interactive computing, prerequisite: CS 330.

CS 450 Computer Science Senior Project (3). Prerequisite: Upper division status.

CS 440 Artificial Intelligence (3). Topics in machine intelligence. Prerequisite: CS 304.

CS 460 Microprocessors (3). Programming and microprocessor concepts, architecture, microprocessor hardware, memory addressing, instructions, and peripheral interfacing. Prerequisite: CS 245 and a structured programming language.

CS 470 Algorithms (3). Studies in selecting and designing algorithms for computer solutions to problems in various areas. Algorithms studied include areas in combinatorics, numerical analysis, pattern matching in text processing, operating systems, data base management, artificial intelligence, and domain independent techniques. Prerequisites: CS 304, CS 305.

CS 480 Computer Graphics (3). Passive and interactive computer graphics, programming, hardware, user languages and output devices, transformations, algorithms, object modeling, storage and manipulations, image processing. Prerequisite: CS 304.

CS 490 Special Topics (3). May be repeated for up to 9 hours credit. Individual topics as approved by the program chairman. Prerequisite: Upper division status.

COURSE DESCRIPTIONS
MATHEMATICS

(Mathematics prerequisites: Two units of high school algebra or 1 unit of algebra and 1 unit of geometry, or MATH 100U, 101U, 102U.)

MATH 100U Fundamentals of Algebra I. (3) Fundamental operations on real numbers, linear equations and inequalities, graphing and linear systems, exponents and polynomials, factoring. This course cannot be used to satisfy the mathematics/science general education requirement. One hour per week of Math Lab attendance is required and three classroom lecture hours.

MATH 101U Fundamentals of Algebra II. (3) Rational expressions, roots and radicals, quadratic equations, lines, functions, ratios and proportion. This course cannot be used to satisfy the mathematics/science general education requiremnt. Three classroom lecture hours and one hour per week of Math Lab attendance are required. Prerequisites: Successful completion of 1 year of high school algebra of MATH 100U or its equivalent.

MATH 102U Geometry. (3) Lines, triangles, circles, polygons, congruent and similar triangles, parallelism, area, coordinate geometry, geometric proofs. Three lecture hous per week are required. Prerequisites: The successful completion of one year of high school algebra or MATH 101U. May not be counted toward degree requirements.

MATH 110U The Mathematics of Drugs and Solutions (1). The metric and Apothecaries systems of weights and measures; abbreviations, symbols, conversions. Calculations involved in preparing solutions from powdered drugs and tablets, dilutions of concentrated stock solutions, dosages. This course will also be offered by self-paced mode of instruction.

MATH 111U Introduction to College Math I. (3) This course will provide the student with a diverse foundation in the following topical categories: graphs, relations, functions, inequalities, polynomials, exponents, and radicals. Prerequisites: The successful completion of two years of high school algebra or the equivalent or one hour of high school algebra and one year of geometry or the equivalent. Three lectures per week.

MATH 112U Introduction to College Math II. (3) This course will provide the student with the diverse foundation in the following topical categories: mathematics of finance, matricies, linear programming, probability and computers. Prerequisite: The successful completion of MATH 111U or the equivalent. Three lectures per week.

MATH 113U Basic Calculus. (3) This course provides the student with the various techniques needed to apply the ideas of differential and integral calculus to situations in economics, business and social science. The emphasis will be on applications. Prerequisites: The successful completion of MATH 111U. Three lectures per week.

MATH 161U Precalculus Mathematics I. (3) This course provides the student with the foundation necessary he calculus sequence. The topics included are the study of polynomial and rational functions, exponential and logarithmic functions and matrices. Prerequisite: The successful completion of two years of high school algebra or the equivalent; or one year of high school algebra and one year of geometry or the equivalent. Three lectures per week.

MATH 162U Precalculus Mathematics II. (3) This course provides a foundation for calculus and analytic geometry. The analytic aspects of trigonometry are emphasized. Other topics included are sequence and series and conic sections. Prerequisite: MATH 161U or its equivalent. Three lectures per week.

MATH 163U Calculus with Analytical Geometry I. (4) Topics studied include functions, graphis, limits, derivatives with applications, the definite integral with applications and algebraic functions. Prerequisite: The successful completion of MATH 162U or its equivalent. Four lectures per week.

MATH 164U Calculus with Analytical Geometry II. (4) Topics studied include derivatives and integrals of trigonometric functions, techniques of integration, an introduction to infinite series and differential equations. Prerequisite: The successful completion of MATH 163U or its equivalent.

MATH 192-2 Fundamentals of Mathematics I—II. (1,1) A brief survey of selected topics, the theory of sets and propositional logic, algebra of vectors, applications of vectors, basic concepts of differential and integral calculus. One lecture per week.

MATH 211-212 Structure of the Number System (3,3). Set theory, relations, functions, inverses, order properties, systems of numeration, rational and irrational numbers, elementary number theory, mathematical systems, algorithms for the fundamental operations on whole numbers, integers, fractions, decimals, percent, ratio and proportion, equations, problem solving, measurement in the metric system, elements of algebra, plane and solid geometry, elementary statistics.

MATH 291-292 Introduction to Probability and Statistics I & II (3,3). An overview of what statistics is and what statisticians do. Basic concepts of probability. Random Variables and Probability Distributions. Basic concepts of inference. Linear Regression and Correlation. The Analysis of Variance. The Analysis of Enumerative Data. Prerequisite: Consent of the department.

MATH 303-304 Engineering Mathematics I & II (3,3) Ordinary differential equation, Fourier series, Laplace transforms with emphasis on the application to mechanical and electrical systems. Prerequisite MATH 341, Phy 222. Prerequisite for MATH 304 is MATH 303.

MATH 311-312 Probability and Statistics I & II (3,3). Probability as a tool for inference. The Axioms of Probability. Random Variables and their Probability Distributions. Multivariate Probability Distributions. Functions of Random Variables. Hypothesis Testing. Linear Models and Estimation by Least Squares. The General Linear Moderl. Analysis of Categorical Data. Non-parametric Statistics. Prerequisites: MATH 164 or consent of department.

MATH 321. Introduction to Number Theory (3). Divisibility properties for the integers, the greatest common divisior, unique factorization, congruences, Diophantine equations, the Euler-function, Wilson's Theorem, the Chinese Remainder Theorem, and other elementary properties of numbers. Prerequisites: MATH 164 or consent of the department.

MATH 331. Introduction to Topology (3). Topological spaces, metric spaces, compactness and homeomorphisms. Applications to the real line. Prerequisite: MATH 164 or consent of the department.

MATH 341-342 Calculus and Analytic Geometry III-IV (3,3). Indeterminate forms, infinites series, vector functions, three dimensional space, partial differentiation, multiple integration and applications. Prerequisite: MATH 164.

MATH 351. Intermediate Analysis (3). A study of the foundations of real variable calculus including the real numbers, limits, sequences, uniform convergence, differentiability and the Riemann-Stieltjes integral. Prerequisite: MATH 164 or consent of the department.

MATH 361. Linear Algebra I (3). Topics include homogeneous and non-homogeneous systems, matrix algebra, determinants, vector spaces and subspaces, bases, orthogonal bases, linear transformations and rank. Prerequisite: MATH 164 or consent of the department.

MATH 362. Linear Algebra II (3). A continuation of MATH 361. It is strongly recommended that 361 and 362 be taken sequentially. Topics include a further treatment of linear transformations and rank, eigenvalues, eigenvectors and the spectral theorem. Prerequisite: MATH 361.

MATH 364. Abstract Algebra (3). An introduction to properties of groups, rings, integral domains and fields. Prerequisites: MATH 164, 321 or consent of the department.

MATH 371. The Teaching of Mathematics in the Secondary School (3). Lectures, discussions, and reports on materials and methods used in the instruction of mathematics at the junior and senior high level. Prerquisite or parallel: field experience required.

MATH 390 Introduction to Numerical Analysis (3). Errors, interpolation, approximations, numerical quadrature, solution of ordinary differential equations. Prerequisite: MATH 164.

MATH 431-432. Toplogy I & II (3,3). Horneomorphisms, connectedness, compactness, metric spaces, normal spaces, Urysohn's Lemma Tietze's theorem, separation acioms, product topology, Hilbert space, quotient space, paracompactness, nets and filters with an introduction to homotopy theory. Prerequisites: MATH 331, 341 and 351 or permission of department.

MATH 441-442. Advanced Calculus I & II (3,3). Topics include functions of several variables; the algebra and topology of Euclidean n-space, differentials; extrema, the gradient; line, surface and volume integuals; Stokes' theorme; inverse mapping theorem; implicit function theorem, change of variable theorem and manifolds. MATH 341, 351 and 361 or permission of the department.

MATH 445. Vector Calculus (3). Derivative and integral of vector functions; gradient, divergence, curl, Green's theorem, Stokes' theorem, Laplace's equation and elementary boundary value problems. Prerequisite: MATH 341 and 362 or permission of department.

MATH 450. Senior Project (3). A comprehensive inquiry into the nature of Mathematics. Emphasis will be placed on written presentation of the subject matter. Required of all prospective graduating seniors in the department. Prerequisite: Senior standing.

MATH 451-452. Real Analysis I & II (3,3). Set theory, algebra and topology of the real numbers, continuous functions, uniform convergence, measure and integration theory, Lebesque measure and integrals, convergence theorems, L_p-spaces, Banach spaces, differentiation, Radon-Nikodym theorem, Fubini theorem. Prerequisite: MATH 442 or permission of department.

MATH 453-454. Complex Analysis I & II (3,3). Analytic functions, Cauchy's integral theorem, Taylor and Laurent Series, Singularities, residue theory, analytic continuation, conformal mapping, Riemann surfaces, infinite products, and entire functions. Prerequisites: MATH 442 or permission of department.

MATH 456-457. Differential Equations I & II (3,3). First and second order equations, general theory of linear n^{th} order differential equations, constant coefficient systems, variation of parameters, infinite series, singular solutions, asymptotic solutions, Green's function, stability, special functions, LaPlace transform. Prerequisites: ENGR or MATH 303 and MATH 361 or permission of department.

MATH 461-462. Linear Spaces I & II (3,3). Fields, vector spaces, quotient spaces, linear transformations, ring theory; similarity, equivalence and congruence of matrices, bilinear forms, tensors and other topics. Prerequisites: MATH 362, 364 or permission of department.

MATH 464-465. Modern Algebra I & II (3,3). Equivalence relations, mappings, groups, rings, fields, polynomial rings, modules, vector spaces, Galois theory. Prerequisites: MATH 321, 361, 364 or permission of the department.

MATH 472. History of Mathematics (3). The origin and development of mathematical ideas beginning with geometry and algebra and continuing through selected topics in modern mathematics. Prerequisite: MATH 341 or consent of the department.

MATH 473-474. Logic I & II (3,3). Introduction to Mathematics Logic. Logic I is a survey of the fundamental material including the statement calculus, the predicate calculus. Gödel's Incompleteness theorem and undecidability questions. Logic II is a formal treatment of the predicate calculus. Prerequisite: MATH 341 or consent of department.

MATH 490. Special Topics (3-6). Special topics in mathematics to be offered with permission of the undergraduate mathematics curriculum committee in response to the preference and needs of the students. Repeatable to six hours.

DEPARTMENT OF SOCIOLOGY
Edna Masuoka, Ph.D., Acting Head

The courses in Sociology are designed to meet the following objectives: (1) to increase the student's comprehension of human nature, society and culture and of major social problems of the day; (2) to provide broad pre-professional education for those students interested in pursuing graduate work in such fields as guidance and counseling, law, urban and regional planning, and social work; and (3) to give a basic body of knowledge for those who may enter graduate work in specialized areas of Sociology.

The curricula in Sociology offer courses of study leading to two Bachelor of Science degrees: B.S. in Sociology and

B.S. in Sociology with teacher certification in Social Studies.

Students in the curricula are required to take a minimum of one major and one minor.

The Department of Sociology participates in an interdisciplinary concentration in Urban Affairs in cooperation with the Department of Government and Public Affairs. Courses are taught in conjunction with the Social Science Laboratory and computer facility. The Urban Affairs concentration is open to those students who elect to pursue it.

Career opportunities of students completing the Bachelor of Science degree in Sociology and not choosing to enter graduate or professional schools include employment in (1) a variety of local, state, or federal social service and community agencies—housing, juvenile court and juvenile correctional facilities, adult correctional institutions, planning agencies, mental health and drug counseling centers, youth guidance agencies, community organization, and the like—, (2) teaching sociology and other social sciences in high school, (3) management and management trainee programs for retail establishments, manufacturers, insurance companies, banks, telephone and other utility companies, (4) publishers' college sales representatives, (5) newspaper journalism, and (6) the ministry.

Requirements for graduation: (1) A student must complete a minimum of 132 semester hours of work for the bachelor's degree (2) At least 60 of the semester hours must be in courses on the 300 and 400 level. (3) Thirty semester hours in sociology with a minimum of 24 semester hours on the 300 and 400 level. Students who minor in sociology must complete a minimum of 15 semester hours in 300 and 400 level courses in addition to the introductory course, Sociology 211U.

CURRICULUM FOR A MAJOR IN SOCIOLOGY
(Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101U-102U	3	3
HIST 201U-202U	3	3
UCOR 100U	1	
ART 133U; MUS 131U; or THEA 120U (Choose 2)		4
MATH 111-CS 100U	3	3
PE or AERO*	1	1
HEA 151U		2
SOC 211U	3	
	14	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
PSY 201		3
ENG 211-212	3	3
SCI 121U-122U	3	3
GPA 221U-222	3	3
PE or AERO	1	1
Electives-Econ 211U	6	3
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
PSY 310-ENG 310	3	3
SOC 330-360	3	3
SOC 300-451	3	3
SOC 490 or 491		3
SOC (300-400 level)	6	
MINOR (300-400 level)	3	3
Electives (300-400)		3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
SOC 452	3	
SOC (300-400 level)	3	
MINOR (300-400 level)	6	6
Electives (300-400 level)	6	3
Electives (any level)		7
	18	16

A minimum of 132 semester hours for the Bachelor of Science degree is required.

CURRICULUM FOR A MAJOR IN SOCIOLOGY
(B.S. Degree with Certification in Social Studies)*

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102U	3	3
HIST 201-202U	3	3
UCOR 100U	1	
GEOG 171U-172	3	3
MATH 111U- SOC 211U	3	3
PE	1	1
HEA 151U, BIOL 111	2	4
PSY 242, ART 133U	3	2
	19	19

SOPHOMORE YEAR	Credit Hours Fall	Spring
ANTH 230U-EDCI 201	3	3
ENG 211-212U	3	3
CHEM 131, Psy 201	4	3
PE or AERO	1	1
MUS 131U		2
GPA 221U-222	3	3
ECON 211U-212	3	3
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
HIST 121-122	3	3
EDCI 301-387	3	3
PSY 312	3	
SOC 330-360	3	3
ENG 310, SOC 490 or 491	3	3
HIST 385 or 451		3
SOC 300-451	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
EDCI 419	1	
SOC 452	3	
SOC (300-400 elective)	3	3
HIST (300-400 elective)**	9	
EDSE 465	3	
HIST 371		3
EDRD 491		3
EDCI 472		9
	19	18

*If a student takes a lighter load during the freshman, sophomore, or junior years, work may be completed in summer sessions to make up the deficit. The new requirements are effective for 1988 graduates. A total of 146 semester hours will be required for the B.S. degree in sociology with certification in Social Studies.

**HIST 341 is strongly recommended for three semester hours for persons planning to teach in the State of Tennessee.

***SOC 305 recommended for one elective course

COURSE OFFERINGS
SOCIOLOGY (SOC)

SOC 211U Introduction to Sociology (3). Introduction to sociology as a scientific discipline. Subject matter includes sociological concepts, sociological processes, social institutions, including family, and education. Prerequisite to all other courses in the department.

SOC 300 Social Statistics (3). Introduction to elementary statistics. Emphasis on analysis and interpretation of social survey data.

SOC 305 Using the Computer in the Social Sciences (3). A course designed to familiarize the student with equipment, programs, and procedures for processing and interpreting the medium and large volumes of data used in the social sciences. Students will be introduced to Basic Plus and Pilot computer languages and to SPSS (Statistical Package for the Social Sciences). The course will also serve as a foundation for Social Statistics. Students preparing senior projects or doing social science research will find the course useful. The PDP 11/34 and the IBM 370/140 computer system will be used.

SOC 310 Sex, Gender and Social Interaction (3). An examination of the difference between sex as a biophysical attribute of human beings and gender as a set of normatively-assigned attributes; source and interpretations of the differences between sex and gender; and the relationship between sex, gender and the way human beings participate in social roles.

SOC 330 Social Problems (3). Analysis and treatment of behavioral and structural problems in society.

SOC 335 Sociology of Health (3). The objectives of the course will be to examine the social and psychological implications of illness from inception to termination. Materials will be drawn from the relevant literature of the behavioral sciences that relate to health. Prerequisite: HCA 201, 202; Sociology 211U.

URBAN AFFAIRS CONCENTRATION

A. Core Contration

GPA/UA	221—American National Government	3
SOC/GPA/UA	451 or 310—Methods Course (jointly taught)	3
GPA/UA	390—Introduction to Urban Affairs	3
SOC/UA	460—Urban Sociology	3
GPA/UA	440—Introduction to Public Administration	3
SOC/UA	305—Uses of the Computer in the Social Sciences	3
		18 Semester Hrs.

B. Students will be required to select one course from each of the following discipline groupings:

Psychology

PSY/UA	434 (3) Community Therapy: Social Training Program Development
PSY/UA	341 (3) Social Psychology

Social Welfare

SW/UA	320 (3) Human Behavior and Social Environment
SW/UA	460 (3) Social Work with Minorities and Women

Communications

SPCH/UA	210 (3) Fundamentals of Speech Communications
SPCH/UA	375 (3) Communicative Skills
SPCH/UA	448 (3) Principles of Public Relations

Geography/History

GEO/UA	382 (3) Urban Geography
GEO/UA	310 (3) Cartography
HIST	364 (3) History of Urban America

SOC 340 Problems of Courtship and Marriage (3). A critical approach to problems of courtship, marriage, and the family with emphasis on mate selection, marital roles and adjustment, economic problems, women and the family, and parent-child relationships.

SOC 345 Cultural and Social Aspects of Health (3). Discussion will center on the effects of the social and cultural milieu on the level of health of the community; the nature, accessibility and availability of health care services. Prerequisites: HCA 202 and Soc. 211.

SOC 350 Social Psychology (3). Analysis of the social act. Topics include socialization, symboling system, social status and social role, personality, small group analysis and research.

SOC 355 Social Movements (3). Development, organization, and function of social movements, especially ideology, leadership, and organization of political, religious, and other types of social movements.

SOC 360 The Family (3). Development and change in the family as a social institution are examined through the use of cross-cultural materials. The development of family expectations and roles, cultural conditioning and learning, emotional interaction, mate selection, and family unity. Attention to changes currently affecting the American family.

SOC 370 Minority Group Problems (3). Examination of the problems, relationships and adjustments of racial, cultural, and ethnic minorities. Emphasis on the nature of these phenomena as they occur in the American social setting.

SOC 375 Sociology of Sports (3). Focuses on social mobility, environmental adjustments, and problems of male and female athletes. Some attention to such factors as race, cultural background of various ethnic groups, and other factors involved in apparent group superiority in some sports.

SOC 380 Industrial Sociology. The human relations of modern business and industrial organization, the interdependence of the technological and social factors and some implications for the adjustment of the individual on the job and in the community.

SOC 385 Political Sociology (3). Sociological analysis of the American political system. Attention given to the concept of power, elitist-pluralist controversy, end-of-ideology debate, and related topics.

SOC 390 Black Nationalism: A Sociological Analysis (3). Analysis of Frazier's concept of the Afro-American community as a nation-within-a-nation, the evolution of national consciousness from domestic to international form, race consciousness, and Black Nationalism.

SOC 392 African Societies and Modernization (3). A sociological treatment of traditional African societies; the constraints of colonization on their development and the transformation of the traditional societies through the processes of industrialization and modernization.

SOC 395 Racism: A Sociological Analysis (3). In-depth analysis of the historical development and perpetuation of racism in the society and examination of the influences of racism on the social institutions within the Black community.

SOC 400 Criminology (3). An examination of the problems of crime and criminals, the making of the criminal, the theories of crime and punishment, machinery employed in dealing with the criminal, penal and correctional institutions and programs of correction. Case studies and visits to institutions serve as aids in enriching understanding.

SOC 410 Juvenile Delinquency (3). Examination of theories of juvenile delinquency, the problems, the making, the punishment, and the correction of the delinquent. Considers the machinery employed in dealing with the delinquent. Visits to the institutions will be made available.

SOC 415 Sociology and the Future (3). Beginning with methodologies for studying the future, this course applies those methodologies to trends concerning population, organization, environmental resources, technology, the mass media, and the military for the purpose of developing and evaluating alternate futures.

SOC 420 Population Problems (3). Growth and change in the composition and distribution of population in the world and in the United States. Basic demographic concepts, theories of population growth and decline, and population policies.

SOC 430 Sociology of Child Development (3). A study of the development of the child with emphasis upon a distinct sociological approach to behavior in relation to the family, play groups, school situations, the community, the large social institutions. Designed to acquaint prospective teachers and majors in sociology with the influences of social institutions upon the child's total development.

SOC 440 Rural Sociology (3). A cross-cultural examination of rural life in the past and the present, focuses on change and processes of change.

SOC 445 The Sociology of Religion (3). Interrelationship of society, culture, and religion.

SOC 451 Introduction to Social Research (3). Study of the theory and methods of social research. Topics include formulating hypotheses, techniques of collecting data, such as interviews, questionnaires, the survey, the computer analysis and interpretation of research data. Prerequisites: SOC 211 and SOC 300.

SOC 452 Senior Project Writing. Designed to orient the student toward the application of sociological knowledge and experience systematically to a specific problem. The project writing must be in one of the three following areas:

Option A—A supervised content analysis involving a critical and systematic examination and survey of literature dealing with one or more social problems. The outline of the problem to be examined must be approved before initiating the analysis. Prerequisites: SOC 300 and SOC 451.

Option B—A supervised internship program in which students conduct social research in conjunction with local community agencies; the purpose is to provide field experience in research related to urban organizations. Prerequisites: SOC 300, 451, and 460.

Option C—A supervised analytical project involving the critical examination of operations and functions of two or more community service agencies, private or public, for dealing with specific and or multiple social problems within the framework of group dynamics of (b) a survey of individual's or groups' attitudes toward a social situation or problem. Research design should be developed and approved before project is initiated. Prerequisites: SOC 300 and SOC 451.

SOC 460 Urban Sociology. (3) Growth of urbanism throughout the world, development of urban areas, internal structure of the city, metropolitan areas, urban fringe and suburban areas, and analysis of social institutions in urban and metropolitan areas.

SOC 465 Complex Organizations. (3) Structure and function of formal organizations and the interrelationships of organizational variables, such as, power, authority, influence, efficiency, hierarchy, and stability.

SOC 470 Social, Sexual and Racial Inequalities. (3) A study of social, sexual, and racial inequalities and their causes and consequences. Topics will include class and ethnic ranking, discrimination, power, status, social mobility, in American society.

SOC 475 Introduction to Medical Sociology. (3) A survey of the major concerns of medical sociology and social psychiatry. Emphasis is placed on such topics as distribution of disease in society, the organization of the health professions, social change and health care, death and dying, stress and disease and social factors affecting and utilization of health services.

SOC 480 Collective Behavior. (3) Analysis of a wide variety of collective groupings and movements; their origin, organization, membership, leadership, and dissolution. Includes analysis of such social phenomena as audiences, publics, crowds, mobs, fads, and fashions, and mass movements such as social unrest and reform.

SOC 490 Sociological Thought. (3) An introductory survey of the development of the field of sociology during the nineteenth and early twentieth centuries. Major emphasis on the intellectual traditions which gave rise to sociology as a separate discipline. Theorists include Comte, Marx, Weber, Durkheim, and others.

SOC 491 Sociological Theory. (3) A survey and analysis of the development of sociological theory in the twentieth century with emphasis on theory in American sociology and theory construction.

SOC 495A, 495B, 495C, and 495D. Independent Study and Readings. (3) Designed to allow students to work independently or in groups on topics of special interest not covered in depth in course offerings. Work may be done in a tutorial relationship with an individual faculty member or in a seminar.

ANTHROPOLOGY (ANTH)

ANTH 210 Human Prehistory. (3) Introduction to the prehistory of man—findings and methods with special attention to the biological and cultural development of man up to the beginning of writing.

ANTH 230U Introduction to Cultural Anthropology. (3) The nature of culture and society. Concepts and theories in terms of social structure, social organization, ecology, change and the role of the individual.

ANTH 310 Comparative Social Structure. (3) Principles of organization of persons into kinship, political, ritual, and other groups. Analysis of rights and duties of persons according to institutional context. Prerequisite: ANTH 230.

ANTH 330 Principles of Cultural Anthropology. (3) Basic concepts and objectives in study of culture. Range of cultural phenomena and approaches to its study. Prerequisite: ANTH 230.

ANTH 340 Religion of Primitive Peoples. Religions of non-literate peoples. Place of religion in their social and cultural systems.

ANTH 360 Archaeology of United States and Canada. (3) Survey of prehistoric peoples north of Mexico from initial occupation to European contact. ANTH 210 and 230 recommended prerequisites.

ANTH 380 Language and Culture. (3) Relationship between linguisitic categories and patterns of culture. Prerequisites: ANTH 230.

ANTH 400 Special Topics. (3) Student-or-faculty generated course. Scope of subject matter to be determined by students and instructor. Prerequisite: Permission of the instructor.

ANTH 410 Indians of the Southwest United States. (3) Survey of Southwestern Indian cultures with emphasis on Pueblos. Lifeways of Southwestern Indians before and after European contact. Prerequisite: ANTH 230 or consent of instructor.

ANTH 440 Fieldwork in Archaeology. (3-9) Practicum work surveying, excavating, processing, and analyzing of data; intensive reading. Prerequisites: ANTH 210, 230, and permission of instructor. May be repeated to a maximum of 9 credit hours.

ANTH 445 Urban Anthropology. Survey of theoretical and methodological issues anthropologists encounter researching cross-cultural urban settlements. Focus is an anthropological perspective and urban problems and planning. Prerequisite: ANTH 230.

ANTH 455 Indians of the Southeast United States. (3) Survey of Southeastern Indian cultures; emphasis on aboriginal adjustment to environment; lifeways of Southeastern American groups prior to Euro-American contact. Prerequisites: ANTH 230 or consent of instructor.

ANTH 460 Method and Theory in American Archaeology. (3) Historical development of New World Archaeology with emphasis on theory and field techniques. Prerequisites: 210 or permission of instructor.

ANTH 498-99. Undergraduate Reading and Research in Anthropology. (3-3) Individual study and research under faculty guidance. Prerequisites: 12 hours of 300-400 level anthropology and permission of instructor.

DEPARTMENT OF SOCIAL WELFARE

Roderic N. Burton, ACSW, LIPSW
ACTING HEAD

The basic objective of the Social Welfare Program at Tennessee State University is to prepare students for employment at the baccalaureate level in the field of social work. The second objective is to contribute to the enrichment of general education by introducing students in our program throughout the University to some of the problems, issues and contemporary developments in social welfare.

These objectives are consistent with the broad needs and interests of the students at Tennessee State University and are met through the curriculum offered through the Social Welfare program.

The curriculum is designed to: 1. Help students understand human behavior, the nature of social problems, and the ability to apply various treatment techniques in working with people who have problems. 2. Give students insight into the basic social work processes, policies and services including the influence of economic, political and social factors. 3. Provide an opportunity to apply theory through educationally focused field practice.

The curriculum in social welfare offers courses of study leading to the Bachelor of Science degree in social welfare.

Requirements for graduation. (1) A student must complete a minimum of 132 semester hours. (2) At least 60 of the semester hours must be in courses on the 300 and 400 level. (3) A minimum of 37 semester hours in Social Welfare content courses.

To fulfill the need for more exposure in social welfare agencies, all students will be required to have a participatory observation experience prior to field placement. During the sophomore year all social welfare majors will observe and participate in two social welfare agencies for a minimum of 10 clock hours. In the junior year, students will complete two written agency profiles. Students participating in a regular Volunteer program may use that experience in lieu of the observation and participation. Both requirements must be met prior to being admitted to field experience.

A student must spend a maximum of 450 clock hours (one semester) in field experience in selected social agencies. The purpose of this experience will provide the student with an opportunity to apply theory to actual practice under supervision and guidance of a qualified practitioner. He/she will be evaluated on the basis of his growth and development in relation to the program's formal educational outcomes. A student must have a cumulative average of at least 2.00 and must have earned the grade of "C" in Social Welfare 320, 330, 340, 350, 360, 380 and 400, before being admitted Field Experience.

Courses in the major field in which a student receives the grade of "D" must be repeated.

CAREER OPPORTUNITIES

Career opportunities include employment at the entry level social work position in public and private agencies including Departments of:

Human Services
Public Health
Mental Health
Mental Retardation
Corrections
Social Security
Social Services in Hospitals
Community Health Centers
Family and Children Services
Public and Private Nursing Homes
Home for the Aged
Day Care Centers
Planned Parenthood Centers
Senior Citizens Centers

COURSES REQUIRED OF ALL MAJORS

Social Welfare 37 Semester Hours

320 Introduction to Social Welfare (3)
330 Human Behavior & Social Environment (2)
340 Social Policy (2)
350I Interventive Methods (3)
350L Interventive Methods Lab (1)
360II Interventive Methods-Organization and Communities (3)
380 Social Work Research (3)
400 Social Work Intervention in Health (3)
410 Field Instruction (10)
420 Field Instruction Seminar (3)
450 Analytical Review of Social Work Literature (3)
490 Senior Seminar (1)

GENERALIST CURRICULUM FOR MAJOR IN SOCIAL WELFARE

FRESHMAN YEAR	Credit Hours Fall	Spring
English 101-102U	3	3
History 201-202U	3	3
Math 111U	4	3
Sociology 211U	3	
Art 133U or Music 131U or Philosophy 201*U		2
Biophysical Science 121-122U 3	3	
Physical Education 11-12 or Air Science 151-152	1	1
Government and Public Affairs 221		3
Computer Literacy CL100U		3
UCOR 100	1	
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
English 211-212	3	3
Speech 220		3
Social Work 320-330	3	2
Economics 211; 212 or Bus. Law 323	3	3
Social Work 340		2
Psychology 201	3	
Physical Education or Air Science 251-252	1	1
Art 133 or Music 131, or Philosophy 201**	2	
Government and Public Affairs 391 or 420		3
	15	17

JUNIOR YEAR	Credit Hours Fall	Spring
Sociology 350, 360	3	3
Psychology 321	3	
Sociology 300	3	
Social Work 350-360	4	3
Social Work 400		3
Social Work 380		3
English 310	3	
Social Welfare Elective		6
	16	18

SENIOR YEAR	Credit Hours Fall	Spring
Sociology 460, 410		6
Social Work 450		3
Electives		9
Social Work 410	10	
Social Work 420	3	
Social Work 490	1	
	14	18

**Students who elect to take philosophy 201 will receive 3 credit hours for the course.

COURSE DESCRIPTIONS

SW 320 Introduction to Social Work (3). This course is designed to give students a historical and current overview of the social welfare system and the field of social work. It proposes to examine basic social work concepts, the social welfare structure, and services within the system.

SW 330 Human Behavior and Social Environment (2). Analyzes the professional process and shows how the psychological and behavioral concepts drawn from the theories can be used by those preparing for the helping professions. It emphasizes understanding human beings as they relate to their social environment, and understanding the human life-cycle and human systems.

SW 340 Social Policy (2). This course is designed to acquaint students with social work policies, the policy making process, and with historical and current issues, trends and values affecting policies in social work. Students will explore and analyze selected historical and contemporary perspectives in the development of social work policy in order to increase understanding current policy-related issues, services and needs.

SW 350 Interventive Methods (3). Interventive Methods is an overview of social casework and group work. It is geared toward developing a conceptual framework for casework and group work practice based on problemsolving, growth-promoting, therapeutic, and educational dimensions. Interviewing skills and techniques will be developed through a laboratory experience. Prerequisites: 320, 330.

SW 350L Interventive Methods Laboratory (Casework-Group Work) (1). This course is designed to provide students with a view of what is involved in problem-solving situations at the beginning level of social work practice through simulated laboratory activities, i.e. role-playing, use of tape recorder, film, dictaphone, etc. Major emphasis is on developing interviewing, recording, and diagnostic skills and techniques in the casework-group work situations. The basic objective is to develop an awareness and familiarize students with the situations. The basic objective is to develop an awareness and familiarize students with the integration of theory and practice. This course is to be taken concurrently with SW 350. Prerequisites: 320, 330.

SW 360 Interventive Methods-Community Organization (3). A course designed to show how the community organizer mobilizes individuals to work together to solve community problems, set priorities, assess community resources, and develop strategies for effecting change to meet community needs. An examination will be made of various techniques utilized by organizers to reach different goals. Prerequisites: 350.

SW 380 Social Work Research (3). This introductory research course allows social work students to gain a theoretical and practical knowledge of the goals of the social work methodology. It is oriented toward teaching the principles of conceptualization, research design, and research proposal writing. In this context students also discover a number of methods and techniques which are available for the implementation of sound research. They are encouraged to develop research proposals centered around realistically conceived, practical problems. Prerequisites: SW 360, Soc. 300.

SW 400 Social Work Intervention in Health (3). This course is designed to acquaint the student with the symptoms, etiology, physical and emotional aspects of acute and chronic diseases, illnesses and disabilities with the development of comprehensive medicine involving the whole person in his milieu. Emphasis will be placed on acquiring knowledge regarding social aspects of illness, utilization of com-

munity resources for the continuation and preventative methods. One hour per week will be devoted to participatory-observation at a health related agency. Prerequisites: 350.

SW 401 Disability and Rehabilitation: Social Work Intervention (3). This course is designed to acquaint students with the organization, legislative provisions and rehabilitation procedures for physically and mentally handicapped adults. Consideration will be given to causes, and nature of various handicaps, diagnosis, treatment, education, training, placement and follow-up. Prerequisites: 350.

SW 410 Field Instruction (10). The purpose of field experience is to provide the student with the opportunity to apply and integrate academic content and to develop skills that meet the requirements for beginning professional social work practice. Supervision in the field will be provided by a qualified practitioner committed to undergraduate social work education. Social work majors at Tennessee State University will be required to spend a maximum of 450 clock hours in an educationally oriented field experience (one semester). Junior and seniors are admitted upon recommendation of their major advisor. Prerequisite: 400.

SW 420 Field Instruction Seminar (3). Gives students in field experience an opportunity to discuss and share agency experiences, and relate social work theory to direct field practice. Discussion in the Seminar moves from the level of personal experience to abstraction. Taken concurrently with 410.

SW 440 Case Work Services for Children and Adolescents (3). This course will provide general knowledge of the basic concepts and principles of casework theory and practice as a method of helping children and adolescents with their social problems. It will acquaint students with the social agencies and the social welfare system and their roles in providing services to children and youth. The course will also increase the student's understanding of the adolescent peer group, family relationships, emotional and physical development and role. Prerequisite: 330, 350.

SW 444 Family Dynamics: Diagnosis and Treatment (3). This course is designed to focus on the family as a dynamic, interacting system interrelated with other systems. It identifies methods generally employed in evaluating and treating the family unit. Selected theories will be applied to a variety of family types and will demonstrate the implementation of these theories in practice. Prerequisite: 330.

SW 446 Intervention in Child Abuse and Neglect (3). This course is designed to identify behaviors common to abusive and neglectful parents. Specific emphasis is placed on the development of interventive skills for working with the families. Knowledge of the court process in child abuse and neglect will be one of the foci. Prerequisite: 330.

SW 448 Child Rearing Practices in Black Families (3). This course will examine the biological, sociological and cultural aspects of Black Families with emphasis on attitudinal and behavior patterns of child care. It will examine the social and environmental system's impact on the Black family's functioning with respect to adequacy of child rearing practices.

SW 450 Analytical Review of Social Work Literature (3). This course is designed to assist the student in developing more adequate knowledge of social work and social science literature and to further develop skills in reading, writing and reporting, using critical and analytical methods. Prerequisites: 380.

SW 460 Ethnic and Minority Concern in Social Work (2). The practice of social work with ethnic minorities will be the focus of this course. Political, economic and social issues will be examined as well as social policy and social welfare services.

SW 470 Social Gerontology (3). A course designed to examine the aging process, and its impact upon the individual, the family, and society. Emphasis is placed on the physical, psychological, and sociological aspects of aging. An interdisciplinary approach will be used in dealing with these aspects to enhance and enrich the understanding of the life process. Prerequisites: 330.

SW 472 Psychosocial Care of the Aged (3). An analysis of the psychosocial needs of older adults, whether residing in an institution or in the community. Emphasis will be placed on physical, psychological, and social factors related to health care for older people. Institutional care and alternatives to institutional care will also be considered: Prerequisite: 470.

SW 476 Environmental Aspect of Aging (3),. This course is designed to consider the impact of differing social and physical environments on aging individuals, and older adults. Emphasis will be placed on a consideration of independent living, semi-sheltered living environments, institutionalization and deinstitutionalization, age homogenerous versus age-mixed environments, privacy migration, and retirement communities.

SW 490 Senior Seminar (1). This course is designed to: (1) initiate areas of interest through discussion; (2) emphasize new trends and contributions to the field; and (3) to familiarize students with the Civil Service Merit Examinations and other techniques for gaining employment.

SW 495 Readings and Research (1-3). Independent study and research under faculty guidance for students who desire to do special projects in gerontology.

THE SCHOOL OF BUSINESS

Tilden Curry, Ph.D., Acting Dean

Mission

The basic mission of the School of Business, as part of a major urban university is 1) to offer a quality program of instruction at the undergraduate and graduate levels in the appropriate fields of study applicable to a sound business education, 2) to provide various forms of technical assistance to members of private firms, public and non-profit agencies, and the general public within particular areas of faculty and staff expertise, and 3) to expand the knowledge base in the business disciplines through scholarly research efforts of the faculty, with emphasis on applied research directed at prevailing problems and issues.

The mission is to be pursued with appreciation of the needs and obligations of a public business school located in the heart of a major metropolitan area that serves as a center of commerce and industry and the state capital. It calls for a school that serves students from a broad spectrum of society, multiracial, varied economic levels, the old and the young, and large numbers representing working adults who pursue their education on a part-time basis. It is, also, to fulfill the need to act as a forum for scholarly inquiry into and public debate of a broad range of issues related to business.

ORGANIZATION

The School of Business is organized into four departments: Accounting and Business Law, Business Administration, Economics and Finance, and Business Education and Office Management. Bachelor of Business Administration degrees are offered in Accounting, Business Administration, Business Education, Economics and Finance, and Office Management. In addition, an Associate of Science Degree program is available for students who wish to prepare for a career as an administrative assistant or an executive secretary with paralegal responsibilities.

STUDENT SERVICES & ORGANIZATIONS

When students are admitted to the School, each student is assigned to a faculty member who serves as the student's major advisor until completion of the student's degree objective.

A variety of experiential activities such as cooperative education, internships, and career seminars are provided to guide the students toward careers in which they can perform successfully.

The following business student organizations are available to business students: Delta Mu Delta National Honor Society in Business Administration; Pi Omega Pi National Business Teacher Education Honor Society; Phi Gamma Nu, National Professional Society for Women in Business; Phi Beta Lambda, National Business Fraternity; The National Collegiate Association for Secretaries; National Student Business League; The American Society for Personnel Administration; The TSU Marketing Group; and The Accounting Club.

Scholarships

A limited number of scholarships are available for students who achieve high academic standing. Some are sponsored by business and industry—such as the American Institute of Certified Public Accountants scholarship.
The Lewis Ross Holland Scholarship is awarded annually to a full-time junior business major who has outstanding scholarship and leadership records.

BACHELOR OF BUSINESS ADMINISTRATION

Admission to The School of Business

Students pursuing the BBA degree must make application to the School of Business through the Office of Undergraduate Studies. Students are to complete lower division (freshman and sophomore) courses before being granted admission to the School of Business.

1. APPLICATION should be made when the student has completed a minimum of 53 hours of lower division courses with a minimum cumulative average of C. (ADMISSION will be granted when the student has completed between 66 and 70 hours of lower division course work with a minimum average of C.)

2. Applicants must have a **C** average in the 24 hours of lower division business core courses; MG 101, QM 201; EC 211, 212; AC 211, 212; MIS 215; and BE 235.

Admission of Transfer Students. Transcripts of transfer students will be evaluated to determine if their performance satisfies the above criteria. Students who do not meet criteria will be advised what requirements must be met for admission.

Credit for junior and senior level business courses being transferred will only be allowed where the student's classification and cumulative average met School of Business admission requirements at the time the courses were taken.

Credit Transferred from Other Institutions

A. The specific credit for work done at other institutions which will apply toward the degrees of the School of Business is determined by the Dean of the School through the Office of Undergraduate Studies of the School. The amount of such transfer credit shall not in any case exceed that allowed by the Dean of Admissions of the University. Allowance of transfer credit by the Dean of Admissions does not mean necessarily that all of such credit will be accepted toward a degree in the School of Business. The amount of transfer credit that may be applied toward a degree in the School of Business will be indicated and controlled by an evaluation of such transfer credits prepared through the Office of Undergraduate Studies.

Transfer students from institutions not accredited by the regional accrediting agency, and from community colleges, may be required to validate proficiency in subject areas.

B. A student who has once enrolled in the School of Business must obtain prior written approval of the Department Head to take course work for credit with any other institution if the student's intention is to apply such work toward a degree in the School of Business. Failure to obtain approval may prevent the acceptance of such credits by this school.

C. Course credit transferred from junior colleges shall apply primarily in the freshman-sophomore years of the degree program.

Other course work must be validated through such means as proficiency tests administered by respective departments.

Credit Hours Required for Graduation

Credit hours required for the Bachelor of Business Administration degree total 132 semester hours. A detailed program is found in a subsequent section.

For students age 25 or older at the time of initial enrollment, the four credits in physical education will be removed from the list of degree requirements. Thus, the minimum credits required for a baccalaureate degree for this latter group of students are 128 hours semester hours.

Specific School Graduation Requirements

1. Students must maintain a C average in core business courses and receive no more than two D's in upper division business courses. Failed courses are to be repeated immediately. Grades earned in all business courses will be included in determining eligibility for graduation.
2. Complete the final 30 semester hours of course work in residence.
3. Take tests designated by the School and respective departments.
4. All electives (Business and Non-Business) in the Junior and Senior years, must be 300 and 400 level courses.

REQUIREMENTS FOR THE BACHELOR OF BUSINESS ADMINISTRATION DEGREE (BBA)

The Academic program for the BBA degree is outlined, year by year, below. The freshman and sophomore years are devoted primarily to general education. The objective is to provide a sound foundation in the humanities, natural and behavioral sciences, and mathematics before studies in the professional areas are undertaken. General education requirements are the same for all majors except those in Business Education. Students intending to major in Business Education should contact an adviser in the Business Education Department.

To satisfy the requirements for a Bachelor's Degree in Business, the student must complete the following:

General Education Requirements	Semester Hours
Orientation	1
English 101-102, Freshman English	6
American History, 201-202	6
Science 121-122, Bio-physical Science[1]	6
Math 111, College Algebra	3
Math 113, Basic Calculus	3
Economics 211-212, Principles of Economics	6
English 211-212, Literature	6
Humanities	4
MIS 215	3
Non-Business Electives	15
PE/AERO/BAND/Health	4
	63

Business Core Requirements

MG 101	3
AC 211-212	6
BE 235, 315	6
BL 300	3
QM 201-	3
FN 330	3
MG 301	3
MG 302	3
MK 301	3
MG 450	3
MIS 323	3
Business Electives, Upper Division	6
Major Requirements	24
Total hours	132

FOOTNOTES

[1]Business Education majors must complete 8 hours of Science. Other business majors may select any six hours in the natural or physical sciences.

MINORS IN BUSINESS

Students who desire to pursue a minor in business should select 18 to 21 hours of business courses which meet their objectives for taking the minor. If courses selected have prerequisites, these must be satisfied. Only juniors and seniors may enroll in 300 or 400 level business courses. Suggested minors in all majors offered in the School of Business are available from the Office of Undergraduate Studies. Below is a suggested minor in Business Administration:

Accounting 211-212	3-6
MIS 215	3
MG 301	3
MK 301	3
MG 403 or OM 430	3
BE 315 *or* BE 235	3
MG 499	3

Students who anticipate pursuing the MBA as a part of their professional preparation, may wish to take the following courses; which are prerequisites for the MBA:

Accounting Principles	6	(AC 211, 212)
Economic Principles	6	(EC 211, 212)
Quantitative Methods	6	(QM 201, 202)
Computer Science	3	(MG 215)
Marketing Principles	3	(MK 301)
Finance	3	(FN 330)

DEPARTMENT OF ACCOUNTING AND BUSINESS LAW

Charles Rolen, Ph.D., (CPA) Head

The curriculum in accounting is designed to provide students with general education requirements; core requirements in the various disciplines of business; and specialized and professional courses in the fields of general business, government, private accounting, and public accounting. Because of the scope of accounting and its breadth of application, majors may find opportunities in various agencies of local, state, and federal government; public and private accounting; teaching; tax and corporate law; and positions of management in industry. Students graduating with a major in accounting automatically have a minor in general business and have completed the ACADEMIC requirement to sit for several professional examinations including: Certified Public Accountant (CPA), Certificate in Management Accounting (CMA), Public Accountant (PA), and Certified Internal Auditor (CIA).

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
MATH 111-113	3	3
SCIENCE 121-122	3	3
HISTORY 201-202	3	3
PE/AERO/BAND/HEALTH	1	1
Non-Business Electives		3
MG 101	3	
Orientation, 100U	1	
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
AC 211-212	3	3
MIS 215		3
EC 211-212	3	3
ENG 211-212	3	3
HUMANITIES	2	2
PE/AERO/BAND/HEALTH	1	1
QM 201	3	
BE 235	3	
Non-Business Elective		3
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
BE 315	3	
FN 330		3
MIS 323	3	
MG 301	3	
MK 301	3	
MG 302		3
AC 311-312	3	3
AC 314		3
Non-Business Electives	3	3
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
AC 413	3	
AC 420		3
AC 411	3	
AC ELECT		3
BL 300	3	
BL 323 or 324		3
BUS ELECT (UPPER DIV)	3	3
MG 450		3
Non-Business Electives	3	
	15	15

DEPARTMENT OF BUSINESS ADMINISTRATION

John Reynolds, Ph.D., Head

The Department of Business Administration offers concentrations in General Business Administration, Management, Marketing, Management Information Systems, and Real Estate and Urban Development. The Department suggests courses for each of these concentrations may not be available each semester. Students who are near graduation should consult department heads on availability of courses and on approved substitutions.

General Business Administration Concentration

This concentration is designed for students who prefer to acquire broad undergraduate training in business, rather than specializing in a specific area.

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
MATH 111-113	3	3
SCIENCE 121-122	3	3
HISTORY 201-202	3	3
PE/AERO/BAND/HEALTH	1	1
Non-Business Electives		3
MG 101	3	
Orientation 100U	1	
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
AC 211-212	3	3
MIS 215		3
EC 211-212	3	3
ENG 211-212	3	3
HUMANITIES	2	2
PE/AERO/BAND/HEALTH	1	1
QM 201	3	
BE 235	3	
Non-Business Elective		3
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
BE 315	3	
BL 300	3	
MG 301	3	
MK 301, 302	3	3
Business Elect.	3	3
Acctg. Elect.	3	
Non-Bus. Elec	3	3
MIS 323		3
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
FN 330	3	
MG 302	3	
EC or FN Elec		3
Bus. Elec.	9	6
Non. Bus. Elec.		3
MG 450		3
	15	15

Business Administration Majors: Management Concentration

The Management program provides students with the opportunity for professional preparation applicable to the management of private and public sector organizations. Examples of employment areas are: administrative management, personnel administration, industrial relations, production management, and other assignments in small, medium, and large businesses, as well as government agencies, foundations, hospitals, and other service organizations.

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
MATH 111-113	3	3
SCIENCE 121-122	3	3
HISTORY 201-202	3	3
PE/AERO/BAND/HEALTH	1	1
Non-Business Electives		3
MG 101	3	
Orientation 100U	1	
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
AC 211-212	3	3
MIS 215		3
EC 211-212	3	3
ENG 211-212	3	3
PE/AERO/BAND/HEALTH	1	1
QM 201	3	
Non-Business Elective		3
BE 235	3	
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
BE 315	3	
BL 300	3	
MG 301	3	
MK 301, 302	3	3
MIS 323	3	
Bus. Elect.		6
Acctg. Elect.	3	
Non. Bus. Elec.		3
MG Elect.		3
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
EC or FN Elec.		3
FN 330	3	
MG Elect.	3	6
MG 302	3	
MG 404 or MG 405	3	
MG 450		3
Non. Bus. Elec	3	3
	15	15

Business Administration Major Management Information Systems Concentration

The Management Information Systems (MIS) concentration provides technical computer skills for students desiring a career working with computer applications in business. The degree leads to employment in data processing centers as a programmer, analyst or as a technician with a centralized computer center and a major corporate division. The course of study provides basic business skills plus MIS skills emphasizing systems analysis, design, and programming on-line systems in COBOL.

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
MATH 111-113	3	3
SCIENCE 121-122	3	3
HISTORY 201-202	3	3
PE/AERO/BAND/HEALTH	1	1
Non-Business Electives		3
MG 101	3	
Orientation 100U	1	
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
AC 211-212	3	3
MG 215		3
EC 211-212	3	3
ENG 211-212	3	3
HUMANITIES	2	2
PE/AERO/BAND/HEALTH	1	1
QM 201	3	
BE 235	3	
Non-Business Elective		3
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
MIS 315-316	3	3
MIS 323	3	
MG 301-302	3	3
MIS 423		3
BE 315	3	
MK 301		3
BL 300		3
Non-Business Elective	3	
	15	15

SENIOR YEAR	Credit Hours Fall	Spring
MIS 415-416	3	3
MIS 481	3	
MIS Elective*	3	3
Business Elective	3	3
FN 330	3	
MG 450		3
Non-Business Elective	3	3
	18	15

*Choose MIS electives from MIS 424; 425, 481, or 300/400 level Computer Science Courses

Business Administration Majors: Marketing Concentration

Marketing includes all activities concerned with ascertaining and satisfying the needs and desires of individual and organizational buyers/consumers. It is, consequently, a function of prime importance in all forms of organizations. The marketing program is designed to facilitate entry into marketing and to facilitate long-term professional advancement. Course emphasis is placed on marketing management.

Positions in marketing offer the opportunity for specialization or diversification. Those who choose marketing as a career will find themselves involved in product development and improvement, consumer research, pricing, promotion, sales, and distribution. Professional careers are open to marketing majors in advertising firms, research organizations, retailing and wholesaling firms, and other service organizations, as well as a wide range of manufacturing and other industries devoted to supply goods or services to meet the needs of the consumer/buyer.

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 102-102	3	3
MATH 111-113	3	3
SCIENCE 121-122	3	3
HISTORY 201-202	3	3
PE/AERO/BAND/HEALTH	1	1
Non-Business Electives		3
MG 101	3	
Orientation 100U	1	
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
AC 211-212	3	3
MIS 215		3
EC 211-212	3	3
ENG 211-212	3	3
PE/AERO/BAND/HEALTH	1	1
HUMANITIES	2	2
QM 201	3	
Non-Business Elective		3
BE 235	3	
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
BE 315	3	
MG 301	3	
BL 300	3	
MK 301, 302	3	3
MIS 323	3	
Bus. Elective		3
Marketing Elect.		3
Non-Bus. Elect		6
Accounting Elect	3	
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
FN 330	3	
MG 302	3	
Econ Elect.		3
MK 455		3
MK Electives	3	6
MG 450		3
Business Elect	3	
Non-Bus. Elect	3	
	15	15

Business Administration Majors: Real Estate and Urban Development Concentration

The curriculum for the concentration in Real Estate and Urban Development is designed for those students who are interested in fields concerning the allocation of urban land resources. Accordingly, students are trained for employment in both the private and public sectors. Fields of study include real estate brokerage, appraisal, law, finance, marketing, property management, land-use planning and development, and public and private policies applicable to real estate and urban development. The curriculum is structured to provide students with an understanding of (1) the specific activities involved in urban land development, (2) the forms of economics, social, physical, and legal services that arise from land use activities, (3) the optimum distribution of residential, commercial, industrial and other specialized land uses, (4) the activities in which real estate businessmen are engaged, and (5) public and private policies and actions that are designed to improve our urban environment.

A number of electives are available to enable each student to pursue a challenging area of study within individual interest and educational background.

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
MATH 111-113	3	3
SCIENCE 121-122	3	3
HISTORY 201-202	3	3
PE/AERO/BAND/HEALTH	1	1
Non-Business Elective		3
MG 101	3	
Orientation 100U	1	
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
AC 211-212	3	3
MIS 215		3
EC 211-212	3	3
ENG 211-212	3	3
PE/AERO/BAND/HEALTH	1	1
HUMANITIES	2	2
QM 201	3	
BE 235	3	
Non-Business Elective		3
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
BE 315	3	
BL 300	3	
MG 301	3	
MK 301, 302	3	3
RE 313		3
MIS 323	3	
Acctg. Elec	3	
Non. Bus. Elec		6
Bus. Elec.		3
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
FN 330	3	
MG 302	3	
RE 320	3	
EC or FN Elec		3
Bus. Elec		3
RE Elec.	6	3
MG 450		3
Non. Bus. Elec		3
	15	15

DEPARTMENT OF ECONOMICS AND FINANCE

G. Bruce Hartmann, Ph.D., Head

The Department of Economics and Finance offers a program of instruction for those who expect to pursue careers in either economics, finance, or insurance and provides service courses for business and non-business majors. Students majoring in Economics and Finance must complete, in addition to the core and general requirements of the School of Business, 24 hours in Economics and Finance.

The program is aimed at helping students acquire: (1) an understanding of the objectives, functions, and institutions of a private enterprise economy, (2) a fundamental and rigorous tool kit for analysis, and (3) the ability to integrate economic and finance principles with various areas of Business Administration.

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
MATH 111-113	3	3
SCIENCE 121-122	3	3
HISTORY 201-202	3	3
PE/AERO/BAND/HEALTH	1	1
Non-Business Elective	3	3
Orientation 100U	1	
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
AC 211-212	3	3
MIS 215		3
EC 211-212	3	3
ENG 211-212	3	3
PE/AERO/BAND/HEALTH	1	1
HUMANITIES	2	2
QM 201-202	3	3
BE 235	3	
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
EC 311	3	
EC 312		3
FN 340		3
BE 315		3
FN 330	3	
MIS 323	3	
MG 301	3	
MK 301	3	
MG 302		3
Non-Business Electives	3	3
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
FN 360	3	
FINANCE ELECTIVE	3	3
QM 300	3	
ECONOMICS ELECTIVE		3
BL 300	3	
MG 450		3
BUSINESS ELECTIVE-	3	3
Non-Business Elective		3
	15	15

DEPARTMENT OF BUSINESS EDUCATION & OFFICE MANAGEMENT

Augustus Bankhead, Ed.D., Head

The general objectives of a major in business education or in office management are: (1) to provide instruction in methods, techniques, and principles underlying modern business as a foundation for business careers; (2) to equip students with a knowledge and understanding of the changing and developing character of our economic society and the responsibility incumbent upon educated men and women engaged in economic activity; (3) to offer training in those phases of business that concern every office worker; (4) to train students as office administrators and as teachers of business subjects; (5) to promote the general objectives of education; (6) to offer exploratory and vocational information and experience in business; (7) to assist students in developing an appreciation of the place of business to society; (8) to meet individual needs of students who enter the University to prepare for positions in business organizations.

Students majoring in Business Education may be certified to teach business courses in high schools or junior high schools. Students may select a primary teaching cluster in Basic Business, Accounting, Data Processing, or Office Technology. An applicant for a teaching certificate shall present a minimum of 30 semester hours of business core courses, including:

Accounting	6
Economics	6
Business Law	2
Business Communication	2
Principles of Business Mathematics	2
Typewriting/Keyboard.	2
Introduction to Data Processing	2
Introduction to Bus.	2

and six hours selected from marketing, management, statistics, or finance (two fields must be represented.)

Instruction in Principles of Business Education and Methods of Teaching Business subjects must cover the areas in which certification is being sought.

Applicants meeting the above requirements may secure Cluster Endorsements by completion of the additional hours indicated below:

BASIC BUSINESS CLUSTER
4 semester hours (2 of business law and an additional 2 hours of business law or business principles; 2 hours of economics or finance; 2 hours of principles of consumer economics.

ACCOUNTING CLUSTER
4 semester hours of accounting.

DATA PROCESSING CLUSTER
6 semester hours of data processing to include at least one (1) programming language; 2 semester hours of college algebra or higher mathematics.

OFFICE TECHNOLOGY CLUSTER
4 semester hours of typewriting; 4 hours of word processing including instruction in word processing concepts and applications, machine transcription, and office machines; 4 hours of records management and/or office procedures; 6 semester hours of shorthand, including 2 hours of advanced shorthand, OR, 6 hours of office management and/or office system

Business Education majors should plan their individual curriculums with the department head beginning in their freshman year. A typical certification pattern is included here and may be adapted to all certification clusters.

BUSINESS EDUCATION CERTIFICATION CURRICULUM PATTERN

FRESHMAN YEAR	Credit Hours Fall	Spring
Ori 100U (1) Fall		
ENG101-102	3	3
MATH 111-113	3	3
HIST 201-202	3	3
SCI./BIOL/PHYSCL. GEOG	4	4
MUS 131		2
MG 101	3	
ART 133		2
P.E.		1
	16	18

SOPHOMORE YEAR	CREDIT HOURS Fall	Spring
ENG 211-212	3	3
AC 211-212	3	3
EC 211-212	3	3
BE 172, BE 235	3	3
QM 201-202	3	3
Hlth/PE	3	
MIS 215		3
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
EDUC 201; PSY 242	3	3
BE 315	3	
BL 300		3
OM 211	3	
MG 301, 302	3	3
MIS 323, MK 301	3	3
OM 330-331	3	3
FN 330	3	
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
EDUC 301, 491	3	3
EDUC 387, 465	6	
PSY 312	3	
MG 450	3	
BE 300		2
BE 371		3
BE 472		9
ECCD 463 or Soc 360	3	
	18	17

OFFICE MANAGEMENT

Students majoring in Office Management Plan to obtain supervisory, administrative, managerial, or executive secretarial positions in offices. The curriculum is designed to provide students with knowledge and skills essential for leadership positions in the office and an appreciation of administrative services as a profession essential to the functioning of our economy.

FRESHMAN YEAR	Credit Hours Fall	Spring
ORI. 100U 1 (Fall)		
ENG 101-102	3	3
HIST 201-202	3	3
MATH 111-113	3	3
MG 101	3	
OM 221	3	
ART 133	2	
MUS 131		2
HEA 151 or P.E.		2
BE 172		3
	18	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
SCI 122-122	3	3
EC 211-212	3	3
QM 201-202	3	3
AC 211-212	3	3
MIS 215	3	
BE 235		3
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
BL 300	3	
BE 315	3	
OM 330, 331	3	3
MG 301-302	3	3
MK 301	3	
HEA 306		3
MIS 323		3
OM 208-307	3	3
Electives (300-400)		3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
OM 430	3	
MG 403, 450	3	3
PSY 350 or SOC 350	3	
OM 441, 442		6
FN 330	3	
Electives (300-400)	6	
	15	15

THE ASSOCIATE OF SCIENCE DEGREE PROGRAM

The Associate of Science Degree program is a two-year curriculum for students who plan to become administrative assistants or executive legal secretaries. Credits earned in this program are transferable to B.B.A. programs in teacher education or office management. Students planning to transfer to a four-year program should plan their schedules with an advisor who will acquaint them with the sequence of courses in the program to which they will be transferring.

Students who already have skills in such areas as typewriting, shorthand, word processing, or data processing may take proficiency tests for advanced placement—it will be necessary for these students to take sufficient number of electives to make up credits for courses in which they took proficiency tests.

ADMINISTRATIVE ASSISTANT

FIRST YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
OM 121-122	3	3
OM 207-208	3	3
MG 101	3	
BE 172	3	
PSY 201		3
OM 222		3
SPCH 230		3
	15	18

SECOND YEAR	Credit Hours Fall	Spring
OM 221, OM 215	3	3
OM 307	3	
AC 211	3	
OM 330-331	3	3
BE 315		3
OM 430, OM 441	3	3
Elective	3	3
	18	15

LEGAL EXECUTIVE SECRETARY

FIRST YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
OM 121-122	3	3
OM 207-208	3	3
MG 101	3	
BE 172	3	
OM 222		3
OM 210		3
PSY 201		3
	15	18

SECOND YEAR	Credit Hours Fall	Spring
SPCh 230	3	
OM 221	3	
AC 211	3	
OM 211, OM 215	3	3
OM 330-331	3	3
BE 315		3
OM 430, OM 441	3	3
Elective		3
	18	15

MINORS IN OFFICE MANAGEMENT

The Department of Business Education and Office Management offers an Office Systems and Management minor and a Secretarial-Stenography minor. Each minor requires 18 to 21 hours—credits required will vary according to the student's background in typewriting or shorthand skills.

Office Systems and Management Minor

Keyboarding for Data Entry/Beginning Typewriting (OM 121) 1-3
Typewritten Communication or Intermediate Typewriting, (OM 122 or OM 340) 3
Business Communication (BE 315) 3
Office Systems and Procedures (OM 330-331) 3-6
Office Management (OM 430) 3
Seminar in Administrative Communication (BE 460) 3
Report Writing (BE 235) 3

Secretarial-Stenography Minor

*Typewriting (OM 121-122-221) 3-6
**Shorthand (OM 207-208-307) 3-6
Word Processing (OM 222) 3
Business Communication (BE 315) 3
Office Systems and Procedures (OM 330-331) 3-6
Office Management or Office Internship (OM 430, 441) 3

*Students with basic skills in these areas will be placed in intermediate or advanced courses as needed. They will earn remaining hours by selecting courses from among those listed.
**Students with skill in Machine Shorthand may substitute Machine Shorthand for manual shorthand.

ELIGIBILITY OF CERTIFIED PROFESSIONAL SECRETARIES FOR COURSE CREDIT

Credit is available in certain courses at Tennessee State University for the passing of the complete CPS examination. Before this credit can be granted, the CPS must have already received credit in at least 9 hours at Tennessee State University. Credit for the following courses may be recorded with a grade of "B" if credit has not already been received for such courses:

Accounting 211 3
Administrative Office Management OM 430 3
Business Law 323 3
Business Principles MG 101 3
Economics 211 3
Executive Office Procedures and Systems OM 330 3
Typewriting OM 121-122 6
TOTAL HOURS 24

Upon receipt of formal application and payment of appropriate fee, verification will be made of CPS status and credit already received from Tennessee State University. Credit will then be recorded.

This acceptance of the CPS examination is subject to change (1) whenever the content of the CPS examination is revised so that it does not correspond with the content of the course now designated for credit or (2) if the courses at Tennessee State University are revised substantially so as to achieve the same result.

To make an "A" in any course, the CPS would be required to take the credit examination, which is available for a given course, and achieve the "A" standard. If the "A" standard is not reached, the "B" grade would be recorded.

COURSE DESCRIPTIONS
ACCOUNTING (AC)

AC 211, 212 Principles of Accounting (3-3). Basic concepts of accounting, the accounting cycle, accounting systems including ethical considerations, and components of the financial statements. Continues with an analysis of financial data, forms of business organizations in our legal environment, departmental accounting, manufacturing, basic cost accounting, cost-volume-profit analysis, and managerial decisions.

AC 311, 312 Intermediate Accounting (3-3). Broad theoretical structure of accounting including underlying environmental assumptions, expanded review of the accounting cycle and components of the financial statement, and future and present value concepts. Continues with a discussion of corporate capital structure, special problem areas (e.g., incomplete data, pensions, leases, and price-level accounting), and in-depth analysis of financial statements. Prerequisite: AC 212.

AC 314 Introduction to Cost Accounting (3). Cost behavior and budgeting concepts, and system design and manufacturing cost systems including job order and process cost. Prerequisite: AC 212.

AC 315 Management Cost Accounting (3). Continuation of AC 314, standard cost, budgets, analysis of cost variances for managerial purposes, direct costing and cost-volume-profit analysis. Prerequisite: AC 314.

AC 317 Managerial Accounting (3). Interpretation and use of accounting data by management in planning, controlling, and decision making for business activities. CREDIT NOT ALLOWED ON ACCOUNTING MAJOR. Prerequisite: AC 212.

AC 400 Advanced Accounting (3). Theory and problems in partnership formation operation, and dissolution, joint ventures, installment sales, consignments, the use of acturial science tables in accounting, government accounting. Prerequisite: AC 312.

AC 401 Consolidating Interrelated Business Entities (3). Principles and techniques of consolidated financial statements: foreign branches and subsidiaries. Prerequisite: AC 312.

AC 403 Institutional Accounting (3). Accounting theory and practice applicable to institutions, municipalities, states and local units of government, organizations, fiscal procedures, budgetary control, classification and uses of funds, auditing financial statements and reports. Prerequisite: AC 212.

AC 411 Federal Income Tax Accounting (3). Determination of taxable income, and other aspects of tax accounting are emphasized. Particular attention is given to preparation of federal income tax return for individuals. Research methodology is also introduced. Prerequisite: AC 212 or consent of Instructor.

AC 412 Advanced Federal Income Tax Accounting (3). Emphasis is placed on corporation, partnership, estate and trust tax returns. Consideration is also given to gift taxes, as well as research. Prerequisite: AC 411 or consent of Instructor.

AC 413 Theory and Practice of Auditing (3). Theory and principles of audit practice and procedure in verifying accounts and supplementary data, the preparation of findings and reports in conformance with the purpose of the audit, illustrative auditor's report and the liability of an auditor. Prerequisite: AC 312.

AC 415 Accounting Systems (3). Principles underlying the establishment of complete accounting systems and the application of such principles to typical business organizations. Special emphasis on cost control. Prerequisite: AC 311, MG 323 and AC 314.

AC 420 Accounting Theory (3). A study of the propositions, axioms, theorems, controversial accounting concepts, authoritative statements, and research studies of professional organizations. Prerquisite: AC 311.

BUSINESS LAW (BL)

BL 300 Legal Environment of Business (3). A study of the legal aspects of the business environment and the legal rights and potential liabilities of businessmen. The presentation of law as an expanding social and political institution in the environment of business. Includes the development and nature of the legal system; business crimes; the law of torts; constitutional limitations on regulatory powers; legislative, judicial, and administrative control of business activity through tax laws, antitrust laws, laws of employment, labor laws, and consumer and debtor protection laws.

BL 323 Business Law I (3). A study of the legal rights and potential liabilities of businessmen, includes an introduction to the nature of the legal system; the basic law of contracts. Uniform Commercial Code, sales, secured transactions, and bankruptcy. Prerequisite: Junior standing or consent of Instructor.

BL 324 Business Law II (3). A study of the legal rights and potential liabilities of businessmen, includes the basic legal principles of agency; partnerships; corporations and securities; personal property and bailment; real property and environmental controls; U.C.C. and commercial paper. Prerequisite: Business Law 323 or consent of Instructor.

BL 420 Personal Law (3). Fundamental principles of American and Tennessee law analyzed through case study of the law's application to the individual. Student participation required in examining typical legal problems associated with the family, home and automobile ownership, negligence, and employment, death, taxation and consumerism.

BL 430 Environmental and Land Law (3). A survey of federal, state, and local laws on conservation and regulation of environmental and land use matters. Includes an introductory constitutional framework of environmental law and market forces, politics and administration of such laws. Prerequisite: Junior standing.

BUSINESS EDUCATION (BE)

BE 172 Mathematics of Finance (3). The application of the fundamentals of mathematics to business problems with the aid of calculators. Emphasis on problems involving discounts, simple and compound interest, insurance and payroll, etc.

BE 235 Report Writing (3). Designed to help students to develop a clear, concise and correct writing style: to help students collect, analyze, organize, interpret and present information to solve business problems.

BE 300 Principles and Philosophy of Vocational Business Education (2). A study of the historical background, philosophy, objectives, principles, problems, and trends in vocational business education. Prerequisite: Admission to Teacher Education Program.

BE 315 Business Communications (3). Study of principles, practices, and mechanics of writing in modern business, and the ability to compose and edit business correspondence; Managerial aspects of oral and written communication. Factors affecting international communication in business.

BE 371 Systems, Methods, and Procedures for Teaching Business Subjects (3). Strategies for designing procedures and directing learning in business subjects. Prerequisite: Admission to the Teacher Education Program. Field Experience required.

BE 472 Student Teaching (9). Actual classroom experience in secondary schools under the charge of expert teachers in cooperating schools. Prerequisite: All methods and professional core courses.

ECONOMICS (EC)

EC 211 Principles of Economics I (3). Methodology of economics, fundamentals of macroeconomics, fiscal policy, and fundamentals of monetary policy. Prerequisite: Math 111.

EC 212 Principles of Economics II (3). Economic growth, and microeconomics, some domestic and international applications of economics and comparative economic systems. Prerequisite: EC 211.

EC 221 Survey of Economics (3) (NON-BUSINESS MAJORS ONLY) Fundamentals of macro and micro economics, income distribution economics of energy, international trade, and international finance.

EC 311 Intermediate Microeconomic Theory (3). The price system and allocation of resources; economic analysis of demand and production. Prerequisite: EC 212.

EC 312 Intermediate Macroeconomic Theory (3). Aggregate demand, aggregate supply and equilibrium level of employment; the price level, inflation and deflation. Prerequisite: EC 212.

EC 320 Money and Banking (3). Nature and functions of money; analysis of monetary systems; money creating role of commercial banks and the Federal Reserve System; determinants of money supply and demand; monetary theory and policy. Prerequisite: EC 212.

EC 330 Principles of Labor Economics (3). A study of the labor market: American labor movement; union history, structure and philosophy; labor problem analysis; industrial disputes and labor legislation. Prerequisite: EC 212.

EC 335 Economic Analysis and Management in Construction (3). This survey course examines the management, economic and financial aspects of construction and construction contracts. Topics covered include the construction management concept, investment project financing and control, organization and role of record keeping in managing construction. Network analysis—CPM, PERT and the Cyclone System—provides the framework for discussing these topics. Prerequisite: By permission of the instructor: Junior level students with backgrounds in business administration, engineering, architecture and accounting are particularly welcome.

EC 410 International Economics (3). Introduction to the tools and techniques of international economic analysis concerning the basic theory of free trade, tariffs and commercial policy as well as international monetary analysis. Prerequisite: EC 212.

EC 420 Government and Business (3). The relation of government to business in a competitive economy; prevention of monopoly and concentration through the antitrust laws; patent policy; alternatives to competition; government control and public ownership. Prerequisite: EC 212.

EC 440 Consumer Economics (3). Designed to acquaint the student with the character and significance of the factors which determine and govern consumption, particularly as they are related to the prosperity and stability of the economic system. Prerequisite: EC 212.

EC 441 Labor Legislation (3). The economic background and effects of governmental regulation on labor relations and efforts to provide economic security. Emphasis on the National Labor Relations Act, Fair Labor Standards Act, Social Security Act, Workmen's Compensation laws, and related matters. Prerequisite: EC 212.

EC 442 Collective Bargaining (3). Organization of labor management for collective bargaining, with emphasis on the private sector. Study of subject matter and procedure for collective bargaining under the National Labor Relations Act as amended and similar legislation. Prerequisite: EC 212 (same as MG 419).

EC 451 Public Finance (3). Survey of institutions and theories of government finance. Effects of public expenditures; functions of public revenues; form of taxation; tax criteria; determination of tax policy; public borrowing; debt management; fiscal policy. Prerequisite: EC 212.

EC 452 Urban Economics (3). Urban history, location theory, city growth, and urban problems. Prerequisite: EC 212.

EC 461 History of Economic Thought (3). A review of the development of economic throught, tools of analysis and economics as a social science together with an analysis of the social-economic conditions which influenced this development. Period covered: 1776 through 1936. Prerequisite: EC 212.

EC 462 Comparative Economic Systems (3). The study and theories underlying capitalism, fascism, socialism, communism, and other economic systems. Prerequisite: EC 212.

EC 470 Managerial Economics (3). Application of economic theory to business decision making, emphasis on profit objectives, measurement and forecasting demand and costs and capital budgeting. Prerequisite: EC 212 and senior standing.

EC 480 Current Economic Problems (3). Examination of key economic issues. Such major objectives as economic progress, and economic justice provide a general framework for analyzing economic growth, inflation, unemployment, public debt, income maintenance, agriculture and international economic affairs. Prerequisite: EC 212.

EC 498-99 Independent Study (3). This course allows the outstanding student to investigate in depth approved topics of the student's choice. Individual studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Permission of Department Head.

FINANCE (FN)

FN 320 Personal Finance (3). Personal financial goals, managing income, expenditures, borrowing, savings, and investment. No prerequisite. Recommended for non-business majors.

FN 321 Personal Investing (3). Individual investment goals, types of investment, sources of information, analysis of risk, return, and value, portfolios, security exchanges. No prerequisites. Recommended for non-business majors.

FN 330 Business Finance (3). Financial goals, ratios, sources and uses of funds, asset management, capital budgeting, leverage, cost of capital, dividend policy, valuation, mergers and reorganizations, financial performance evaluation. Prerequisite: AC 212.

FN 340 Financial Markets and institutions. (3). Operating characteristics, regulation, flows of funds, intermediation, major sectors of money and capital markets and the institutions operating therein. Prerequisite: FN 330.

FN 350 Financial Administration (3). The application of business finance to short cases in asset and liability management, valuation, financial analysis, operation, and planning. Prerquisite: FN 330.

FN 360 Investment Theory (3). Theory of investment value, investment media and strategies, risk, returns, price behavior, investment techniques, portfolios, Prerequisite: FN 330

FN 445 Commercial Bank Management (3). Organization, administration of commercial banks, balance sheet management, loans and investments. Prerequisite: FN 340.

FN 450 Corporate Finance (3). Optimizing sources and uses of funds, corporate asset and financial structure management and strategies, sophisticated techniques of analysis. Prerequisite: FN 350.

FN 460 Security Analysis and Portfolio Management (3). Fundamental and technical techniques analysis, security valuation, capital asset pricing model, portfolio analysis and management, advanced models, theories, and techniques of analysis. Prerequisite: FN 360.

INSURANCE (IN)

IN 370 Introduction to Insurance (3). Principles, practices and major coverages on life, casualty and property insurance. Prerequisite: Junior standing.

IN 375 Individual Life and Health Insurance (3). Basic life, health, and annuity contracts, risk selection procedures, government regulation. Prerequisite: IN 370.

IN 475 Group Insurance (3). Group life and health products, marketing underwriting, reinsurance premiums, and reserves. Prerequisite: IN 370.

IN 485 Property and Casualty Insurance (3). Basic property and casualty insurance contracts. Emphasis on technical aspects and coverages applicable. Prerequisite: IN 370.

MANAGEMENT (MG)

MG 101 Business Principles (3). A survey of the fundamental principles of business organization, banking, credit, management, salesmanship, and accounting. (For freshman business students and students in other fields.)

MG 240 Introduction to Hotel Management (3). An overview of the Hospitality Industry. This course deals with and provides a survey and an overview of major areas of the booming service industry. Specific attention will be given to the growing development of tourism which is projected to be the largest industry by the turn of the century. The course will cover the basic of operations and background of hotels, motels, convention centers, restaurants and other related areas. This course will provide additional insights of those contemplating a specific career in hotels or the hospitality industry.

MG 241 Church Management (3). This course is designed to introduce church professionals to appropriate business principles. The major subject covered are: human relations, conducting meeting, using outside consultants, budgeting, accounting, product development, marketing, planning, and time management.

MG 242 Introduction to the Sports Industry (3). A survey of the sports industry—professional and amateur sports, as well as the manufacturing of sporting goods. Attention is given to the administrative structure of various sports organizations, owner-player contracts, manufacturer and team marketing techniques, fund raising, and the economic viability of the industry.

MG 301 Management-Organization Theory and Behavior (3). Analysis of the basic managerial functions of setting objectives, planning, organizing, directing, and controlling. Introduces theoretical foundation and models for design and analysis of organizational systems, processes and human behavior in organizations, leadership, motivation, conflict in group dynamics. Emphasis will be on building predictable systems for obtaining optimal results. Prerequisite: Junior Standing.

MG 302 Production and Operations Management I (3). Analysis and synthesis of concepts, analytical tools, and techniques used in

the production of goods and services. (Including application of mathematics and other tools for optimal decision making in the use of resources. Also integrates operational functions with other business functions.) (Prerequisite: Junior standing. Math 113 and QM 202.

MG 303 Management of Service Organizations (3). Decision making in service operations such as health care and delivery, food/restaurant, hotel/motel, banking and finance, transportation, leisure, and government. Both conceptual framework and application of management techniques to problems peculiar to service organizations. Prerequisite: MG 301.

MG 304 Management Science I (3). Fundamentals of management science. Theory and application of mathematical, statistical, and operations research techniques to problems in industry, business and government. Prerequisite: All core Math and QM 202. (Same as QM 300).

MG 320 Small Business Management (3). Managerial and business theory functions and processes applied to small business. Emphasis will be given to problems and practices peculiar to the establishment and operation of small business enterprises. Opportunities, hazards, strategies, and objectives will be analyzed from broad managerial and specific functional aspects. Case studies, research selected presentation, by small business owners and other teaching methodologies will be used. Prerequisite: Senior standing: completion of core junior level business courses.

MG 324-25 Business Consulting and Enterpreneurship I and II (6). Opportunities for consulting with small business or generating prospects and plans for new enterprises. Provides experience that extends and solidifies what is learned in the classroom and allows students trial and error experiences in a relatively protected environment. Lectures and discussion, but emphasis on problem solution by the student. Prerequisite: Approval of instructor.

MG 402 Production and Operations Management II (3). Continuation of MG 302. Indepth study of operations and production problems and application of selected decision making tools and techniques used in the production of goods and services. Included will be a computer based management decision game. Prerequisites: MG 301, MG 302.

MG 403 Personnel Administration (3). Analysis of theories, policies, procedures, practices, regulations relevant to attracting, retaining, and directing a competent work force. Analysis of the basic personnel functions with emphasis on the fact that all managers are "personnel managers." Integration of scientific theory, procedures, instruments and federal regulations into personnel selection, placement, promotion, wage and salary administration, employee benefits, and security programs. Prerequisite: MG 301.

MG 404 Organization Theory (3). Theoretical foundations for the study and analysis of organizations, including theory development and important research findings. Examines aspects of various systems and behavior. Emphasis will be on the dymanics, efficiency and effectiveness of organizational systems. Prerequisite: MG 301.

MG 405 Behavior in Organizations (3). Theoretical foundations for the study and analysis of human behavior in complex social organizations and of related managerial problems and challenges. A study of management and behavioral science concepts. Techniques and research as applied toward increasing human productivity and individual and group satisfaction in organizational settings. Prerequisite: MG 301.

MG 406 Special Topics in Personnel Administration (3). Research into selected areas of Personnel Management. Prerequisite: Completion of Management 403 with a "B" or better and approval of instructor.

MG 407 Industrial Relations (3). Labor Relations, Federal Legislation, and the collective bargaining process; case studies and arbitration cases in public and private sectors; impact of collective bargaining on the economy, Union-Management problems and opportunities in both the public and private sector.

MG 408 Personnel Legislation and Regulations (3). Selected experts in conjunction with student participation will review new Federal legislation and administrative decisions affecting the operation of production and service systems. (External and internal Environmental Constraints: Equal Employment and Pay regulations: OSHA, Consumer Legislation.) Prerequisite: MG 403.

MG 409 Human Resource Planning and Evaluation (Manpower Management Practices) (3). Forecasting future human resource needs based on organizational strategies and personal objectives. Performing management and other job audits to assess strengths and weaknesses of organizational posture formulating and administering basic policies in human resources management and development; development and comprehensive administrative processes, decision making systems, and evaluative processes. Prerequisite: MG 403.

MG 410 Compensation Administration (3). Research, review, and application of job evaluation and other methodologies as a basis for establishing and controlling personnel equitable wage, salary, and benefit programs. Included will be a review of relevant theories, methods, and practices; case analysis, review of current and pending legislation and projection of future compensation plans. Prerequisite: MG 301.

MG 411 Operative Supervision (3). Operations (goods and services) supervision with emphasis on objectives, planning, organizing, scheduling, directing, and controlling work operations. Learning theory, employee development and training, use of resources, methods performance measurement, evaluation, and human problems will be stressed. Prerequisite: MG 301.

MG 412 International Business Management. (3). Analysis of managerial and business theory functions and processes practiced by multinational firms. A study of the products and services, strategies, objectives, policies and organizational structures of enterprises operating in various social, economical, political, and cultural environments. Cases, research, and other teaching methodologies will be employed. Prerequisite: Senior standing. MG 301.

MG 413 Operations Planning and Control (3). Analysis of the operations control function with application of mathematical and statistical techniques. Techniques of long and short term forecasting; material and capacity requirements, planning, integration of scheduling and operations flows into the total operation functions. Included will be a review and analysis of key supporting functions. Prerequisite: MG 302.

MG 417 Seminar-Management Innovations (3). Research and review of key creative managerial innovations that revitalized dying enterprises, created new enterprises, greatly enhanced products, service, contribution, profitability growth, and such for national, foreign, or multinational organizations. Attempts will be made to identify and assign innovative and creative action needed for specific problem areas. Prerequisite: Senior Standing.

MG 418 Management Science II (3). A continuation of Management Science I. Advanced theory and application of management science tools and techniques to managerial decision. Prerequisite: MG 304.

MG 419 Collective Bargaining. Analysis of collective bargaining processes, procedures, legislation in private and public sector organizations. Review of current and future implications for management. (Same as EC 442).

MG 450 Business Policy (3). Course designed to integrate the student's knowledge of business functional area disciplines into the analysis and solution of managerial and business problems. Analysis of strategies, objectives, policies, business problems, functional areas and managerial decision making through the case study method. Written and required. Prerequisite: Completion of core business courses; senior standing.

MG 468 General Systems Concepts (3). An introduction to systems thinking, general systems theory, cybernetics, the organization as a system, information technology, and applications of management systems. Prerequisite: MG 301, senior standing.

MG 480 Internship (3-6). Supervised and approved program and learning experiences undertaken by students in governmental, business, or industry setting. Formal proposals, project objectives, or learning plans must be reviewed and approved, by faculty. Student activity and progress must be monitored, evaluated and graded by an assigned full-time faculty. Prerequisite: Consent of Advisor.

MG 499 Independent Study in Business (3). This course allows the oustanding student to investigate, in depth, approved business topics of the student's choice. Individual studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Permission of Department Head.

MANAGEMENT INFORMATION SYSTEMS

MIS 215 Basic Computer Science (3). A study of the priciples and applications of data processing in business. A survey of information system concepts, systems analysis and design, tools for analysis and design, the impact of the computer on the organization, programming languages and introduction to programming BASIC. Prerequisite: Math 111

MIS 315 COBOL I-Application Program Development I (3). Fundamentals of structured design, development, peer reviews, testing and documentation using COBOL. Coverage of language syntax, data file structures, report generation, input editing, table processing, sorting, and sequential updating Prerequisite: MIS 215.

MIS 316 COBOL II-Application Program Development II (3). Continuation of MIS 315. Emphasis on structured methodology of program design, development, testing, implementation and documentation using COBOL. Coverage of random access files and processing programs for batch and interactive systems of programs. Prerquisite: MIS 315.

MIS 323-System Analysis Methods (3). System Analysis Methods. Study of the systems development life cycle. Coverage of system requirements, feasibility, process flows, input and output design, program specifications, testing specifications. Emphasis on the role of management in controlling the life cycle. Prerequisite: MIS 215.

MIS 415 Data Base Systems. (3) Understanding of application of data structures and models of data including hierarchical, network and relational. Programming in a data base language. Discussion of data administration, data analysis, design, MIS 316 and MIS 423.

MIS 416 COBOL III-Software Development. Application of computer programming and system development concepts principles and practices to a comprehensive development project. A team approach to analyze, design and document a realistic system of moderate complexity. Prerequisites: MIS 316, MIS 415.

MIS 423 Structured System Analysis and Design. Advanced study of structured systemd evelopment. Emphasis on strategies for producing methodologies for dealing with complex information systems. Coverage of feasibility, structure charts, processing modules, test plans and implementation plans using a semester long case. Prerequisites: MIS 323, MIS 315.

MIS 424 Office Automation. Office Automation and decision support systems. Coverage of support of data, records management, electronic filing and retrieval, word processing, micro and reprographics and communications. Prerequisites: MIS 323 MG 301.

MIS 425 Decision Support System. Study of concepts and applications of computer based systems that support the manager. Alternate methods to analyze, design and implement DSS. Communications and data base concepts as applied to DSS. Prerequisites: MIS 323, QM 202, MG 302

MIS 481 Seminar in Information Systems (3). In depth development of a current MIS Topics. Prerequisite: Consent of instructor, Senior standing.

MARKETING (MK)

MK 301 Basic Marketing (3). General survey of marketing in our economy. Influence of environment, social, economic, ethical, legal, and technologic forces on marketing activities. Assessment of dimensions of the organization's marketing program. Prerequisite: Junior standing and EC 212.

MK 302 Marketing Management (3). Analysis of marketing management process including identifying marketing opportunities, planning marketing programs, and implementing competitive strategies. Cases are used to help develop an understanding of decision marketing. Prerequisite: MK 301.

MK 303 Sales Fundamentals (3). Covers the basic fundamentals of salesmanship, sales theory, sales techniques, sales role playing, and guest lectures by practicing sales persons. The role of personal selling in our economy is included to provide a deeper understanding of the contributions made by this marketing activity. Prerequisite: MK 301.

MK 405 Consumer Behavior (3). An analysis of the processes underlying purchasing by ultimate consumers, with an emphasis upon the marketing management applications. Prerequisite: MK 302.

MK 410 Industrial Marketing Management (3). Analysis, from management perspective, of internal and external environments affecting the industrial marketing manager's decision relative to characteristics of industrial marketing, research, distribution, promotion, and general marketing problems and policies. Prerequisite: MK 302.

MK 415 Advertising Fundamentals (3). A study of the role of advertising in the economy and the use of advertising in marketing management decision making. Discusses mass communication theories and concepts. Advertising and its relationship to the firm's marketing program. Prerequisite: MK 301.

MK 420 Industrial Purchasing (3). Purchasing Management of non-consumer materials and equipment in industry and government. A study of optimizing quality, price, source, quantity, and time. Prerequisite: MG 302.

MK 425 Retailing Management (3). Structure and environment of retailing and its relationship to other parts of the economy. Analysis or retailing marketing and financial strategy, retail store operation, merchandising decisions, advertising and sales promotion activities and accounting controls. Prerequisite: MK 301.

MK 430 Applied Marketing Research (3). Modern research methodology applied to marketing problems/opportunities with the goal of supplying relevant information for better marketing decision. The entire research process is studied with an application emphasis. Prerequisite: MK 302, QM 202.

MK 435 Distribution Channels, Structure, and Management (3). Distribution channel's functions, structures, and processes: the channel as an economic and behavioral system; relationship between channel members: Vertical marketing systems; the evaluation of channel performance and future trends. Prerequisite: MK 301.

MK 440 Environmental Issues in Marketing (3). The changing nature of marketing environment, and impact on marketing strategy and decision making. Marketing's role in society, social marketing, societal interfaces, and the ethical and social responsibility of marketing. Prerequisite: MK 302.

MK 445 Credit and Collections (See Finance 336) (3). Principles and practices of credit and collection management, consumer credit, business credit investigation. Prerequisite: FN 330.

MK 450 Marketing in Nonbusiness Organizations (3). Analysis and application of marketing concepts to nonbusiness organizations. Consumer behavior, market segmentation, product differentiation, promotion mix, channels of distribution and related concepts are analyzed in terms of both private and public nonbusiness organizations. Prerequisite: MK 301.

MK 455 Marketing Strategy (3). Design, implementation, and evaluation of marketing strategy; pragmatic orientation to application to advanced analytical concepts and skills within marketing environment. Emphasis on integration of knowledge from the component areas of marketing into cohesive, well-organized marketing program. Case studies and/or computer games will be used. Prerequisite: 9 hours of marketing including MK 405 and 430 or permission of instructor. Should be taken as close to graduation as possible.

MK 460 Introduction to Transportation (3). Economic, social, and political aspects of national transportation system; economic characteristics of modes of transport; regulatory problems.

MK 465 Business Logistics (3). Introduction to management of physical distribution and supply systems; consideration of design concepts; cost determinants, firm and environmental constraints. A critical examination of the managerial aspects of the logistics function. Prerequisites: MK 302, QM 202.

MK 470 Traffic Management (3). Concepts and problems of freight traffic management ratemaking theories, rate and classification systems. Prerequisite: MK 460.

MK 475 Transportation Rates (3). Analysis of current railroad, motor carrier tariff classification systems, rate systems. Prerequisite: MK 460.

OFFICE MANAGEMENT (OM)

OM 115 Basic Business Communication (3). A thorough review of grammar, sentence and paragraph construction, punctuation and writing techniques. Exposure to business terminology and written documents. Work is individually critiqued and suggestions made by instruction for improving student's writing style and skills.

OM 121 Keyboarding for Data Entry/Beginning Typewriting (1-3). This course provides touch mastery of the keyboard for individuals who need proficiency in entering and retrieving data from computers. It also develops basic skills in the preparation of typewritten documents.

OM 122 Intermediate Typewriting (3). The development of employable skills in the preparation of letters, manuscripts, tables, and other typewritten documents. Development of typing speed and accuracy. Prerequisite: Thorough knowledge of the keyboard and ability to type a minimum of 25 words a minute.

OM 207-208 Beginning and Intermediate Shorthand (3-3). Development of an understanding of the basic principles of shorthand and the ability to apply these principles to an extensive shorthand writing vocabulary and acquirement of basic transcription skills. The Gregg system is taught.

OM 210-211 Introduction to Law and The Tennessee Legal System (3-3). An introduction to legal nomenclature and legal thinking; a study of document drafting through actual preparation of legal memoranda; special emphasis on the court system of Tennessee. Designed to serve as prerequisite to other office administration legal courses.

OM 215 Microcomputers for Administrative Support (3) Designed to develop skill in the use of microcomputers for various state-of-the-art word and data processing operations. Emphasizes both business and personal applications. Programs included will vary as technology changes.

OM 221 Production Typewriting (3). Sustained production of professional business papers and communications using simulated office materials; and the development of higher typewriting speeds. Prerequisite: OM 122

OM 222 Word Processing Concepts and Applications (3). A comprehensive overview of word processing—its concepts, language, equipment, and procedures. The course includes a review of business language skills, refines keyboarding skills, and develops operational techniques on selected word processing units. Prerequisite: OM 122 or ability to type 40 words a minute.

OM 223 Advanced Word Processing and Machine Transcription (3). This course emphasizes advanced operating skills on text editing and transcribing equipment. Rapid performance and management of work in a modern office environment or word processing center. Processing simulation projects used. Prerequisite OM 222

OM 307 Advanced Transcription Techniques (3). Development of sustained production of mailable transcripts; development of skills for transcription of legal, medical, and technical materials.

OM 330-331 Executive Office Procedures and Systems (3-3). An integrated sequence emphasizing scientific development, analysis, and control of business information systems; routines for handling correspondence, internal and external communications, office machines, reprographics, records management, and word processing.

OM 340 Typewritten Communications and Reports (3). Designed to develop skill in preparation of typewritten reports, manuscripts, correspondence, and other documents. This course emphasizes the use of the typewriter as a tool for drafting and composing as well as for producing finished copy. Instruction includes planning, organization, format, and presentation of various typewritten materials, as well as introduction to the typewriter keyboard. No previous training in typewriting is required.

OM 430 Administrative Office Management (3). Systems methods, and procedures for efficient office management.

OM 460 Seminar in Administrative Communication (3). The development of skill in researching and preparing specialized communications such as training manuals, policy manuals, proposals for funding, assessment reports and related documents. Instruction includes evaluative analysis of materials currently used by selected companies and organizations.

OM 441-442 Office Internships (3-3). Designed to provide opportunity for full-time supervised work experience for students who have not had appropriate full-time employment. Student may enroll for three or six hours credit. Theory and reading assignments complement work experience. Evaluation of University and work supervisors required at the end of course. By consent of advisor.

QUANTITATIVE METHODS

QM 201 Introduction to Statistical Analysis I (3). Elementary statistical techniques with emphasis on applications to business problems. Topics covered include: descriptive statistics, probability, random variation, probability distributions, and statistical inference. Prerequisite: Math 113.

QM 202 Introduction to Statistical Analysis II (3). A continuation of QM 201. Topics covered include; linear regression and correlation. Multiple regression, the analysis of variance, elements of time series analysis, forecasting models, and survey sampling. Prerequisite: QM 201.

QM 300 Introduction to Quantitative Methods. (3). An introduction to quantitative methods of the management scientist with applications to economic and industrial problems. The course is designed to introduce the student to the use of mathematics, statistics, economics, and accounting as tools in management decision making. Prerequisite: QM 202 and EC 212. (Same as Management 304).

QM 301 Analysis of Time Series (3). Statistical methods applicable to analysis of trends and time series; graphic presentation and analysis. Index numbers, curve fitting, correlation, trend analysis, seasonal and cyclical variation. Prerequisite: QM 202.

QM 401 Applied Regression Analysis (3). Survey in simple and multiple regression techniques with special applications for students of business and economics. Topics covered include: linear regression with one independent variable, inference in regression analysis, aptness of model and remedial measures, multiple and polynomial regression. Prerequisite: QM 202.

REAL ESTATE AND URBAN DEVELOPMENT (RE)

RE 313 Principles of Real Estate and Urban Development (3). Introduction to the social, economic, financial, and legal systems and processes involved in the development and use of real property. A survey of Real Estate Brokerage, Finance, Appraisal, Management, Law, Investment Principles.

RE 320 Urban Land Resource Analysis (3). A survey of the changing patterns of urban development and processes of urban growth. An examination of the structure of the real estate market, characteristics of land resources, location and analysis, and the importance of urban land economics in public and private land use decisions.

RE 330 Real Estate Finance (3). Institutional and government funds for financing real estate transactions. Legal instruments of finance, flow of mortgage funds into local markets, and financial packaging of real estate transactions. Prerequisite: RE 313.

RE 340 Real Estate Law (3). The legal environment of real estate. Emphasis on real property law, contract law, law of agency, brokerage, license law and mortgage law. Prerequisite: RE 313.

RE 350 Real Estate Appraisals (3). Economic theories of value applied to real estate; valuation methods, analysis of evidences of values; appraising residential properties. Prerequisite: RE 313.

RE 410 Urban Planning and Public Policy (3). Processes of land use regulations including the organization of public planning, planning methodology, zoning, subdivision regulations and other governmental impacts on real estate. Prerequisite: RE 313.

RE 420 Development of Residential and Commercial Real Estate (3). The processing of developing single-family subdivisions, multi-family housing projects, office buildings, shopping centers, recreational facilities and industrial parks. Included are market analysis, legal contraints, site selection, financial analysis, design and construction procedures and marketing methods, case studies. Prerequisite: 9 hours of Real Estate or consent of instructor. Prerequisite: RE 313 and 330.

RE 430 Income Property Appraisal (3). Financial theories and methodologies used in estimating the value of income producing properties, i.e., apartments, office buildings, and shopping centers. Prerequisite: RE 313.

RE 440 Real Estate Investment Analysis (3). Analysis of real estate equity, ownership including sole proprietorship, partnership, limited partnership, real estate investment trusts, sub-chapter S and public real estate securities. Computer-assisted analysis of federal income taxation on investment, development, equity yields and risks. Prerequisite: 6 hours of Finance, Economics, Accounting, Consent of instructor, and 9 hours of Real Estate.

RE 449 Independent Study in Business (3). This course allows the outstanding student to investigate, in depth, approved business topics of the student's choice. Individual studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Permission of the Department Chairperson.

THE SCHOOL OF EDUCATION

Douglas J. Simpson, Ph.D., Dean
Richard O. Renfro, Ed.D., Assistant Dean

PURPOSES OF THE SCHOOL OF EDUCATION

The basic purpose of the School of Education is to offer professional courses and experiences for prospective and in-service elementary and secondary teachers, counselors, supervisors and administrators.

In realizing this purpose, the School of Education seeks to prepare individuals to take their places as competent members of the teaching profession and to provide opportunities for advanced study for school personnel already established in the profession.

The professional teacher education programs are, for the most part, administered and supervised by the School of Education. The School of Education and the Graduate School cooperate with the graduate teacher education programs.

In addition to its basic purpose, the School of Education also seeks to prepare persons for human services careers through programs in psychology and recreation. Consequently, the objectives of the School of Education are:

1. To prepare elementary and secondary teachers, counselors, supervisors, administrators and school psychologists.
2. To provide opportunities for students to pursue research in the problems of education.
3. To assist graduates in finding teaching and other positions for which they are qualified and in advancing to better positions after they have had experience in their profession.
4. To provide students with opportunities for knowledge and understanding of the society in which they live and their relation and responsibility in such a society.
5. To provide a sound program of guidance and to work cooperatively with the other departments and schools of the university in implementing the program.
6. To offer basic and advanced courses, laboratory and other experiences designed to give students a knowledge and understanding of the data, theories and methods of psychology.

In keeping with the basic purpose, the professional education component provided by the School of Education is designed to develop the competencies necessary for beginning teachers, which are:

1. To develop knowledge and understanding of the principles and process of human growth, development and learning, and the practical application of this knowledge to teaching all children.
2. To develop an understanding of instructional methods, materials and media as they apply to facilitating learning in the student's field of specialization.
3. To utilize materials, methods and resources in order to plan and teach effectively and to work ethically and constructively with pupils, teachers, administrators and parents.
4. To develop an understanding of the historical, philosophical and social foundations underlying the development and practices of public education of this country.
5. To develop an understanding of the purposes, organization, administration and operation of the total educational program of the school.
6. To develop an understanding of the total instructional process through planned field based experiences which involve direct observation and participation in teaching under supervision.
7. To develop instructional skills and strategies through a wide range of laboratory, clinical and student teaching experience.
8. To provide experiences designed to enable the student to utilize and apply psychological data and evaluation procedures in measuring the progress of students.

Organization

The School of Education is composed of five (5) departments. It is organized as follows: The Department of Educational Administration, the Department of Curriculum and Instruction, the Department of Health, Physical Education and Recreation, the Department of Psychology, and the Department of Reading and Special Education. The School of Education has established, through cooperative agreements, student teaching centers in the School system of Metropolitan-Nashville-Davidson County. Other school systems in the State of Tennessee also assist with the student teaching program.

Public Services

Throughout the year the School of Education receives requests for services from local, county, and state agencies. In an effort to meet those requests, the following services are provided: (1) cooperation with the state in-service program in conducting short courses and summer work-conferences, (2) consultative services on local problems to school personnel through the State by university staff members, (3) development and distribution of material to school personnel, and (4) cooperation with the State Department of Education in the administration of the State-wide Testing Program, and (5) delivery of sponsored programs through the Center for Training and Technical Assistance.

Office of Pre-Service Field Experiences

The School of Education also provides pre-service field experiences in order to afford opportunities for students to correlate theoretical information with real life situations through observations, one to one and small group participation; and finally, student teaching. The Office of

Pre-Service Field Experiences accepts placement requests for these field based activities from teacher education faculty and students for the purpose of making appropriate placements. Upon approval of each request, including applications for student teaching, these data are submitted to the Office of Pre-Service Education of the Metropolitan Nashville Public School System for further processing and final placement.

Curriculum Laboratory

The Curriculum Laboratory is a center for instructional materials in teacher education. It is designed for students and teachers in the professional core courses in education, the specialized professional courses, student teaching and the required activities related to student teaching. The laboratory is located in Room 208 in the Education Building.

Learning Resources Reading Center

The Learning Resources Reading Center administered by the School of Education serves as a laboratory for students who wish to improve their reading skills and habits. This center also serves as a resource center for the study of the teaching of reading.

DEPARTMENT OF CURRICULUM AND INSTRUCTION
Ruby W. Martin, Ed.D, Acting Head

The Department of Curriculum and Instruction is designed primarily for the education of teachers. It offers an undergraduate major in Elementary Education and a general major in education for preparing secondary teachers of General Science or Social Studies.

The program of teacher education includes two broad areas of study: The General Education Programs and the Professional Programs.

The General Education Programs, required of all departments offering a teacher education program is described in the general "Academic Information" section of this catalog. The Professional Education core is presented below.

PROFESSIONAL EDUCATION

The basic pattern of professional education needed for teaching has certain common elements which apply to problems which all teachers face irrespective of the age level of the pupils who are under their supervision. In addition, preparation for teaching on the different educational levels and in various curriculum areas requires specialized training appropriate to the different areas.

The basic pattern of professional education, therefore, includes (1) core professional courses required of all persons in teacher education and (2) specialized professional courses appropriate to the different areas.

CORE PROFESSIONAL REQUIREMENTS

In planning the core professional program attention was given to those areas of study which are considered essential to the development of those understandings and competencies needed by all teachers.

These areas include:

1. Historical, Philosophical, and Sociological Foundations of American Education.
2. Human Growth and Development, and the Psychology of Learning, including an understanding of how children grow physically, emotionally, and mentally, the nurture necessary for wholesome growth, and the relation between growth and acquiring of learning new behavior patterns.
3. Understanding of School Organization, Administration, and Management, and the relationship of the school to the total community.
4. Techniques of Measurement, Evaluation and Classroom Guidance.
5. Skill in Curriculum Development.

PROFESSIONAL EDUCATION CORE REQUIREMENTS

The following courses are required of all persons enrolled in the teacher education program.

EDCI 201—History & Foundation of Education
EDCI 301—School Organization, Administration, Management and Community Relations
EDCI 387—Curriculum Development
EDCI 465—*Introduction to Special Education*
PSY 242—Human Development and Learning
PSY 312—Educational Measurement

SPECIALIZED PROFESSIONAL EDUCATION REQUIREMENTS

The specialized professional education requirements vary according to the area of grades in which one seeks certification.

The specialized requirements, adapted to grades 1-8 or grades 7-12, include:

1. Materials and methods of teaching appropriate to the level of certification, including reading methodology.
2. Knowledge and understanding of learning and behavioral characteristics of handicapped children.
3. Supervised student teaching appropriate to an area of endorsement.
4. These specialized requirements are outlined under the areas to which they apply.

CURRICULUM IN ELEMENTARY EDUCATION

Elementary education is one of the curricula in the Department of Curriculum and Instruction set up by the University as its agency for the professional preparation of teachers in the field of elementary education. The Bachelor of Science degree is awarded upon the satisfactory completion of this curriculum.

GENERAL REQUIREMENTS FOR THE BACHELOR'S DEGREE IN ELEMENTARY EDUCATION

All candidates for the Bachelor of Science degree must complete a minimum of 133 semester hours which includes:

1. The General Core including subject matter concentration (73-76 semester hours).
2. The professional and specialized education core (34 semester hours).
3. Educational Seminar—EDCI 470A (3 semester hours).
4. Those students graduating in 1988 or later will be required to take EDCI 418-Children and Micro-Computer Technology.

RESTRICTED ELECTIVES

Five (5) to eight (8) hours of course work on the 300 and 400 level must be selected.

The curriculum sequence for each year level is presented. Each student is required to secure the approval of his faculty adviser in the Department of Curriculum & Instruction concerning his program of work.

SPECIALIZED PROFESSIONAL EDUCATION REQUIREMENTS FOR ELEMENTARY EDUCATION MAJORS

(Grades 1-8) Credits

EDCI 472e—Student Teaching in the Elementary Schools .....9 Sem. Hrs.

EDSE 465—Introduction to Special Education .....3 Sem. Hrs.

EDRD 424—Teaching Reading in the Elementary School .....4 Sem. Hrs.

EDCI 311—Classroom Management .....3 Sem. Hrs.

EDCI 321—Teaching Arithmetic in the Elementary School .....3 Sem. Hrs.

EDCI 322—Teaching Language Arts in the Elementary School .....3 Sem. Hrs.

EDCI 323—Teaching Social Studies in the Elementary School .....3 sem. hrs.

EDCI 418—Children and Micro-Computer Technology* .....1-3 sem. hrs.

*Required of students graduating in 1988 and thereafter.

A minimum grade of "C" must be earned in each of the Specialized Professional courses.

SPECIALIZED PROFESSIONAL EDUCATION REQUIREMENTS FOR THE SECONDARY LEVEL

(Grades 7-12) Credits

EDSE 465—Introduction to Special Education .....3 Sem Hrs.

EDCI 371—Methods Course in the Special Subject Area .....3 Sem. Hrs.

EDCI 472s—Student Teaching and General Methods on the Secondary School Level .....9 Sem. Hrs.

EDRD 491—Reading and Study in the Secondary School .....3 Sem. Hrs.

GENERAL REQUIREMENTS FOR STUDENT TEACHING

All students desiring to enroll in Student Teaching (472e, or 472s) must meet the following general requirements:

1. Must file applications for Student teaching ONE SEMESTER prior to the one in which he/she wishes to enroll. They should be submitted to the Office of Pre-Service Field Experiences, Clay Hall, before the LAST SCHOOL DAY IN OCTOBER for Spring Semester Student Teaching; and before the LAST SCHOOL DAY IN FEBRUARY for Fall Semester Student Teaching.
2. Must be classified as a senior (90 or more semester hours).
3. Have an acceptable GPA in all courses taken with a minimum grade of C in all methods courses.
4. Meet all courses and classroom observation prerequisites.
5. Receive certification from health authorities that no serious physical condition detrimental to the welfare of the children exists.
6. Show evidence of emotional stability.

CURRICULUM FOR MAJOR IN ELEMENTARY EDUCATION

FRESHMAN YEAR	Credit Hours Fall	Spring
Eng 101u-102u	3	3
Hist 121u or 122u	3	
PEu	1	1
Geog 171u or 172u	3	
Sci 121u-122u	3	3
Hea 151u	2	
Math 111u		4
Spch 210u or 220u		3
Art 133u	2	
Mus 131u		2
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 211u-212u	3	3
EDCI 201u	3	
Hea 307eu or Hea 306u	2	
PEu	1	1
Hist 201u-212u	3	3
Psy 242u	3	
PE 310u or 302u		2
Math 211u		3
Lib. Sci. 211u		3
Phil. 201u or 202u	3	
Hea. 300u		2
	18	19

JUNIOR YEAR	Credit Hours Fall	Spring
MUS 301	3	
SCI 301-302	3	3
EDCI 301	3	
EDCI 322-323	3	3
EDCI 387		3
PSY 312	3	
ART 360		3
ENG 320 or LS 363		3
EDCI 311	3	
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
Soc. 211 or 360 or 430	3	
Hist. 341 or 342 or GPA 320	3	
EDCI 470A	3	
EDCI 321		3
EDRD 424		4
EDCI 472e		9
EDCI 472o		0
EDSE 465		3
Electives (300-400 level)*	3-6	
	15	16

*Students graduating in 1988 or later must take EDCI 418.

TOTAL SEMESTER HOURS 133-135

CURRICULUM FOR A MAJOR IN EDUCATION (SECONDARY FOR TEACHERS OF SOCIAL STUDIES EMPHASIS)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
PE or AERO	1	1
HIST 201-202	3	3
MATH 111; EDCI 201	4	3
EdCI 101	1	
ART 133; MUS 131	2	2
GEOG 171-172	3	3
	17	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
SCI 121-122	3	3
PSY 242	3	
PE or AERO	1	1
HEA 151; SOC 211	2	3
PSY 201-202	3	3
EC 211-212	3	3
	18	16

JUNIOR YEAR	Credit Hours Fall	Spring
EDCI 301; 387	3	3
PSY 312; Soc 330	3	3
HIST 301-02 or 401-02	3	3
GPA 221-222	3	3
SOC 320; PSY 341	3	3
ELECTIVES 300 & 400	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
ELECTIVES 300-400*	9	
EdCI 470A	3	
EdSE 465	3	
EdCI 371B		3
EdRD 491		4
EdRD 472e		9
	15	16

TOTAL SEMESTER HOURS—132

*EDCI 419 is required of students graduating in 1988 and thereafter.

CURRICULUM FOR A MAJOR IN EDUCATION (SECONDARY TEACHERS OF SCIENCE EMPHASIS)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
PE or AERO	1	1
HIST 201-02	3	3
MATH 161-62	5	5
BIO 111-12	4	4
EdCI 101; MUS 131	1	2
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-12	3	3
EdCI 201; PSY 242	3	3
PE or AERO	1	1
HEA 151; ART 133	2	2
CHEM 121-22	4	4
PHYS 211-12	4	4
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
EdCI 301-387	3	3
PSY 312, SCI ELECT	3	4
(SOC 400)	3	4
BOT 220; BIO 370	4	4
SOC SCI ELECT (300-400)	3	
SCI ELECT (300-400)		4
ED ELECT (300-400)	3	
	16	15

SENIOR YEAR	Credit Hours Fall	Spring
EdCI 470A	3	
EdSE 465	3	
CHEM 360	3	
ELECT (300-400)*	6	
SCI ELECT (300-400)	3	
EDCI 371A		3
EdRD 491		4
EdCI 472s		9
	18	16

TOTAL HOURS: 132

*EDCI 419 is required of students graduating in 1988 and thereafter.

LIBRARY SERVICE

The Library Science program may be elected as a concentration by students taking a major in any department of the institution. The library service curriculum provides training for the following groups: (1) students who wish to prepare for library positions in elementary and secondary school; (2) students who plan to enter a graduate library science program after receiving the bachelor's degree; (3) in-service teachers, who desire information on library materials related to their teaching needs; (4) students who wish guidance in the use of library resources.

GROUP I—REQUIREMENTS

Students pursuing a teacher education program on either the elementary or secondary level may elect library service as a concentration to qualify for position as school librarians. Library Service 361, 362, 441, 451, and 452 are required for certification as librarians, along with teacher certification. Education 463—Audio-Visual Aids in Education is recommended for students taking library service as a minor.

GROUP II—REQUIREMENTS

Students preparing to enter graduate library school for further training should complete all courses offered in the department. Some graduate library schools require two years of college credit in foreign languages, while others may waive such requirements altogether, depending upon the kind of library work the student chooses for specialization.

GROUP III—REQUIREMENTS

In-service teachers, administrators, and prospective teachers may enroll in library service courses even though they do not plan to complete a minor. It is recommended that they take courses dealing with materials: Library Service 361, 362, and 363.

GROUP IV—REQUIREMENTS

Students seeking guidance in the use of library resources should elect Library Service 211 as early as possible in their first two years of academic training.

COURSE DESCRIPTIONS LIBRARY SERVICE (LS)

LS 221 Use of Library Resources. (3) A general course on the use of library resources including the card catalog, periodical indexes, bibliographies, encyclopedias, and other reference tools. Designed primarily to aid students in developing a systematic approach to using library materials. A required course for elementary education majors, however, it may be taken by students from any department. Course does not provide credit for certification as a school librarian.

LS 361 Reference Materials. (3) Embraces a study of basic reference books and other reference materials particularly for the school library or small library. Also includes the organization and administration of reference services.

LS 362 Books and Related Materials for Children. (3) Principles of selection, aids for selection, evaluation and use of books and related materials for young people and adults. Emphasizes reading of books and an examination of materials for curriculum needs, reading interests, and personal growth, and to the development and promotional activities aimed at stimulating use of materials by students and teachers.

LS 363 Books and Related Materials for Children. (3) Principles of selection aids for selection, evaluation and use of books and related materials for children. Emphasis placed on required readings for acquainting students with children's books and writers in the field. Attention given to an examination of materials for curricular needs, reading interests, and personal growth and to the development of promotional activities aimed at stimulating use of materials by students and teachers.

LS 441 Classification and Cataloging. (3) Introduction to principles underlying the classification and simplified techniques of cataloging books. The abridged Dewey Decimal Classification scheme used and printed cards stressed. Making the unit cards, filing and other essential procedures of organizing the book collection are included.

LS 451 Organizing Library Materials. (3) Emphasizes the organization, selection, acquisition, evaluation and use of non-book materials in the library program in relation to the entire school program. Included are problems involved in developing the library as a materials center that is responsible for audio-visual aids.

LS 452 School Library Administration. (3) Principles, objectives and procedures involved in administering the small library. Standards and evaluation, housing and equipment, personnel, financial support, budgeting, loan systems, reports and other administrative procedures included. Also includes an introduction to the development and funtion of libraries, library work and opportunities in librarianship.

COURSE OFFERINGS DEPARTMENT OF CURRICULUM AND INSTRUCTION

EDCI 100 The Education Environment and Career Choice. (2) Exploration of occupations based upon analysis of self and occupational requirements; development of commitments to teaching and understanding of teaching learning problems in the classroom (Pass-Fail grades only)

EDCI 201 History and Foundations of Education. (3) A study of the historical, philosophical, and sociological foundations of the American public schools, with emphasis on the traditional function of the American public school as a local community institution.

EDCI 210-220 Field Study in Education. (2-2) Problems of teachers in active service in the fields of methods of teaching, curriculum materials, school-community relationships and school organization.

EDCI 301 School Organization, Management and Community Relations. (3) Deals with the general organization, administration and management of public schools with special attention given to the relationship of the school to the local community. Techniques for effective use of community resources are also explored. Prerequisites: Admission to the Teacher Education Program. Field experience required.

EDCI 310 Penmanship. (2) Develops skill in simple letter forms; upper lower case letters to facilitate the teaching of reading in the first elementary grades for chart making, and chalkboard work.

EDCI 311 Classroom Behavior Management. (3) An overview of the major techniques of modifying classroom behavior.

EDCI 320 Teaching Science in the Elementary School. (3) Methods and materials, Prerequisite: Admission to Teacher Education.

EDCI 321 Teaching Arithmetic in the Elementary School. (3) An analysis of current methods in teaching arithmetic through first-hand experiences, the place of number meaning, thinking and drill in effective learning. Prerequisites: Math 211 and admission to the Teacher Education Program. Course taken with EDRD 424 during the Student Teaching semester. Field experience required.

EDCI 322 Methods of Materials in Language Arts. (3) A consideration of modern technique and trends in the teaching of language arts in the elementary school. Prerequisites: Admission to the Teacher Education Program and

previously or currently enrolled in Education 301 or 387. Field experience required.

EDCI 323 Teaching the Social Studies in the Elementary School. (3) Includes a study of the objectives, scope, organization, and techniques of teaching on the elementary level. Prerequisites: Admission to Teacher Education Program and previously or currently enrolled in Education 322. Field experience required, but cannot be taken the same semester as Student Teaching.

EDCI 351-352 Development Field Experiences for Teaching. (1-1) Field experiences in which students perform tasks related to teaching and teacher roles. May be taken separately or concurrently by consent of instructor. Must be taken before student teaching. Prerequisite: Admission to Teacher Education.

EDCI 371a The Teaching of Science Grades 7-12. (3) Purposes, techniques, materials, and evaluation; directed observation in public schools, preparation of teaching plans and materials. Prerequisite: Admission to Teacher Education.

EDCI 371b The Teaching of Social Studies Grades 7-12. (3) Purposes, techniques, materials and evaluation; directed observation in public schools preparation of teaching plans and materials. Prerequisite: Admission to Teacher Education. Field experience required.

EDCI 387 Curriculum Development. (3) A critical study of the reorganization, construction, and administration of the school curriculum in the light of modern educational principles and objectives. Prerequisite: Admission to Teacher Education. Field experience required.

EDCI 410 Philosophies of Education in Cultural Perspective. (3) Education in relation to the liberal, conservative reactionary and radical currents of thought in American culture.

EDCI 417 Home Educational Uses of Micro-Computers. (1-3) Deals with various techniques for using the micro-computer in the home.

EDCI 418 Children & Micro-Computer Technology. (1-3) Computer Language and Software as it relates to the education of children.

EDCI 419 Technology in the School. (1-3) Deals with computer introduction for secondary schools.

EDCI 420 Introduction of Word Processing in Elementary Education. (1-3) Designed to explore how word processing can benefit the elementary school student.

EDCI 425 Education Workshop. (3) This course is designed to provide the student with opportunities to make an inclepth study of one area or combination of areas involving contemporary problems and issues in education.

EDCI 426 Philosophies of Education: Introductory Studies. (3) Truth, knowledge and valuation in relation to the work of the schools.

EDCI 431 Developing the Mathematics Laboratory. (3) Developing activity-oriented math.

EDCI 445 Field Study. (3) Under the guidance and supervision of trained teachers, the students are provided with information, teaching techniques and materials relative to the particular subject matter area of interest.

EDCI 452-53 Problems in Teaching Social Studies. (3)

EDCI 454-455 Problems in Teaching Science. (3)

EDCI 456-457 Problems in Teaching Language Arts. (3)

EDCI 458-459 Problems in Instructional Materials. (3)

EDCI 461-462 Problems in General Curriculum. (3)

EDCI 463 Audio-Visual Aids in Education. (2) A survey course is designed to acquaint the student with audio-visual materials of instruction. Proper classroom utilization of film strips, 16mm motion picture, slides, graphic materials, field trips, exhibits, and models are studied.

EDCI 470A Educational Seminar. (3) A study of the foundations and history of education, curriculum development in education methods of teaching, and present trends in education.

EDCI 470B Educational Seminar. (3) A study and analysis of the basic course content of courses taught in the elementary schools.

EDCI 472e Student Teaching in the Elementary School. (9) This course consists of directed observations, participation, and teaching in the elementary grades. It provides opportunities for students to work in typical school situations under the guidance of experienced teachers. Parallel readings and conferences for further interpreting and enriching these experiences are held regularly. This course is open only to seniors and teachers with some experience.

EDCI 472o Student Teaching Orientation. (0) This course is designed to prepare the prospective student teacher for the public school classroom and for participation in the student teaching program.

EDCI 472s Student Teaching in the Secondary Schools, Grades Seven Through Twelve. (9) Actual classroom experience in secondary schools under the charge of expert teachers in cooperating schools. Student teacher schedules should be arranged well in advance of the senior year and planned so as to enable the student to devote full time to student teaching during the semester in which the course is to be completed. Required for all students who are following the professional education core that leads to teaching as a career. Prerequisites: EDCI 201, Psy. 242, EDCI 301, EDCI 387, and 371, the Department's specific methods course.

EDCI 490 Multicultural Education. (3) This course is designed to develop awareness, understanding, and sensitivity to the needs and interest of ethnic and cultural groups. The differences and similarities that characterize individuals and groups should be cherished for their worth and cultivated for the benefits they bring all people.

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
Franklin B. Jones, Ed.D., Head

The Department of Educational Administration offers instruction designed to prepare individuals for the principalship, supervisory positions and the superintendency. The programs sponsored by the department lead to a degree of Master of Arts in Education, Master of Education, Specialist in Education, or Doctor of Education. The department's courses, seminars, studies, etc., are intended for graduate students. Interested students should see the GRADUATE BULLETIN for more information.

The Center for Community Education, Edward G. Hantel, Ph.D., Acting Director

The Center for Community Education was established in cooperation with C. S. Mott Foundation in July of 1973. The purpose of the Center is to disseminate information about community education and to assist in the development and expansion of such programs in Tennessee. The center provides consultant services, in-service training programs, and other assistance to communities throughout the State. At the University level, the center is responsible for in-service education, development of seminars and workshops, establishment of training programs in community education, research, public relations, conferences, and other activities which enhance the development of community education. In addition, undergraduate and graduate level courses in Community Education are offered through the School of Education at Tennessee State University.

COURSE DESCRIPTIONS

EDAD 300 Utilization of Community Resources (3). Exploration of the multitude of existing community resources for learning and how these resources can be most effectively integrated into existing educational programs. Special emphasis on resource identification, recruiting and screening skills, supervision, evaluation, reward systems for volunteers and training and utilizing non-professionals in a community school setting.

EDAD 401 Community Education for the Teacher (3). Basic introduction to the philosophy of community education and the community school concept with special emphasis on the historical and legal basis for community education, interagency relationships, facilities, community organization, and financing.

EDAD 402 Problems and Issues in Community Education (3). Utilization of a multidisciplinary approach to the analysis of contemporary issues related to the community school. Special emphasis will be given to reviewing recent literature and research in the field. Course format will be influenced by emerging developments in community education, i.e., legislation, evaluation, goal setting, etc. Prerequisite: 401 or consent of instructor.

DEPARTMENT OF READING AND SPECIAL EDUCATION
Ruby W. Martin, Ed.D., Head

The Department of Reading and Special Education offers undergraduate and graduate instruction in the areas of Reading Education and Special Education.

The Bachelor of Science Degree in Education/Special Education Concentration with generic certification of Special Education personnel is awarded upon completion of curricular requirements.

Undergraduate minors are offered in Special Education and in Reading Education. Electives are also offered in Reading Education.

Certification and master's degree programs exist in both areas, and a doctoral degree in Curriculum and Instruction with specialization in Reading is offered.

Veterans and adult students who have resumed study after interruption may find the learning strategy courses beneficial to expand their learning and retention of textual materials.

Courses in subject matter learning strategies are available through day and evening offerings in the University College.

READING EDUCATION MINOR AND/OR ELECTIVES

The Reading Education Program of Studies or minor is designed to be an interdisciplinary program emphasizing communication—language, reading, reasoning and learning.

Students may select courses in Reading-Language Arts as electives, and those students who wish to establish a stronger support area for majors with emphasis in language or communication skills may select a minor in Reading Education. The Reading Education courses will enhance teacher education programs in Elementary Education and Early Childhood Education. Its interdisciplinary structure will support Teacher Certification programs in Speech and Theater; Speech Pathology and Audiology, English Education; Psychology; Sociology and other academic disciplines.

Teachers at all levels, K-12, find that much of their time is devoted to teaching their students how to think clearly and creatively, and how to communicate ideas through reading, writing, listening, and speaking. Teachers of all subjects in middle and secondary schools are constantly faced with problems of what to do when their students cannot read the assigned textbook or cannot write well enough for others to understand.

The minor in Reading Education is designed to provide a high quality program concentrated in the teaching of reading, thinking and other language skills. This program has been designed in accordance with the "Guidelines for the Professional Preparation of Reading Teachers" as recommended by the International Reading Association.

CURRICULUM FOR READING MINOR OR PROGRAM OF STUDIES

Required Courses: 18 credit hours minimum, six hours of which are approved electives.

*EdRD 0419	Exploring the Language Learning Process	(3)
*EdRD 0424	Teaching Reading in the Elementary School	(4)
*EdRD 0445	Methods and Materials for Reading Instruction	(3)
*EdRD 0446	Diagnostic Teaching of Reading-Language Arts	(3)
EdRD 0482	Teaching Reading-Language Arts to Exceptional Learners	(4)
EdRD 0487	Techniques for Integrating Reading-Language Arts Instruction	(3)
***EdRD 491	Reading and Study in the Secondary School	(3)
EdRD 0495	Practicum in Individualizing Reading-Language Arts Instruction	(3)

*Courses required for Early Childhood and Elementary Education Majors who minor in Reading.

**EdRD 0424 is a requirement for elementary teacher certification for all students who do not minor in reading.

***(EdRd 0491 is a requirement for secondary teacher certification for all students who do not minor in reading.)

COURSE DESCRIPTIONS

EdRd 100 College Reading-Study Skills. (3) This course is designed as an experience in reception and processing of ideas to enable students to retain information that they read, and to use that information in a functional way. Efficiency in the use of study skills, vocabulary development, and test-taking skills will be stressed. Crosslisted UCRD 100.

NOTE: Based on recommendation of advisor or department head, this course may be a prerequisite to minoring in Reading.

EdRd 102 College Reading Comprehension. (3) This course is designed to provide experiences to help the student increase his/her capacity for retention, rate and reading flexibility. Particular emphasis will be placed on techniques to refine study skills when reading materials. Crosslisted UCRD 102.

EdRd 100L/102L Modularized Reading Laboratory. (0) Individual diagnosis, counseling or independent study centered around reading skills, test-taking, study techniques, etc. Application of reading skills to content-area course subject-matter and materials. Skill development through instructional modules.

EdRd 0200 Advanced Content-Study-Reading Skills. (1) This mini-course is designed to prepare students to comprehend the text and related textual reading assignments. various instructional strategies will be discussed, demonstrated, and then developed by the student which can be imposed upon textual readings. Students will become acquainted with the features of a text (i.e., patterns of paragraph organization, organization of text, etc. Student must complete prescribed laboratory activities.

EdRd 0300 Flexibility of Reading Rate. (1) This course is designed to provide experiences to help selected students increase their capacity to adjust reading flexibility and related study skills; to help the student develop a greater vocabulary power, faster rates of reading and techniques for deeper understanding of the material read. Students must complete prescribed laboratory activities.

EdRd 0310 Strategies for Successful Test-taking. (1) This course is designed for selected students. The major purpose of the course is to provide instruction that will facilitate the development of skills and techniques related to extending competencies in test-taking. Students must complete prescribed laboratory activities.

EdRd 0320 Medical-Scientific Communications. (1) Medical Terminology is an intensified course designed to provide a systematic approach for building medical words.

The course is designed for selected students in Nursing, pre-dental, pre-medical, Health professions and other scientific disciplines. Students must complete prescribed laboratory activities.

EdRd 0401 Speed Reading for Adults. (0) Course is designed to improve the speed and comprehension of the learner with various types of contexts.

EdRd 0415 Improving the Verbal Skills of Teachers. (3) (Must be ready to be admitted to teacher education) This course will utilize teaching, real and functional settings in which students critique themselves and seek to develop their oral and written classroom presentations. Students will see and critique actual classroom teachers as well, and will evaluate those whom the student believes to be the best teachers.

EdRd 0419 Exploring the Language Learning Process. (3) This course covers current theory concerning the nature of reading, language, and learning as well as an overview of school reading-language arts programs.

EdRd 0424 Teaching Reading in the Elementary School. (4) This course includes methods, materials and modern practices and trends in the teaching of reading at the elementary school level. (Required only for students pursuing teacher certification in grades K-9 or K-12.

EdRd 0445 Methods and Materials for Reading Instruction. (3) This course emphasizes major methods for developmental reading instruction, as well as materials and techniques for personalizing reading-language arts and motivating readers.

EdRd 0446 Diagnostic Teaching of Reading—Language Arts. (3) This course emphasizes techniques for determining learners' strengths and weaknesses in reading—language arts across all levels with practice in creating diagnostically based teaching techniques.

EdRd 0482 Teaching Reading—Language Arts to Exceptional Learners. (4) Language characteristics and the special reading—language arts needs attendant with the exceptional learner. Focuses on linquistically different students, and on students who deviate from the average or norm in intellectual, social, physical, emotional, sensory or communication abilities. Designed especially for the regular class teacher.

EdRd 0487 Techniques for Integrating Reading-Language Arts Instruction. (3) This course explores a rationale (theory and principles) for integrating reading and language arts; its goals and objectives; basic processes; and a (flexible) curriculum design for the basic and developmental skills, assessment and treatment procedures.

EdRd 0490 Directed Individualized Study in the Teaching of Reading. (1-3) Individualized Study. Consent of Instructor.

EdRd 0491 Reading and Study in Secondary Schools. (3) For all subject matter teachers. Teaching strategies, designs, and materials for teaching comprehension, advanced study skills, and vocabulary; formal and informal teaching, pupil abilities and interests. (Required only for students pursuing teaching certification 7-12, for students not minoring in Reading.)

EdRd 0495 Practicum in Individualizing Reading-Language Arts Instruction. (3) This course is designed as a field-based experience in hands-on work diagnosing, and individualizing and evaluating instruction for groups of children with reading-language arts deficiencies.

SPECIAL EDUCATION PROGRAM

The purpose of the Special Education program is to prepare teachers, supervisors, principals, and supportive personnel who will be responsible for implementing Tennessee Public Law, Chapter 839 of the Public Acts of 1972, and the federal mandate, Public law 94-142; while maintaining quality education for all children. The program also prepares teachers to develop and implement adequate learning experiences to accommodate exceptional children in the least restrictive environment.

The philosophy of the Special Education program is consonant with the basic philosophical tenets of Section 504 of the Rehabilitation Act of 1973, Public Law 94-142 of 1975, Developmental Disabilities Act of 1973 and other related federal mandates. These tenets emphasize that all handicapped individuals, regardless of the severity of their handicapping condition, are entitled to care, treatment, education and opportunities which will enhance their ability to make a contribution to society.

The Special Education competency based certification option is constructed to reflect the aforementioned philosophy, by providing special education students with courses and experiences designed to enable them to serve in various capacities (i.e. classroom teachers, diagnostic prescriptive teachers, resource teachers, consulting teachers, liaison teachers, teacher counselors, clinical teachers and others.)

The general objective of the undergraduate program is to provide a competency based generic teacher preparation program which will provide the student with the requirements which have been established by the State Department of Education for a direct free standing certification in Special Education.

PROGRAM REQUIREMENTS

1. Students are required to meet the General Education Requirements for the Bachelor of Science Degree in Teacher Education Program. Refer to the general "Academic Information section of this catalog.
2. A total of 132 semester credit hours must be completed. A minimum cumulative 2.0 grade average must be maintained.
3. The major course of study is composed of a Generic Core of Special Education courses. A minimum of 30 semester credit hours within the Generic Core must be completed.
4. Students must complete a minor area program consisting of a minimum of 18 semester hours.
5. A minimum competency level of 70% (C) is the lowest acceptable competency level for major courses.
6. Students must successfully pass (70% competency level) a competency based Special Education examination during their senior year.
7. Students must complete four semester hours of methodology in the Teaching of Reading in the Elementary School.

PROFESSIONAL EDUCATION CORE REQUIREMENTS

PROFESSIONAL EDUCATION CORE

EdCI 201	History & Foundations of Education
EdCI 301	School Organization, Management, & Community Relations
EdCI 387	Curriculum Development
Psy 242	Human Growth & Learning
Psy 312	Measurement, Evaluation & Guidance for Classroom Teachers
*EdRd 424 AND/OR *EdRd 482 AND/OR	Teaching of Reading in Elementary School Teaching Reading/ Language Arts to Exceptional Learners
*EdRd 491	Reading & Study in Secondary Schools (Minimum required is 21-32 semester hours)

*A combination of any two of these courses is required.

Special Education Generic Core

		Sem. Hr.
EdSE 101	Orientation to Special Education*	2
EdSE 333 or EdSE 465	Education of Exceptional Children	3
EdSE 334	Humanistic Tch. Excep. Children	3
EdSE 336	Char. & Needs Mildly Hand. & Gifted	3
EdSE 337	Char. & Needs Severely Handicapped	3
EdSE 462	Educ. Assessment of Exceptional Children	3
EdSE 468	Tch. Mild. Handicapped & Gifted	3
EdSE 471	Teaching and Severely Handicapped	3
EdSE 495	Student Teaching Exceptional Children	9
		32 Sem. Hrs.

*Required for first semester freshmen only.

MINOR AREA PROGRAM SPECIALIZATIONS

The minor area program consists of (18) hours of 300 and 400 level courses. Students may elect a (1) specialization area within Special Education (i.e. mental retardation, emotional disturbance, learning disabilities, clinical special education, visually impaired or auditorilly impaired) or (2) a related field (i.e. psychology, speech, audiology, reading, early childhood, etc.) as their minor option.

Students enrolled in the Special Education Option who elect a specialization area within Special Education must follow the curriculum prescribed in their selected specialty.

Area A: Mental Retardation
EdSE 411 Characteristics & Needs of Mentally Retarded
EdSE 412 Teaching the Mentally Retarded
EdSE 464 Managing Inappropriate Classroom Behavior
EdSE 483 Seminar in Mental Retardation
6 Semester Hours Special Education Electives

Area B: Emotional Disturbance
EdSE 406 Char. & Needs of Emotionally Disturbed Children
EdSE 407 Teaching and Emotionally Disturbed
EdSE 464 Managing Inappropriate Classroom Behavior
EdSE 481 Seminar in Emotional Disturbance
6 Semester Hours Special Education Electives

Area C: Learning Disabilities
EdSE 460 Nature of the Learning Disabled Child
EdSE 413 Education of the Learning Disabled Child
EdSE 464 Managing Inappropriate Classroom Behavior
EdSE 485 Seminar in Learning Disabilities
6 Semester Hours Special Education Electives

Area D: Clinical Special Education
EdSE 487 Clinical Special Education: Diagnosis & treatment
EdSE 488 Habilitation & Rehabilitation of Exceptional Youth
EdSE 489 Seminar in Clinical Special Education
EdSE 496 Clinical Internship
EdSE 464 Managing Inappropriate Classroom Behavior
3 Semester Hours Special Education Electives

Area E: Visually Impaired
EdSE 430 Braille
EdSE 416 Char. & Needs of the Visually Impaired
EdSE 417 Teaching the Visually Impaired
9 Semester Hours Special Education Electives

Area F: Hearing Impaired
EdSE 425 Manual Communication
EdSE 420 Characteristics & Needs of the Hearing Impaired
EdSE 430 Communication Processes for the Hearing Impaired
9 Semester Hours Special Education Electives

Area G: Speech & Language Impaired
EdSE 425 Manual Communication
EdSE 450 Characteristics & Needs of Speech & language Impaired Children
EdSE 451 Teaching Speech & Language Impaired Children
9 Semester Hours Special Education Electives

PROGRAM FOR A MINOR IN SPECIAL EDUCATION UNDERGRADUATE MINOR REQUIREMENTS

The program in special education may be selected as a minor by students pursuing a major in any area of teacher certification. Students who pursue a State Generic Endorsement in special education must also meet all of the requirements for the initial certification at either the elementary or secondary level.

The program as outlined below qualifies the student for a state generic endorsement in special education.

Special Education Specialized Courses **Semester Hours**

Survey:
Education of the Exceptional Child, EDSE 0333 3

Characteristics and Needs:
Characteristics and Needs of the Mildly Handicapped and Gifted, EDSE 0336 3
Characteristics and Needs of the Severely Handicapped, EDSE 0337 3

Educational Procedures:
*Humanistic Teaching of Exceptional Children, EDSE 0334 3
OR
*Teaching the Severely Handicapped, EDSE 0471 3
Teaching the Mildly Handicapped and Gifted, EDSE 0468 3

Educational Assessment:
Educational Assessment of Exceptional Children, EDSE 0462 3

Student Teaching:
*Practicum in Special Education, EDSE 0473 3
OR
*Student Teaching of Exceptional Children I, EDSE 0493 3

****Reading**
Teaching Reading in the Elementary School, EDRD 0424 4
****Curriculum and Instruction**
Teaching Arithmetic in the Elementary School, EDCI 0321 3
27-28

Semester Hours (Equivalent to 40 Quarter Hours)

*These courses are restricted electives.
**These courses are also required for elementary education certification.

EdSE 465 Introduction to Special Education. This course is required of all persons enrolled in the teacher education program. **Persons pursuing the minor or state endorsement should enroll in EdSE 0333 instead of EdSE 0465.**

CURRICULUM FOR A MAJOR IN EDUCATION SPECIAL EDUCATION EMPHASIS

FRESHMAN YEAR	Credit Hours Fall	Spring
Eng 101-102	3	3
Math 111*	4	
PE* or AERO	1	1
Humanities electives	2	2
EdSE 101, Health	2	2
Sci 121-122*	3	3
Speech Elective	—	3
	14	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 211-212	3	3
History 201-202	3	3
EdCI 201, Psy 242	3	3
PE or AERO	1	1
Sci Elective	3	3
Social Studies Electives	3	3
	16	16

*Subject to approved substitutions and exemptions.

JUNIOR YEAR	Credit Hours Fall	Spring
EdCI 301, 387	3	3
EDSE 333, Psy 312	3	3
EDSE 336, 337	3	3
EDSE 334, 462	3	3
Minor Electives	6	6
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
EDRD 424 or 482 or 491	4	3
EDSE 471		3
EDSE 468		3
EDSE 495		9
Minor Electives (300-400)	6	
Electives (300-400)	9	
	19	18

EDSE 480 is required of students graduating in 1988 and thereafter.

COURSE DESCRIPTIONS SPECIAL EDUCATION (EDSE)

EDSE 101 Special Education Orientation (2) The purpose of this course is to provide a general introduction to the field of special education. Experiences will include provision of concepts that relate to the field of Special Education through interaction with faculty members and guest speakers. Film, literature, etc. will be provided. (Designed for entering freshman).

EDSE 305 Parenting Exceptional Children. (3) A survey of categories of exceptionality, special needs of exceptional families, community resources, and child advocacy; methods for communicating with parents of exceptional children.

EDSE 333 Educational of the Exceptional Child. (3) Principles, characteristics, and special needs; local and state programs for diagnosis and care; educational provisions in regular or special classes; home teaching, social and vocational guidance.

EDSE 334 Humanistic Teaching of Exceptional Children. (3) Development insights into causes of children's problems; using communication skills to solve conflict situations; employing democratic methods to manage children; clarifying values; expressing emotion; the teacher as group facilitator.

EDSE 336 Characteristics and Needs of the Mildly Handicapped and Gifted. (3) Characteristics and needs of children who: (1) experience learning problems resulting from mental retardation, emotional disturbance, learning disability, or unidentifiable causes, (2) are physically handicapped, including visual and auditory impairments, and (3) are gifted. (Prerequisite 333 or 465).

EDSE 337 Characteristics and Needs of the Severely Handicapped. (3) Characteristics of moderately, severely, and profoundly disabled, and/or multiply handicapped individuals from ages three to twenty-one are included in this course. Discussion of needs includes functional living skills (dressing, feeding, toileting, mobility, communication) as well as utilization of specialty personnel.

EDSE 340 Career Education for the Handicapped. (3) Procedures and curricula to facilitate success in a vocation and in home, school, community, and interpersonal relations.

EDSE 406 Characteristics and Needs of Emotionally Disturbed Children. (3) Characteristics, degrees of severity, possible causes and groups of causes; relationships among personality, developmental factors, behavior problems may be considered.

EDSE 407 Teaching the Emotionally Disturbed. (3) Needs and educational procedures; methods and materials for special and regular classes; treatment models and perspectives.

EDSE 411 Characteristics and Needs of Mentally Retarded Children. (3) Characteristics, degrees of severity, identification, description, possible causes, and needs of the family.

EDSE 412 Teaching the Mentally Retarded. (3) Needs and educational procedures; methods and materials for special and regular classes.

EDSE 413 Education of the Learning Disabled Children. (3) Needs and educational procedures; methods and materials for special and regular classes; treatment models and perspectives.

EDSE 416 Characteristics and Needs of the Visually Impaired Characteristics and needs of children who are blind or partially sighted. (Prerequisites EdSE 333 or 465, 336, 337 and 462)

EDSE 417 Teaching the Visually Impaired Emphasis on curricular teaching methods, program adaptations and service delivery systems for the visually impaired; field-based experience. (Prerequisites—EdSE 333 or 465, 336, 337, 462 and 416.

EDSE 420 Characteristics and Needs of Hearing Impaired Child (3) Chracteristics, needs, educational procedures, and possible causes; treatment models and perspectives.

EDSE 425 Manual Communication. (3) Develops competence in fingerspelling, basic signing, and conversational skills; introduces advanced techniques.

EDSE 430 Communication Processes for the Hearing Impaired. (3) Speech and language development, auditory trainig, speech-reading, treatment models and perspectives, observation and practicum. (Prerequisite 230).

EDSE 435, 436, 437 Problems in the Education of Exceptional Children. (3,3,3) Individualized study. Consent of instructor.

EDSE 440 Braille (3) Develops competence in basic communication skills for individuals with visual impairments.

EDSE 450 Characteristics and Needs of Speech and Language Impaired Children. (3) Characteristics, needs and causes of speech and language problems in the exceptional child.

EDSE 451 Teaching Speech and Language Impaired Children. (3) Educational procedures, treatment models and perspectives, and field-based experience. (Prerequisite EDSE 450).

EDSE 460 Nature of the Learning Disabled Child. (3) Characteristics, identification and diagnosis, relationships to other disabling conditions, issues, and trends.

EDSE 462 Educational Assessment of Exceptional Children. (3) Administration and interpretation of various educational, cognitive, and social assessment instruments. Prescriptive teaching strategies and behavior management techniques will be developed based on assessment results, and IEP's will be written. Observation and practical experience are required. (Prerequisites 333 or 465; 334 and 335).

EDSE 464 Managing Inappropriate Classroom Behavior. (3) Theories, goals and intervention strategies for serving exceptional learners with mild to severe behavior disorders.

EDSE 465 Introduction to Special Education. (3) Designed to acquaint the student with the general field of special education—its purpose and scope. Offered each semester.

EDSE 468 Teaching the Mildly Handicapped and Gifted. (3) Developing individual education programs (I.E.P.s), social and personal skills or vocational preparation and alternative approaches including various forms of enrichment for the gifted; field-based experience. Prerequisites: Ed. S.E. 333, or 465; 336 and 462.

EDSE 469 Vocational Guidance & Occupational Placement for the Handicapped (3) This course is designed to promote occupational competency for the handicapped pupil through efficient vocational guidance. (Prerequisite EdSE 333 or 465)

EDSE 471 Teaching the Severely Handicapped. Developing functional and daily living skills for the profoundly to moderately handicapped; stimulation development and integration of sensory-motor perceptual communicative skills, and self-help abilities; field-based experience. (Prerequisites: Ed.S.E. 333 or 465, 462 and 337).

EDSE 473 Practicum in Special Education. (3) A practicum in actual classroom situations, guiding the learning experiences of exceptional children. Frequent conferences and reference readings will aid in the interpretation and solution of existing problems, as well as improving teacher-learning situations. Students must have completed the sequence of courses listed in the specialized area. (Prerequisites 333 or 465, 336, 465, 336, 337, 334 or 471, 468 and 462).

EDSE 480 Technology in Special Education & Rehabilitation. Indepth study of the various technologies utilized in Special Education and Rehabilitation. (1-3) Theories, goals, and intervention strategies (instructional and therapeutic) for developing and implementing computer-based educational environments and aids for the handicapped and gifted.

EDSE 481 Seminar in Emotional Disturbance. (3) Exploration and clarification of questions important to the prospective teacher; current literature. Specific aim; to bring together into a meaningful whole all the diverse studies of the prospective teacher and to focus this knowledge upon the problems of emotionally disturbed children. (Prerequisite EdSE 333 or EdSE 465, 406, 407, and 464).

EdSE 483 Seminar in Mental Retardation. (3) Survey of emerging professional and ethical issues related to mental retardation. Exploration and clarification of special topics. (Prerequisite—EdSE 333 or EdSE 465, 411, 412 and 464).

EdSE 485 Seminar in Learning Disabilities. (3) Survey of emerging professional and ethical issues related to learning disabilities. Exploration and clarification of special topics. (Prerequisite—EdSE 333 or EdSE 465, 460, 413 and 464).

EdSE 487 Clinical Special Education: Diagnosis & Treatment. (3) Advanced course in administration, interpretation and application of psychological educational and human service related tests and assessment data. Results will be utilized for development of appropriate treatment strategies. Observation and practical experience are required. Prerequisites: EdSE 333, 336, 337 and 462.

EdSE 488 Habilitation and Rehabilitation of Exceptional Youth. (3) Overview of theories and practices of the habilitation and rehabilitation process. Application of techniques for maximizing the physical, mental, social, vocational and economic potential of exceptional individuals. (Undergraduate prerequisites—EdSE 333 or 465, 336, 337.)

EdSE 489 Seminar in Clinical Special Education. (3) Seminar dealing with current issues and problems in theoretical and applied areas of special education. Enables students to acquire knowledge relative to medical habilitation/rehabilitation, mental health, human services, research and legal aspects of various exceptionalities. (co-requisites—EdSE 496; prerequisites EdSE 487 and 488.)

EdSE 495 Student Teaching of Exceptional Children. (9) Observation and supervised practicum with exceptional children. Experience may be split between two of the following: Mildly handicapped, severely handicapped, and gifted. (Prerequisites: 333 or 465; 334, 336, 337, 462, and 471.)

EdSE 496 Clinical Internship (3-9) Supervised on-site clinical experiences, development of advanced competencies as a clinician, teacher-counselor, crisis resource teacher, etc. (Prerequisites—Permission of Instructor.) Co-requisite—EdSE 489

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION

Harry Beamon, Ph.D., Head

The Department of Health, Physical Education and Recreation serves all students in the University by contributing to their health, organic vigor and assisting the development of desirable mental and physical habits that will improve their quality of life as they pursue their goals.

The Departmental objectives are:

1. To provide instruction to all students and/or develop appreciation for a variety of physical activities for a two-fold purpose: (a) development of physical skills and achievement of a balance in the demands of college life, (b) knowledge and appreciation of leisure time activities for immediate and later use.
2. To provide health instruction to all students so that they may be knowledgeable as health consumers and improve the quality of life for all.
3. To prepare prospective teachers in the areas of health instruction and physical education in addition to preparing the physical education professional with the necessary skills for athletic coaching responsibilities.
4. To prepare recreation specialists for positions as leaders and/or directors in public and/or private agencies.
5. To provide graduate studies in recreation to enable qualified persons to assume administrative and supervisory positions in the field of professional recreation services. (See Graduate Bulletin).
6. To provide advanced studies in health and physical education to meet high standards in the teaching profession and advancement in the respective fields. (See Graduate Bulletin).
7. To provide intramural and recreational activities for all students.
8. To provide leadership and services to the University and the community in the areas of health instruction, physical education and recreation.

PHYSICAL EDUCATION ACTIVITY COURSES:

Designed for all students to meet University Requirements for Bachelor's degree. Course offerings are PE 11 through PE 94—1.0 credit each.

PE 11 Physical Fitness Activities and PE 12 Elementary Swimming are required courses for the Freshman year. (One Course Per Semester). The four semester requirements must be completed prior to Junior year.*

*Note option regulation in Academic Information Section of the Catalog.

PE 15 through 50 are courses offered for the Sophomore year. (One Course Per Semester)

PE 91 through PE 94 are courses offered for students who require limited physical activities because of a physical disability. A medical statement must be filed with Department attesting to the physical disability for permission to enroll and continue in the course. Enroll in one course per semester—1.0 credit hour.

INTRAMURALS

Intramurals and Recreational Activities are part of the responsibilities of the Health, Physical Education and Recreation Department. Schedule of activities are posted each semester and all students at the University are encouraged to participate.

AWARDS

The Department of Health, Physical Education and Recreation offers two awards. HPER Junior-Senior HEPERMOTS and Faculty Award and the Lua S. Bartley Award. Majors in HPER with high grade point averages and involved in school activities may secure information from the Department.

MINORS IN HEALTH, PHYSICAL EDUCATION AND RECREATION

Physical Education

HPER 101	Intro to HPER	2
Hea 306	First Aid and CPR	3
PE Dance	PE 222A-B, PE 227 or 300-400 level dance	2
Fund & Tech Sports	PE 201-214	4
PE 331	Measurement and Evaluation PE	3
PE 334	History and Philosophy of PE	3
PE 403	Physical Education for Atypical	3
		20 cr. hrs.

Health Instruction

HPER 101	Intro HPER	2
Hea 300	School Health Program	2
Hea 303	Environmental Sanitation	3
Hea 305	Family Health	2
Hea 306	First Aid and CPR	3
PE 312	General Anatomy	3
Ntr 312	Nutrition for Teachers	3
Micro 250	Prin of General Bacteria	3
		21 cr. hrs.

Recreation

HPER 101	Intro to HPER	2
Fund and Tech	Dance and/or Sports and/or Aquatics	2
PE 300 or HPER 403	Play and Lead-Up Games/P.E. & Recreation for the Handicapped	2 or 3
PE 434	Planning Special Events and Demonstrations	2
REC 303	Camping	2
REC 353	Leadership Principles	2
ART	(2 courses 300-400 level)	6
		18 cr. hrs.

DEGREE PROGRAMS

The Department offers six (6) undergraduate curricula leading to a Bachelor of Science degree and two (2) Master's of Science. (See Graduate Catalog).

Four undergraduate curricula meet certification requirements. Health Instruction, Physical Education Elementary, Physical Education Secondary, and Health and Physical Education (K-12). The other two undergraduate curricula (without certification) are Recreation and Physical Education—minor(s) required.

REQUIREMENTS FOR HEALTH, PHYSICAL EDUCATION AND RECREATION MAJORS

All students are required to meet General University Requirements for the Bachelors Degree. These requirements are described in the "Academic Information Section" of this Catalog. The courses are part of the curriculum and should be taken at the prescribed time.

All students wishing to follow the curricula for certification must meet the Teacher Education and Retention Requirements. These requirements and proper procedures are described in the "Academic Information Section" of this Catalog.

All students must meet all Departmental requirements and follow a selected prescribed curriculum. "C" is the lowest acceptable grade for major courses for credit toward graduation requirements.

HEALTH INSTRUCTION (with certification)

The curriculum is designed to prepare a health specialist to teach effectively with the knowledge, competencies, methodology and material required. The student will do the pre-service field experience on the secondary level.

In addition to the required Departmental courses, plus the General Education and Teacher Education core, Health Instruction majors must take the following.

HCA 201 Introduction to Health Care Organization 3
MCB 250 Principles of General Bacteriology 4
MCB 410 Pathogenic Microorganisms 4
NTR 312 Nutrition for Teachers 3
Soc 420 Population Problems 3
Zoo 201-202 Human Anatomy and Physiology 4-4
EDCI 463 Audio Visual Aids in Education 2
EDCI 419 Tech in the School 1-3

REQUIREMENTS FOR GRADUATION HEALTH INSTRUCTION

General Education Requirements

Professional Education Core .....

Block Courses HEA 371 H 3
HEA 472 H 9
EDRD 491 3
EDCI 472 (0)....0

Major course requirements in Department HPER .....

HPER *101-*304-450-402, HPER 403 (GE) HEA *151, HEA *300, *303, 304, *305, *306, *307, 409
PE 312-313-314 .....
PE *331

*Pre-requisites for Student Teaching Application for Student Teaching must be filed one (1) semester prior to the enrollment semester.

CURRICULUM FOR A MAJOR IN HEALTH INSTRUCTION (with certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-ENG 102	3	3
HIST 201-HIST 202	3	3
CHEM 121-CHEM 122	4	4
HPER 101-MATH 111	2	4
HEA 151-PE 12	2	1
PE 11-PE 15 thru 50	1	1
	15	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-ENG 212	3	3
ZOO 201-ZOO 202	4	4
EDCI 201-HPER 304	3	2
MCB 250-MUS 131	4	2
HEA 300-GPA 221	2	3
Art 133-Psy 242	2	3
PE 51 thru 50	—	1
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
HEA 303-HEA 305	3	2
PE 312-HPER 304	3	2
PE 331-PSY 312	3	3
EDCI 301-MCB 410	3	4
HPER 402-EDCI 387	3	3
HEA 307-SOC 420	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
PE 314-HEA 371H	3	3
NUTR 312-HEA 472H	3	9
HPER 450-EDCI 472-0	3	0
Hea 409-EDRD 491	3	3
EDSE 465	3	
EDCI 463	2	
	17	15

TOTAL HOURS: 134

PRE-PHYSICAL THERAPY (option). The course of study provides the necessary college preparatory work leading to entrance into the professional preparation institution. In addition, an individual will have gained a teaching certificate in the area of Health Instruction. The broad supportive background is similar to that which is required for other degrees within the department, with such additions as provide the strength in subject matter important to the physical therapy schools. One may also, if one wishes, matriculate under the Health and Physical Education course of study and elect the chemistry and physics to satisfy the physical therapy requirements. The student would become proficient in a wide range of physical skills and thus be better prepared to assist patients in their efforts to regain their physical efficiency.

Suggested additional courses in preparation for application to Physical Therapy School.

Math 161-162 4-4
Physics 191-192 1-1
Physics 211-212 4-4
Chemistry 311-312 4-4

ELEMENTARY PHYSICAL EDUCATION (with certification K-7)

The curriculum is designed to prepare the elementary physical education specialist. The student will do the pre-service field experience on the elementary level.

REQUIREMENTS FOR GRADUATION
Physical Education—Elementary

General Education Requirements
Professional Education Core
Block Courses PE 371E 3
PE 472E 9
EDRD 491 3
EDCI 472 (0).

Major course requirements in HPER Dept.

PE Elementary
*HEA 306 First Aid 3
HPER 101-402, 403, 450 11
Fundamental and Technique 6
Prior to Student Teaching
Team Sports *4 Sports
Individual and Dual *2 3 Sports

PE 202 2
Dance *22A-B or 227 4
PE 310 Play and Lead Up Games 2
PE *301 Gymnastics 2
PE *302 Movement Exploration 2
PE 304 Elements of Safety 2
PE 312 Anatomy-PE 313 Kinesiology 6
PE 314 Physiology of Exercise 3
PE 315 Teaching Individual and Dual Sports 2
PE *331 Measurement and Evaluation in PE 3
PE *334 History and Philosophy 3
PE 335 Principles of Perceptual Motor Development 2
PE 434 Planning Special Events and Demonstrations 2
*Prerequisites for student teaching.

CURRICULUM FOR A MAJOR IN PHYSICAL EDUCATION (Elementary—With Certification K-7)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-ENG 102	3	3
HPER 101-HEA 151	2	2
MATH 111-GPA 221	4	3
HIST 201-HIST 202	3	3
ART 133 or MUS 131	2	2
PE 11-PE 12	1	1
PE 15 thru 50-PE 36	1	1
	16	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-ENG 212	3	3
SCI 121-SCI 122	3	3
EDUC 201-PSY 242	3	3
HEA 306-PE 227	3	2
PE 222A-PE 301	2	2
PE 203 thru 214-PE 203 thru 214	1	1
PE 202-PE 203 thru 214	1	1
PE 302-PE 310	2	2
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
EDCI 387-PE 201 thru 214	3	1
PE 312-PE 313	3	3
PE 331-PE 334	3	3
PE 335-Psy 312	2	3
EDUC 301-PE 201 thru 214	3	1
PE 315-PE 201 thru 214	2	1
PE 201 thru 214-PE 434	2	2
HPER 403		3
	17	17

SENIOR YEAR	Credit Hours Fall	Spring
HPER 450-EDRD 491	3	3
HPER 402-PE 371E	3	3
EDSE 465-PE 472E	3	9
PE 314-EDCI 472 (0)	3	0
EDCI 419	3	
HPER 304	2	
	17	15

SECONDARY PHYSICAL EDUCATION (with certification 7-12)

The curriculum is designed to prepare the secondary physical education specialist and those teachers interested in coaching. The student will perform the pre-service field experience on the high school level.

REQUIREMENT FOR GRADUATION PHYSICAL EDUCATION—SECONDARY

General Education Requirements
Professional Education Core
Block Courses: EDRD 491 3
PE 371S 3
PE 472 (S) 9
EDCI 472 (0) .....

Major Course requirements in Department HPER

Hea 300	Environmental Sanitation	3
*Hea 306	First Aid and CPR	3
Hea 307	Health Instruction (K-12)	3
*HPER 101	Intro to HPER	2
HPER 304	Elements of Safety	2
HPER 402	Organization and Admin. of HPER	3
HPER 403	Physical Education and Recreation for the Handicapped	3
HPER 450	Senior Project Writing	3
*PE	Fundamental and Techniques Three (3) Team Sports Four (4) Individual and Dual Sports	8
PE 202	Theory of Aquatics	1
*PE	Dance PE 222A or B, PE 227	4
*PE 301	Gymnastics	2
*PE 312	General Anatomy	3
*PE 313	Kinesiology	3
PE 314	Physiology of Exercise	3
*PE 315	Teaching Individual and Dual Sports	2
*PE 331	Measurement and Evaluation	3
*PE 334	History and Philosophy of Physical Education	3
PE 420 to 428	Coaching Courses	4

*Prerequisites for Student Teaching

Application for Student Teaching must be filed one (1) semester prior to the enrollment semester.

CURRICULUM FOR A MAJOR IN PHYSICAL EDUCATION SECONDARY (7-12)

FRESHMAN YEAR	Credit Hours Fall	Spring
Eng 101-Eng 102	3	3
Hist 201-Hist 202	3	3
Sci 121-Sci 122	3	3
Art 133-Hea 151	2	2
HPER 101-Mus 131	2	2
PE 11-PE 12	1	1
PE 15 thru 50-PE 36	1	1
	15	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 211-Eng 212	3	3
Math 111-GPA 221	4	3
EDCI 201-Psy 242	3	3
PE 222A-PE 222B or 227	2	2
Hea 303-Hea 306	2	2
PE 201 thru 214 (team)-PE 301	1	2
PE 201 thru 214 (Individual)-PE 202	1	1
PE 201 thru 214 (Individual)		1
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
PE 315-PE 335	2	2
PE 312-PE 313	3	3
PE 331-Psy 312	3	3
PE 201 thru 214-EDCI 301	1	3
PE 201 thru 214-EDCI 387	1	3
PE 201 thru 214		1
HPER 304-PE 334	2	3
PE 420 thru 423	2	
HPER 402	3	
	17	18

SENIOR YEAR	Credit Hours Fall	Spring
HPER 450		3
PE 472S-PE 420 thru 423	9	2
PE 371S-PE 314	3	3
HPER 403		3
EDCI 472-O-EDSE 465	0	3
EDRD 491-EDCI 419	3	3
	15	17

TOTAL HOURS: 132

HEALTH AND PHYSICAL EDUCATION (Certification K-12)

Students may do pre-service on elementary or secondary level, but student must follow with the pre-service experience the same semester as the chosen level for the methods course.

REQUIREMENTS FOR GRADUATION HEALTH AND PHYSICAL EDUCATION (K-12)

General Education Requirements
Professional Education Core
Block Courses: PE 371E or S 3
EDRD 491 3
EDCI 472 (0) 0
PE 472 E or S 9

Selected methods level determines the level for student teaching and must be taken the same semester.

Major Requirements:
HPER *101-304-402-403-450
HEA *300-*303-305-*306-307, 409
PE (Fundamental and Technique Courses)-*4 Hours
PE 202
PE *301
Dance PE 227-222A or B .....*4 Hours

PE 302-*301-*312-*313-314 .....*6 Hours
PE 315-335.....*2 Hours

*331-334 .....6 Hours

PE 371E or S-(Not Student Teaching Semester)
PE 420 to 428-(Coaching Courses-4 Hours)

*Prerequisites for Student Teaching

CURRICULUM FOR A MAJOR IN HEALTH AND PHYSICAL EDUCATION (WITH CERTIFICATION—K-12)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-ENG 102	3	3
HIST 201-HIST 202	3	3
MATH 111-GPA 221	4	3
SCI 121-SCI 122	3	3
HPER 101-HEA 151	2	2
ART 133-MUS 131	2	2
PE 11-PE 12	1	1
PE 36		1
	18	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-ENG 212	3	3
EdCI 201-PSY 242	3	3
HEA 300-PE 313	2	3
PE 312-HEA 306	3	3
PE 301-PE 202	2	1
Hea 305—PE 310	2	2
Hea 335-Hea 303	2	3
PE 15 thur 50	1	
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
HEA 307-PE 334	3	3
HPER 402-PE 314	3	3
PE 201 thru 214-EDCI 387	1	3
PE 201 thru 214-PSY 312	1	3
PE 315-PE 201 thru 214	2	1
PE 331-HPER 403	3	3
PE 302-PE 227 or 222B	2	2
EDCE 301	3	
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
EDCI 491-*PE 472E (Spring only)	3	9
HPER 304-EDCI 472	2	0
HPER 450-PE 371E	3	3
EDSE 465-EdRD 491	3	3
PE 222A or PE 326	2	
PE 420 thru 426	2	
PE 371S	3	
	18	15

*PE 472/S-FALL ONLY

PHYSICAL EDUCATION—NON-TEACHING (without certification)

Students must select one or two minor fields of study. Suggested approved minors are Business, Communication, and Psychology. Other minors must be approved by Advisor and Department Head.

CURRICULUM FOR A MAJOR IN PHYSICAL EDUCATION (Without Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-ENG 102	3	3
HIST 201-HIST 202	3	3
MATH 111-MATH 112	4	3
PE 11-PE 12	1	1
ART 133-MUSIC 131	2	2
HPER 101-GPA 221	2	3
	15	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-ENG 212	3	3
ZOO 201-ZOO 202	4	4
HEA 305-HEA 306	2	3
HPER 304-PE 222A or 222B or 326	2	2
PE 15 thru 50 THEA 120	1	2
HEA 151-PE 15 thru 50	2	1
Electives (200 thru 300 level) minor Electives (300 level) minor		3
PE 201 thru 214	1	
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
PE 312-PE 313	3	3
HEA 303-PE 334	3	3
PE 202-PE 332	1	2
PE 201 thru 214-PE 201 thru 214	2	1
PSY 201-PE 420 thru 426	3	2
PE 420 thru 426-PSY (300-400 level)	2	3
Elective (300 thru 400 level) minor	3	
Elective (300 thru 400 level) minor		3
	17	17

SENIOR YEAR	Credit Hours Fall	Spring
PE 314-PE 331	3	3
HPER 450-PE 201 thru 214	3	2
PE 201 thru 214-Elective (300-400 level) minor	2	3
Elective (300 thru 400 level) minor	3	
Elective (300 thru 400 level		4
SOC (300 thru 400 level)-SOC (300 thru 400 level)		3
	17	15

TOTAL HOURS: 132

SUGGESTED MINORS FOR HEALTH, PHYSICAL EDUCATION AND RECREATION MAJORS

General Business Administration

OM 315	Basic Computer Science	3
BL 300	Legal Environment of Business	3
MG 301	Management, Organization Theory and Behaviors	3
MK 301	Basic Marketing	3
MG 403	Personnel Administration	3
AC 211	Principles of Accounting or	3
EC 211	Economic Principles	3
BA 400L	Elective	3
AC 212	Principles of Accounting	3
		18

MASS COMMUNICATION

SPCH 200	Introduction to Mass Communication	2
SPCH 350	Broadcasting in America	3
SPCH 364	Radio and Television Production	3
SPCH 440	Radio and Television Programming	3
JOUR 301	Survey of Journalism	3
JOUR 302	New Writing	3
JOUR 304	Advanced Reporting	3
		20

PSYCHOLOGY

PSY 201	General Psychology	3
PSY 310	Psychology of Adjustment	3
PSY 333	Group Dynamics and Human Relations	3
PSY 341	Social Psychology	3
PSY 351	Developmental Psychology: Child Development	3
PSY 381	The Psychology of Adolescence	3
PSY 430 or PSY 471		
PSY 430	Motivation and Emotion	-
PSY 471	Industrial and Personnel Psychology	-
		21

RECREATION

The curriculum in recreation has as its purpose to give the student theory and practice in the broad field in recreation and to prepare him to meet requirements for recreational employment. This major is designed to develop leaders in recreation with a sound general education and an insight into the social responsibilities of community agencies.

The curriculum is designed to prepare students for a variety of positions as recreation leaders or directors in public and private agencies, including administrative positions in parks, recreation departments, positions as supervisors or community center directors as well as industrial, hospital, church, institution, settlement house and armed services recreation program workers.

The curriculum includes courses in education, psychology, natural and social sciences and courses in sports, aquatics, crafts, drama, music, social recreation, dance and camping. Practical experience is obtained through community as well as camp work experience.

All students in the recreation curriculum must meet the general education requirements of the University. To meet these requirements, students are required to complete approved sequence of courses in the areas of the humanities, mathematics, the natural sciences, and the social sciences. Curriculum requirements total 132 hours.

CURRICULUM FOR A MAJOR IN RECREATION

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-ENG 102	3	3
HIST 201-HIST 202	3	3
HPER 101-HEA 151	2	2
NAT SCI 121-NAT SCI 122	3	3
MUS 131-ART 133	2	2
PE 11-PE 12a	1	1
PE 15 thru 50-PE 15 thru 50	1	1
	15	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-ENG 212	3	3
MATH 111-GPA 221	4	3
PSY 201-PSY 310	3	3
SPEECH 220-PE 222B	3	2
PE 201 thru 214-Art 200 thru 300	1	3
PE 202-PE 201 thru 214	1	2
PE 222A-PE 332	2	2
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
HEA 300-HEA 306	3	3
PE 310-	2	
PE 312-PE 313	3	3
PSY 242-PE 314	3	3
ART/IND (300 level)-REC 302	3	2
MUS 301-Rec 303	3	2
PE 201 thru 214-REC 353	1	2
DRAMA (300-400 level)		3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
HPER 402-REC 473	3	9
SOC (300-400 level)-EDCI 463	3	2
HPER 450-HPER 403	3	3
PE 315-PE 434	2	2
Electives (300-400 level)-REC 481	2	2
ART 301	3	
PE 308	2	
	18	18

TOTAL HOURS: 133

COURSE OFFERINGS HEALTH

HEA 151. Personal Hygiene. (2) Emphasis is placed on health through a consideration of various conditions which affect health. It includes a comprehensive coverage of important trends on major health areas such as communicable diseases, drugs, nutrition, and those involving the psychological or adjustive processes and those of a psychological or biological nature. A requirement for students fulfilling the core in general education. Combined with UTN 1110.

HEA 300. The School Health Program. (2) Designed to give a general knowledge of those procedures established to determine the health status of the child and to relate ways and means of enlisting the cooperation of pupils, teachers, parents and others in health protection. Special emphasis is placed on the functions of all school personnel. Prerequisite: 151.

HEA 303. Environmental Sanitation. (3) Emphasis is placed on the expanding concept of community hygiene and sanitation in our society. It includes not only sanitation of food, water, waste disposal, material health and health in industry, but drug abuse, pollution control and the utilization of citizens for total community participation.

HEA 305. Family Health. (2) Aims to acquaint the student with the important individual, family, and community factors essential to healthful living. The significance of heredity, nutrition, and housing in effective family living is emphasized. Stress is placed upon the provision and use of health services for maternal and child care and for the prevention of illness. The mental, physical, and emotional aspects of family health are also considered.

HEA 306. First Aid and Cardio-Pulmonary Resucitation. (3) Demonstration and practice of general first aid care for emergencies resulting from physical trauma or acute illness. Special attention also given to preventing and administering to athletic injuries. Laboratory experience in taping and bandaging are provided. CPR is also offered in this course. Two Red Cross Certificates are awarded for successful completion of the course.

HEA 307. Health Instruction for the School. (3) Designed to familiarize the students with the basic principles and concepts of constructing unit and lesson plans in health education, and utilizing materials and aids in grades K-12 from the conceptual approach to curriculum design.

HEA 371H. Methods and Materials of Health Education. (3) Attention focused on the curriculum and content of health education program with consideration given to procedures, techniques, and equipment used in teaching. Study, discussion, and experience in planning and conducting and health lesson provided. Field Experience required.

HEA 409. Drug Education. (3) Designed to present general and specific knowledge of the avoidance, use and abuse of substances. The course includes substance effects, dependence, habituation, addiction, abuse, classification of abused drugs, treatment of alcoholism and drug addiction.

HEA 472 H. Student Teaching In Health. (9) This course is designed to provide an opportunity for students to put to use methods, techniques and materials of instruction in Health in classroom setting. Prerequisites; specific courses as established for the program, plus at least a "C" in methods.

HEALTH AND PHYSICAL EDUCATION (HPER)

HPER 101. Introduction to Health, Physical Education and Recreation. (2) Introduces freshmen to the requirements for effective college living in general and to the field of health, recreation and physical education in particular. Includes a review of objectives, scientific foundations, opportunities for service, careers, qualifications and professional personnel in these areas. Physical Fitness Testing and Sport Skills Testing are administered in the course.

HPER 304. Elements of Safety. (2) Is concerned with the exploration of concepts that foster safe living at home, in school, on the job and at leisure.

HPER 402. Administration of Health, Physical Education, Recreation, Athletics and Intramurals. (3) Aim is to give the student a knowledge of the organizational, administrative and supervisory policies and procedures utilized in Health, Physical Education and Recreation. Emphasis is placed on skills and techniques necessary to prepare students for problems encountered as administrators of school, park, playground and health programs.

HPER 403. Health Physical Education and Recreation for the Handicapped. (3) A competency-based modularized course of instruction designed to assist students in acquiring the necessary knowledge, skills and competencies to enable them to provide physical education programming for handicapped children in the least restrictive environment. Students frequently will be required to travel to off-campus sites for practicum experiences.

HPER 450. Senior Project Writing. (3) Designed to give students opportunities to initiate and develop projects from problems of interest to them in a junior thesis style. Enrollment in course at least one semester prior to the expected semester of graduation is advised.

PHYSICAL EDUCATION (PE)

Service Courses—This section contains required and elective physical education courses for the general student body. (NOTE PE 12a is for HPER majors only).

PE 11. Physical Fitness Activities. (1) Designed so that students participate in exercises and various physical activities that can improve strength, flexibility and cardio-vascular endurance. It is a required course for freshmen students.

PE 12a. Introduction to Swimming. (1) Required of freshmen HPER majors.

PE 12b. Elementary Swimming. (1) Required of other than HPER majors.

PE 15. Modern and Ballet Dance. (1) Designed to give an introduction to modern dance technique and ballet technique as well as elementary composition. The first half of the semester will be spent covering modern, the last half covering ballet. No prerequisites.

PE 16. Badminton. (1) An elective course designed to develop skill in badminton.

PE 17. Volleyball. (1) An elective course in which volleyball is taught.

PE18. Soccer. (1) An elective course in which the basic elements of soccer are taught.

PE 19. Handball. (1) An elective course, in handball elements.

PE 20. Golf. (1) An elective course in which the basics of golf are taught.

PE 21. Bowling. (1) An elective course designed to teach elementary bowling.

PE 22. Shuffleboard. (1) An elective course in which shuffleboard is taught.

PE 23. Speedball. (1) An active elective in which speedball is taught.

PE 24. Basketball. (1) An elective concerned with teaching basketball skills.

PE 25. Folk and Square Dance. (1) An elective course for folk and square dance skills.

PE 26. Softball. (1) An elective in which softball is taught and played.

PE 27. Tennis. (1) An elective course for the teaching of basic tennis.

PE 28. Social Dance. (1) An elective course exploring different types of social dances.

PE 29. Touch Football. (1) An elective presenting the modified form of football.

PE 30. Weight Training. (1) A course designed to teach the rudiments of movement using weights.

PE 31. Racquetball. (1) A course designed to teach racquetball.

PE 32. Beginning Yoga. (2) An elective course to teach the Yoga Postures.

PE 33. Wrestling. (1) A course designed to teach the skills of wrestling.

PE 34. Archery. (1) An elective course in which basic skills of archery are taught.

PE 36. Stunts and Tumbling. (1) A course for the teaching of the basic tumbling skills.

PE 43. Track and Field. (1) An elective course for the teaching of the elements of selected track and field activities.

PE 44. Karate. (1) An elective, the study of basic movements of Oriental Martial Art. Theory and practice of the mental and physical discipline related to the activity. To be taught as a sport, and for self defense.

PE 46. Beginning Jazz and Tap Dance. (1) Designed to give the basic fundamental movements, steps and patterns of Jazz and Tap Dance as well as incorporating the style and the history. No prerequisite.

PE 50. (2) Scuba Diving. Course is designed to teach safety, theory, and practice of scuba diving.

PE 91, 92, 93, 94. Adapted Physical Education. (1) Elective for those students who have some type of condition that requires limited physical activity.

MAJOR COURSES

PE 201. Fundamentals and Techniques of Football. (1) Emphasis is placed on the development of the ability to demonstrate the fundamental skills of football with proficiency as well as upon the recognition of problems related to the introduction of review of these skills in teaching situations.

PE 202. Theory of Aquatics. (1) A course in which proficiency is to be developed through the intermediate level of water skills. Emphasis is also given to the theoretical aspects, performance and teaching of acquatic activities.

PE 203. Fundamentals and Techniques of Badminton. (1) A course intending to develop skills and the techniques associated with this racquet game.

PE 204. Fundamental and Technique of Basketball. (1) A concentration upon development of proficiency in the performance of fundamental skills in basketball with some emphasis upon recognizing problems of the teacher in introducing and/or reviewing the skills involved.

PE 205. Fundamentals and Techniques of Tennis. (1) A major course in which a racquet activity is taught, for perfection of skill and for an understanding of teaching elements.

PE 206. Fundamentals and Techniques of Track and Field. (1) A major course concerned with the student's developing performing skills and "teaching point" awareness in the activities involved.

PE 207. Fundamentals and Techniques of Golf. (1) A major course in which students learn to perform better and to understand the theory of the activity to the extent that they may instruct more effectively. Students frequently will be required to travel to off-campus sites for laboratory experiences.

PE 208. Fundamentals and Techniques of Wrestling. (1) A major course designed to develop individual skill and understanding of the activity.

PE 209. Fundamentals and Techniques of Volleyball. (1) A required course for majors which discusses fundamentals and techniques of the activity and prepares the student in methods of organizing, strategy in competition, conditioning, and related matters for instructional purposes.

PE 210. Fundamentals and Techniques of Bowling. (1) A major course in which individual skills are developed and practiced.

PE 211. Fundamentals and Techniques of Archery. (1) A major course in which the skills of archery are sharpened and awareness of teaching concerns explored.

PE 212. Fundamentals and Techniques of Softball. (1) A major course in which softball as a set of skills is taught.

PE 213. Fundamentals and Techniques of Soccer. (1) A major course in which the skills of soccer are sharpened.

PE 214. Fundamentals and Techniques of Handball/Racquetball. (1) A course in which the skills of handball or racquetball are developed. Racquetball is a modification of the older game of handball.

PE 222A. Survey of Dance Forms; Folk and Square. (2) A study of the history, some personalities associated with (past and present) and fundamental techniques and experiences related to folk and square dance.

PE222B. Survey of Dance Forms: Modern. (2) A study of the history some personalities associated with (past and presen) and fundamental techniques and experiences related to modern dance.

PE 222C. Survey of Dance Forms: Jazz and Social Dance. (2) The study and skill development in selected social dances. The effort is to understand and develop skill in the continuum of movements in the activity.

PE 222D. Survey of Dance Forms: Tap Dance. (2) Development of basic skills and understanding related historical elements associated with the dance.

PE 227. Fundamental Rhythms and Music for Dance. (2) Provides an understanding of music in its relationship to dance; offers experiences in creating music with rhythm instruments (standards and contrived) for dance accompaniment; surveys the area of fundamental movement patterns through participation in creative and exploratory experiences.

PE 301. Gymnastics and Apparatus Work. (2) Deals with the acquisition of skill and the development of intermediate to advanced techniques in gymnastics and apparatus works.

PE 302. Movement Exploration. (2) Offers theoretical and practical experiences in developing the problem-solving method of teaching motor activities. Includes study and analysis of the implications of the exploratory method for teachers at pre-school, primary, and intermediate levels of instruction.

PE 308 Officiating Techniques. (2) To teach the techniques of officiating in selected sports and provide practical experiences through officiating in intramural activities.

PE 310 Play and Lead-Up Games. (2) Designed to offer the major theory and practice in exploratory experiences, lead-up activities, low organized games (for classroom, gymnasium, out-of-doors), drills, and self testing activities primarily for use in elementary physical education programs. A study of factors that make up desirable elementary physical education programs will be included. Suggestions as to how these activities may be adapted to use at secondary levels and in recreational situations will be discussed.

PE 312 Anatomy and Physiology. (3) A basic course in gross anatomy and physiology designed to provide instruction in the study of the structure and function of the human body, and all that it implies. Laboratory experiences will also be provided to augment concepts to be covered.

PE 313 Kinesiology. (3) A study concerned with motion of the human body, its segments and their mechanical functioning in games, sports, and other physical education activities. Required of HPER majors.

PE 314 Physiology of Exercise. (3) A course designed to combine several science disciplines, neuromuscular activities, circulation and respiration, metabolism, environmental aspects of exercise, fatigue and training, health and physical fitness. The course will describe and explain the functional responses and adaptations that accompany single and repeated bouts of physical exercise. Laboratory experiences will also be provided to augment concepts to be covered.

PE 315 Teaching Individual, Dual and Team Sports. (2) A course in which the implications of the fundamental and technique experiences are focused on teaching of all activities. Methods of planning and presenting skills to be learned in the most effective manner are explored.

PE 319 Adult Fitness. (2) The course is designed to determine one's level of fitness, participate in selected activities to improve fitness, and analyze changes in fitness in the Human Performance Laboratory. (Open to all—medical exam required).

PE 323 Modern Dance: Techniques and Composition. (2) Intermediate advanced modern dance techniques and an introduction to the choreography process. Elective for majors and non-majors with previous experience in modern dance.

PE 324 Tap Dance: Technique and Choreography. (2) Intermediate and advanced experience for those who desire it; elective for majors and non-majors with previous experience in tap dance.

PE 325 Square Dance Calling and Modern Square Dance. (2) Techniques for calling square dance introduced with laboratory experiences for developing individual styles; participation in square dance experiences which involve the modern and up-to-date figures and innovations.

PE 326 Rhythmic Performance Groups. (2) Theory and practice related to the organization, training, and supervision of rhythmic groups (dance drill teams majorettes, modern dance groups, tap dance groups, dance "half-timers", etc.); prerequisite: previous dance experience.

PE 326A Rhythmic Performance Group. (2) This course is designed to give the student intermediate and/or advanced techniques in Tap; as well as prepare them for Theory and training related to dance performances. Prerequisites required.

PE 326B Rhythmic Performance Group. (2) This course is designed to give the student intermediate and/or advanced techniques in Modern Dance as well as prepare them for Theory and Training related to dance performances. Prerequisites required.

PE 326C Rhythmic Performance Group. (2) This course is designed to give the student intermediate and/or advanced technique in Jazz as well as prepare them for Theory and Training related to dance performance. Prerequisites required.

PE 331 Measurement and Evaluation in Physical Education. (3) This course acquaints the student with tests available in physical education. It emphasizes the theory, application, and administration of tests for use in evaluating the content and methods of measuring student's achievements, criteria for classification of students, and marking. Required of majors in health and physical education.

PE 332 Advanced Swimming and Lifesaving (2) To review coordinate styles of swimming, water safety skills, and techniques leading to American Red Cross lifesaving certificate. Prerequisite—PE 202 or equivalent.

PE 334 History and Philosophy of Physical Education. (3) A basic survey of the history of physical education. It provides orientation in the essential unity of the educational process in the field of physical education, and it provides a foundation for philosophy, principles, curriculum, organization and administration, methods and trends of modern physical education.

PE 335 Principles of Perceptual Motor Development. (2) This course is structured to identify basic principles of physical education which serve as guidelines for action by prospective teachers in planning for teaching and in deciding what and how to teach.

PE 371E Materials and Methods in Physical Education for Elementary Schools. (3) Attention given to the nature and content of an adequate elementary physical education program with study and discussion of current principles, practices, and procedures applicable. Experience include developing teaching units and lesson plans, observation in the elementary school, and practice in conducting skill lessons. Field Experience required.

PE 371S Materials and Methods in Physical Education for Secondary Schools. (3) Special attention is given to content of the program, methods, procedures, techniques and devices relative in individual and dual sports, team games, rhythms, self-testing activities and related events for boys and girls on the secondary school level. Required of majors and minors in physical education. Observation in Secondary Schools required. Field experience required.

PE 372D Methods of Teaching for Dance. (2) Practical procedures, lead-up activities, planning and conducting the dance lesson with attention to special problems presented at various age-grade levels and under various teaching conditions (folk, square, social, modern, and tap dance).

SOC-PE 375 Sociological Implications of Sports. (3) This course deals with social mobility, environment adjustments, problems and attitudes to male and female athletes. There will be some concern with race, culture and backgrounds of various ethnic groups along with factors involved in apparent group superiority in some sport activites. An elective, for most majors, taught in the Department of Sociology.

PE 420 Coaching of Football. (2) An examination and study of rules, methods of organizing practice and management of teams, team offense and defense, strategy and philosophy of coaching football.

PE 421 Coaching of Basketball. (2) A course concerned with rules and regulations and theory of developing basketball teams. The skills and team strategies are examined as parts and as wholes.

PE 422 Coaching of Baseball. (2) All elements of the game as they concern coach—the skills, personnel, theory, practice sessions, and team organization are explored.

PE 423 Coaching of Track and Field. (2) A course concerned with the presentation and practice of skills associated with coaching and officiating of track and field activities. Officiating at track meets required.

PE 424 Coaching of Volleyball. (2) Is concerned with the theory and practice of those elements important to the coaching and officiating of volleyball as a competitive activity.

PE 425 Coaching of Gymnastics. (2) The course presents the facets of gymnastics important to coaching and officiating of the activity.

PE 426 Coaching of Aquatics. Concerns for theory, events, training personnel, etc. of swimming as they are important to coaching a team is discussed. The alignment of events in meets is also part of the concern. (2 crs.)

PE 427 Coaching and Officiating of Individual and Dual Sports. (2) A course in which coaching/teaching in the types of sports involved are pulled together for study.

PE 428 Coaching and Officiating of Team Sports. (2) A course in which all team games, their important aspects from the coach's point of view and the developing of a team are studied.

PE 430 Defensive Football. (2) To study the intricacies of defensive football, techniques, drills, stations, fronts, etc. Prerequisites PE 201 and PE 421 (Course offered even years).

PE 434 Planning Special Events and Demonstrations. (2) Provides prospective physical education teachers and recreation leaders with practical methods and materials for planning, directing, and producing demonstrational and extra-class events related to the daily instructional program of the school, or the daily activity program of the recreational institution. Greatest attention is directed toward projects which involve large numbers of participants and which are performed before an audience. Some attention given to "small-scale" events which are outgrowths of interest-group activity, class or club experiences.

PE 436 Water Safety Instructor. (2) The course is designed to train instructor candidates to teach effectively the safety procedures, skills and knowledge of the American Red Cross courses in swimming and lifesaving. The prerequisites for this course is a Red Cross Lifesaving Certificate.

PE 472E Student Teaching in Elementary Physical Education. (9) This course is designed to provide an opportunity for students to put to use methods, techniques, and materials of instructions in physical education in a classroom setting. Prerequisites—specific courses as established for the program, plus at least a "C" in methods.

PE 472S Student Teaching in Secondary Physical Education. (9) This course is designed also to provide an opportunity for students to put to use methods, techniques, and materials of instruction on the secondary level in physical education in a classroom setting. Prerequisites—specific courses as established for the program, plus at least a "C" in methods.

RECREATION

HPER 101 Introduction to HPER. (2) Introduces freshmen to the requirements for effective college living in general and to the field of health, recreation and physical education in particular. Includes a review of objectives, scientific foundations, opportunities for service and the qualifications and professional personnel in these areas. Physical Fitness Testing and Sports Skills testing.

HPER 402 Administration of Health, Physical Education, Recreation, Athletics and Intramurals. (3) Aim is to give the student a knowledge of the organizational, administrative and supervisory policies and procedures utilized in Health, Physical Education and Recreation. Emphasis is placed on skills and techniques necessary to prepare students for problems encountered as administrators or school, park, playground and health programs.

HPER 403 Physical Education and Recreation for the Handicapped. (3) A competency-based modularized course of instruction designed to assist students in acquiring the necessary knowledge, skills and competencies to enable them to provide physical education programming for handicapped children in the least restricted environment. Students frequently will be required to travel to off-campus sites for practicum experiences.

PE 308 Officiating Techniques. (2) To teach the techniques of officiating in selected sports and provide practical experiences through officiating in intramural activities.

REC 302 Group, Table Games and Adult Recreation Activities. (2) Aims to develop skills and provide practical experience in the supervision and participation of table games and adult leisure activities including: checkers, chess, monopoly, dominoes, scrabble, aggravation, yoot, chinese checkers, yahtzee, table tennis, shuffleboard and deck tennis.

REC 303 Camping Skills. (2) Designed to develop practical camping skills through direct experiences, including cooking skills, camp site selections, hiking skills, compass reading, rock climbing, tenting, and aquatic skills.

REC 353 Leadership Principles. (2) Purposes to equip the student to manage the supervise recreation programs. Emphasizes program planning, current trends in principles, philosophy, skills, and techniques in leadership.

REC 473 Field Experience. (9) Supervised work experience by students in recreational agencies. The student is selected to be considered as a recreation employee subject to such requirements and responsibilities as evidenced in gainful employment in this area. Combines theory with practical experience in recreation.

REC 481 Intramural Practicum. (2) Lectures, discussions and projects dealing with types of tournaments, schedules, policies, and officiating of intramural activities.

DEPARTMENT OF PSYCHOLOGY
Pearl G. Dansby, Ph.D., Head

The courses in the Department of Psychology are designed to satisfy the needs of two groups of students: first, students who desire to major in psychology as preparation for a career in psychology or who desire intensive training in psychology as background for social work, personnel work, or medicine; and second, students who desire training in psychology as a part of the teacher education requirements.

Requirements for a Major in Psychology

To be accepted as a Psychology major a student must:

1. Meet the minimum exit requirements from the University College.
2. Have taken Psychology 201 and 202 with a grade of C or better.
3. Apply for admission by completing a departmental form.

The undergraduate curriculum in psychology terminates in a Bachelor of Science degree, or a Bachelor of Arts degree if the student takes the prescribed courses plus four semesters of a foreign language. All majors are required to take: General Psychology 201, Intermediate General Psychology 202, and 36 additional hours in psychology at the 300-400 level. The 36 hours must include the required courses: Psychology 311, 411, 450, 481. At least half of the remaining 23 hours of 300-400 level electives must be selected from basic psychology courses (Psychology 321, 341, 351, 412, 420, 425, 431, 462), and the remainder from any of the other psychology electives.

Majors must earn a grade of "C" or better in all psychology courses. Majors who receive a grade of "D" or "F" in a psychology course **must** repeat and pass the course with a grade of "C" or better.

Supporting courses in other departments required for a major in Psychology that are in addition to the specified general education requirements of the University College are: Biology 111-112 or Zoology 201-202, Sociology 211-330, and GPA 221 or 222.

It is recommended that majors select electives from: Genetics, Human Physiology, Physics, Philosophy, Computer Science, History, Anthropology, Foreign Languages, Economics and Sociology.

The Psychology Department provides opportunities for advanced undergraduate majors to practice and acquire experience in psychological research and other applications of psychological knowledge and skills. In the Senior Project Seminar, senior psychology majors are required to complete a research project under faculty supervision. In addition, students may avail themselves of opportunities to work on on-going faculty research projects. The University Counselling Center and the University Testing

Center are also available to advanced undergraduate psychology majors as sources for training experience.

Students interested in study in the area of psychology who desire to qualify for teacher certification may pursue one of two courses, take a double major in psychology and in another area, that is a teacher training area, or minor in psychology and major in a teacher training area and become certified in psychology.

Mental Health Concentration

In addition to the regular undergraduate course of study in psychology, the department offers a concentration in mental health. The mental health concentration is solid preparation for bachelors level entry into careers in mental health services, counseling and related work in industry and human services, as well as, for graduate study in community, clinical and social psychology. The emphasis of the program is on the scientific study of behavior and practical applications of this knowledge.

The program consists of 114 semester hours of course work in addition to a 18 semester hours core of mental health courses. The core courses are interdisciplinary and experientially oriented. Students in other departments may take a minor in mental health by taking the 18 hours of core courses and the introductory psychology course, Psychology 201 and Psychology 202.

Social Science Degree—Concentration in Psychology

A student may elect to pursue a general degree/social science major with a concentration in psychology, (see Arts and Sciences General Degree Program in this catalogue for a detailed description). Students in this program may design a course of study comparable to the educational background provided through the psychology major while at the same time tailoring it to their specific goals and interest.

REQUIREMENTS FOR A MINOR IN PSYCHOLOGY

The general psychology courses 201, 202 plus 18 additional semester hours of 300 and 400 level psychology courses are required for a minor in psychology.

CURRICULUM FOR MAJOR IN PSYCHOLOGY*

FRESHMAN YEAR	Credit Hours Fall	Spring
Eng. 101-102	3	3
Math 111-112	4	3
Hist. 201-202	3	3
PE or AERO or HEALTH	1 or 2	1 or 2
Freshman Orient		
Psy. 201		3
Art 133	2	
Mus. 131		2
Computer Sci. 100	3	
	16 or 17	15 or 16

SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng. 211-212	3	3
Bio. 111-112/Zoo 201-202	4	4
PE or AERO or Health	1 or 2	1 or 2
Psy. 202	3	
GPA 221 or 222		3
Soc. 221	3	
Soc. 330		3
**Advised Electives	3	3
	17 or 18	17 or 18

JUNIOR YEAR	Credit Hours Fall	Spring
Psy. 411	4	
Psy. 411		4
**Psy. Electives	9	9
***Electives	6	4
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
Psy. 481	3	
Psy. 450		3
**Psy. Electives	3	3
***Electives	12	8
	18	14

*Graduation requirements for Bachelor of Arts degree in Psychology: Complete the prescribed core, plus 14 semester hours of a foreign language.

**See recommended electives. These must be approved by major advisor before the department will accept them for credit.

***Electives must equal a minimum of 24 hours of 300 or 400 level courses. Recommended electives: Genetics, Human Physiology, Physics, Philosophy, Computer Science, Anthropology, Foreign Language (French or German), Economics and advanced courses in the areas of Sociology and Economics.

CURRICULUM FOR A BACHELOR OF SCIENCE DEGREE IN PSYCHOLOGY WITH A CONCENTRATION IN MENTAL HEALTH

First Year	Credit Hours
English 101-102	3
Math 111-12	7
History 201-02	6
PE/AERO/HEALTH	2
Freshman Orient	1
Psychology 201	3
Art 133	2
Music 131	2
Computer Science	3
Total	32

Second Year	Credit Hours
English 211-12	3
Biology 111-12/Zoo 201-02	8
PE/AERO/HEALTH	2
Psychology 202	3
GPA 221 or 222	3
Sociology 211-330	6
Electives	6
Total	34

Third Year	Credit Hours
Psychology 311	3
*Psychology 336	3
Psychology 321	3
*Psychology 339	3
Psychology 341	3
Psychology 411	4
Psychology 424	3
Psychology 462	3
Electives	9
Total	34

Fourth Year	Credit Hours
*Psychology 433	3
*Psychology 434	3
*Psychology 435	3
*Psychology 436	3
Psychology 450	3
Psychology 481	3
Electives	14
Total	32

*Courses in the 18 hour Mental Health Concentration Core

COURSE DESCRIPTIONS PSYCHOLOGY (PSY)

All 300 and 400 level courses have as a minimum prerequisite Psychology 201 or the consent of the instructor.

PSY 201 General Psychology. (3) The basic course in introductory psychology for majors and non-majors. The course introduces students to the fundamental concepts of psychological methodology, basic physiological processes, sensory and perceptual processes, learning memory, motivation, and emotions. The course is a prerequisite for all psychology courses.

PSY 202 Intermediate General Psychology. (3) An intensive integrative coverage of specific content areas in psychology offered in modular sequence. Topics include methods and experimental design, growth and development, sensation and perception, learning and memory higher mental processes, motivation and emotion, personality and psychotherapy and social psychology. Required of all majors, prerequisite: Psy 201.

PSY 242 Human Development and Learning. (3) Designed to give the student an understanding of the child as a growing organism of how behavior is acquired, an introduction to learning theory and its classroom application, and to give the student training in the application of psychological principles to various functions of the school. Required in the Professional Education Core. Field Experience Required.

PSY 310 Psychology of Adjustment. (3) A study of personality development and structure, with major emphasis on personal adjustment and the functional aspects of the psychology of daily living. Topics covered include: development of adjustment patterns, individual adjustment to life situations, societal definitions, treatment of the maladjusted personal appraisal systems, and modification of behavior.

PSY 311 Elementary Statistics. (3) An introduction to statistics for the general student, with emphasis on organizing and describing numerical data probability; sampling distributions; correlation; regression; point estimation; interval estimation; testing hypotheses and distribution free methods.

PSY 312 Measurement Evaluation for the Classroom Management in Public Schools. Primarily concerned with offering training in administering, scoring, processing and using the result of standardized and teacher-made tests and other measures of progress in schools; also training is offered in the construction of objective and subjective tests. Attention is also given to various tests as they relate to the functions, techniques, and tools of guidance and counseling. Prerequisite Psychology 242. Required in the Professional Education Core.

PSY 321 Abnormal Psychology (3) A descriptive and theoretical survey of the major forms of psychopathology in children, adolescents and adults. The course will examine current trends and research in the field of mental health and psychopathology.

PSY 323 The Psychology of the Black Experience (3) The Psychology of the Black Experience deals with coping strategies of Black families (opposed to current emphasis on pathology of Black families); Psychology of the Black female; Black male. Research of Black authors will be emphasized.

PSY 331 Principles of Human Sexuality (3) A study of theories and current research related to psychological and physiological aspects of human sexuality, as well as the effect of sex-roles on sexual interaction.

PSY 333 Group Dynamics and Human Relations (3) A study of the structures and processes of human relations in both dyads and larger groups Cohesiveness, communication and interpersonal transactions are among the topics which will be covered. The dynamics of the relationships among class members may be included as part of the subject matter.

PSY 336 Introduction to the Delivery of Mental Health Services. (3) This course is designed to acquaint students with the mental health profession and its delivery of mental health services. The student will observe and interact with mental health workers in various settings, e.g. community mental health centers, crisis call centers, day care centers, etc. to obtain "first hand" knowledge of what mental health services delivery encompasses. The student will be primarily concerned with the relationship of good mental health service delivery and its benefit to the community being served. (Two hours will be used for field visits and the other four for classroom discussion).

PSY 339 Working With People: Methods and Techniques (3) An introduction to some methods utilized in the delivery of mental health services. The course will emphasize understanding the helping relationship from the viewpoint of both the client and the professional. Students will be introduced to methods in interviewing, observing, information gathering, and situation analyzation. Some field experience will be a built-in dimension of this course.

PSY 341 Social Psychology (3) A study of interpersonal behavior including such topics as perceiving other, interpersonal attraction, prejudice, attitude change, social influence, aggression, altruistic behavior, group processes and the psychology of organizations.

PSY 351 Developmental Psychology (3) The growth and development of the human organism from a theoretical perspective; biological, cognitive, social and emotional, development.

PSY 352 The Psychology of Adult Development and Aging (3) A study of the development tasks of adulthood. Emphasis will also be given to the search for meaning and the courage to create one's lifestyles.

PSY 353 Psychology of Death and Dying (3) A study of such topics as the dying person, attitudes toward death, children and death, grief, funeral rites, euthanasia and criteria for determining death. Emphasis will be placed on individual experience.

PSY 373 Educational Psychology (3) Increasing the effectiveness of learning. Applications of learning theory to educational settings.

PSY 411 Foundations of Psychological Investigation (4) Introduction to methods of behavioral research commonly employed in psychology and education. Topics include methods of observing behavior, measurement, subject selection, design and interpretation of behavioral research, research ethics and conducting and reporting research projects in the behavioral sciences.

PSY 412 Principles of Learning (3 hrs. lecture 1 hr. lab) A study of classical and operant conditioning (including reinforcement, scheduling, acquisition, extinction, generalization discrimination) and topics in complex human learning (including verbal learning, memory, problem solving, information processing conception formation.) The laboratory includes experiments in animal and human learning.

PSY 414 Psychology of Stress Management. (3) A study of the nature and sources of stress in modern society. Discussion of the various ways our systems react to stress. Specific techniques for managing stress.

PSY 420 Perception (4) A study of the processes by which individuals acquire information about their environment. Topics include perceptual learning, sensory mechanisms and impairments, illusions, cultural and personality influences, subliminal perception and ESP. Emphasis on demonstration of sensory phenomena with subsequent discussion, Lecture and Lab.

PSY 424 Behavior Modification. (3) Designed to give the student a firm grounding in behavior theory, of applications and the theoretical basis for several discrete methods of behavioral management in the home, clinical settings, and the school. Ethical consideration of manipulating human behavior will thoroughly be explored. Contrasts with other techniques and criticism will be documented.

PSY 425 Introduction to Personality Theory. (3) A study and analysis of the major theoretical approaches to the personality.

PSY 431 Psychological Psychology (3 hrs. lecture 1 hr. lab) An introduction to the study of the relationship between bodily processes and behavior. Emphasis is placed upon the basic anatomy and psychology of sensory and motor functions, motivation, emotion, learning and behavior disorders. The laboratory focuses on individual and group experience in these areas.

PSY 451 A,B,C, Readings and Research in Psychology (3) (3) (3). Individual study and research under faculty guidance. Prerequisite 12 hrs. of upper division psychology and permission of instructor.

PSY 440 Drugs and Behavior (3) A study of the biomedical, psychosocial and mental health aspects of drugs that affect behavior including alcohol. Substance abuse and treatment modalities will also be emphasized.

PSY 460 B, C, & D Special Topics (3) (3) (3). Faculty generated topics in psychology. Scope of the subject matter to be determined by instructor. Designed for upper-division students. May be taken more than once.

PSY 462 Introduction to Psychological Tests and Measures (3) Designed to give the student an understanding of the basic principles underlying psychological measurements, offers training in selection and use of psychological tests and practice in both group and individual testing. An intensive study of individual differences, with emphasis of intellectual, personality, & academic achievement testing. Prerequisite: Descriptive statistics.

PSY 481 History and Systems of Psychology (3) Special attention to the historical development of psychology as a science and the fundemental concepts of various schools of psychology.

CENTER FOR TRAINING AND TECHNICAL ASSISTANCE

Barbara A. Nye, Ph.D., Director

The Center for Training and Technical Assistance administers offices and programs which provide training and support to education and human service delivery agencies for children and families. These offices and programs include services that encompass credit, non-credit, and public service activities. Described below are the offices and programs currently located in the Center for T/TA.

Continuing Education and Public Service Instruction Office
The Center for Training and Technical Assistance administers the Office of Continuing Education and Public Service Instruction for the School of Education. Courses, seminars, workshops, and conferences sponsored by the School's faculty and the education community of a service nature are planned through the Public Service Office. The School awards Continuing Education Units to activities which meet the University's criteria for activities of a public service and non-credit nature. The Office of Public Service works with community groups, schools, educational organizations, state departments, and the faculty to sponsor courses that provide continuing education opportunities for Nashville, the Middle Tennessee region, and state wide. The Center also sponsors services in conjunction with its programs in other states.

Head Start Training Resources Office
The Head Start Training Program provides training and technical assistance throughout Tennessee and the Nation to locally sponsored Head Start grantees. Areas in which training is provided include administration and supervision, fiscal, management, educational instruction, social services, parent involvement, health services, and exceptional child services. Training focuses on content, implementation, and interpretation of federal and state policies and regulations that affect Head Start and human service programs in general. Within Tennessee there are approximately 9,000 disadvantaged children and families are enrolled in the twenty Head Start grantees. Eighty-six (86) Tennessee counties are served by Head Start programs, and the Center for T/TA staff work with all Tennessee counties which are served by these Head Start programs. As a part of the TSU land grant mission to serve the state and nation, the Center for T/TA is committed to assist Head Start programs to offer quality services to socio-economically disadvantaged families and to the Head Start concept that emphasizes the preservation of human dignity of families and children.

Exploring Parenting Curriculum and Training Program
The Center for Training and Technical Assistance administers a project to train local program staff to implement the national Exploring Parenting Curriculum. Programs which participate in training included Head Start, community agencies, the State Department of Education, the State Department of Mental Health, and other state departments and commissions that impact on service programs to children and families.

After School Child Care Technical Assistance Office
Originally initiated in 1981 through a grant from the Wellsley College Center for Research on Women, this office continues to provide assistance to organizations and communities in Tennessee and the Southeast who are developing or conducting after school child care programs. Special workshops, a library of resource material and on-site technical assistance are available to organizations and community agencies. The office works directly with the editor of **School-Age Notes** in disseminating information to interested individuals and organizations.

Volunteer Services and Private-Sector Initiative Office
A joint effort between the Telephone Pioneers of America and Head Start has produced a program of statewide volunteer services to programs for young children and their families. Other efforts to produce public and private-sector cooperation for the delivery of community services and educational programs are provided through this office. Current plans call for a national replication of the highly successful "Tennessee Partnership for Children Project" and development of volunteer involvement from other corporate organizations and with other publically sponsored human service programs.

Child Development Associate Training Program
The Child Development Associate (CDA) Program is a national credentialing effort to improve the quality of performance of individual staff in their role as child caregivers. The program emphasizes competency-based instruction, including supervised field experiences. The Center for T/TA administers the CDA program. CDA Courses are offered through the Department of Home Economics.

In response to the increased need of the early childhood education and child care community in Tennessee for quality preparation of staff, Tennessee State University during 1977-78 developed a traiing program related to the national Child Development Associate (CDA) competencies. These competencies serve as a guide to curriculum development and course offerings in the TSU CDA Program.

The curriculum and courses have been carefully designed to provide a practical training plan which meets the unique in-service needs of teaching personnel. A flexible schedule and practically oriented instruction is offered while at the same time comprehensive coverage of the CDA competency area is maintained. Individuals entering the program may proceed at their own pace in completing any of the 30-39 credit hours of courses available which they need.

Since the training plan is directly related to the national CDA competencies, students are prepared to apply for assessment by the national CDA Credentailing System and to seek award of the CDA Credential. Students, with assistance from their program advisor, determine the point during their program of training that their performance demonstrates the competency standards of the national CDA Credentialing System.

The national CDA competencies fall into six broad competency areas which are further defined into 13 functional areas. The functional areas provide definition of the indicators of competent performance. These competency and functional area definitions provide a foundation for the training program as well as assessment.

CDA training is competency based and is, therefore, unlike traditional approaches to professional training. CDA trainees may earn viable college credit before, during and following their involvement in the CDA assessment process. The CDA credential is awarded based upon demonstrated ability rather than solely upon courses taken or degrees awarded. Academic credit for CDA training is also awarded based upon demonstrated ability along with completion of commonly held standards for academic credit such as instructor-student contact, knowledge of subject, and course matriculation. The TSU CDA training program brings these two aspects of professional credentialing (academic and demonstrated professional standards) into a complementary relationship, fulfilling the six national CDA training criteria.

National Criteria:
1. Training must be organized around the CDA competencies.
2. Fifty percent (or more) of the training must consist of supervised field experience.
3. Academic and field experiences must be integrated.
4. Training must accommodate individual strengths, individual needs and learning styles.
5. Scheduling must be flexible.
6. Valid, transferable college credit must be offered for both academic and field experiences.

The following courses descriptions provide an outline of how the TSU CDA training program addreses each of these six criteria. The TSU training program is designed to meet the needs of preschool, early childhood, head start, and nursery school teachers, who work with children ages 3-5 years in the Middle Tennessee Area. This approach to the total child care community allows for a comprehensive training program.

The CDA Course Curriculum is designed as a two year program of academic study and supervised experience. Students will enroll in two academic courses and two practicums on an average during the academic year (fall and Spring semesters). All course offering will be based on individual needs assessment and can be offered during any semester on an Independent study or through arranged instructor-student contract.

First Year of Enrollment
Early Childhood/Child Development—ECCD C211
Early Childhood/Child Development—ECCD 212
Early Childhood/Child Development—ECCD 221
Early Childhood/Child Development—ECCD 222

Second Year of Enrollment
Early Childhood/Child Development—ECCD 231
Early Childhood/Child Development—ECCD 232
Early Childhood/Child Development—ECCD 241
Early Childhood/Child Development—ECCD 242

Summer Semester or Optional for the Second Year—Regular Semesters
Early Childhood/Child Development—ECCD 251
Early Childhood/Child Development—ECCD 252
Early Childhood/Child Development—ECCD 253, 254, or 255

ECCD 211. Problems in CDA Competency Area 1: Safe, Healthy, Learning Environment (3). Individualized study for early childhood caregivers in setting up and maintaining safe and healthy learning environments for young children. Must be taken in conjunction with ECCD 212 or by consent of instructor.

ECCD 212. Practicum: Safe, Healthy, Learning Environments. (3) Caregivers demonstrate ability to set up an maintain safe and healthy learning environments for young children. Consent of Instructor.

ECCD 221. Problems in CDA Competency Area 2: Physical and Intellectual competency (3) Individualized study for caregivers in learning to advance the physical and intellectual development of young children. Must be taken in conjunction with ECCD 222 or by consent of instructor.

ECCD 222. Practicum: Physical and Intellectual Competency. (3) Caregivers demonstrate ability to advance the physical and intellectual development of young children. Consent of instructor.

ECCD 231. Problems of CDA Competency Area 3: Self-Concept and Individual Strength (3) Individualized study for caregivers building positive self-concept and individual strength in young children. Must be taken in conjunction with ECCD 232 or by consent of instructor.

ECCD 232. Self-Concept and Individual Strength. (3) Caregivers demonstrate ability to build positive self-concept and individual strength in young children. Consent of instructor.

ECCD 241. Problems in CDA Competency Area 4: Positive Functioning of Children and Adults in a Group (3) Individualized study for caregivers in organizing and sustaining the positive functioning of young children and adults in a group in a learning environment. Must be taken in conjunction with ECCD 242 or by consent of instructor.

ECCD 242. Practicum: Positive Functioning of Children and Adults in a Group. (3) Caregivers demonstrate ability to organize and sustain the positive functioning of young children and adults in a group in a learning environment. Consent of instructor.

ECCD 251. Problems in CDA Competency Areas 5 and 6: Home, Center, and Professionalism (3) Individualized study for caregivers in coordinating home and center and carrying out supplementary responsibilities. Must be in conjunction with ECCD 252 or by consent of instructor.

ECCD 252. Practicum: Home, Center, and Professionalism (3) Caregivers demonstrate ability to establish positive and productive relationships with parents; encourage parents to participate in the center's activities, policies, and rules. Consent of instructor.

ECCD 253-254-255. Problems in Providing Care for Young Children. (3,3,3) Individualized experiences for early childhood caregivers. Consent of instructor.

ECCD 331-333-334. Internship for Trainers. (3,3,3) Individualized internship experiences for persons interested in providing child caregiver training. Consent of instructor.

Social Services Competency Based Training Program
The SSCBT Program is a national training program for the development of generic competencies through the improvement of job practice skills of human service workers. The program was developed through the Center for T/TA during a three-year research and evaluation project which resulted in the publication of a competency-based curriculum. In conjunction with the Tennessee Conference on Social Welfare, a Social Service Practitioners credential is awarded to interns enrolled in the Center's SSCBT program. The Center has been funded to implement the program throughout the southeast and also has program adopters in several other states.

Technology and Learning Program
The Center administers the technology and learning program for the School of Education. Several areas of emphasis have been developed: 1) credit courses at a graduate and undergraduate level (see list below), 2) research and training projects, 3) school-community partnerships, 4) national conference, 5) training laboratory, and 6) coordination with state offices and private sector organizations and companies involved with technology and education.

EDSE 480/580 Technology in Special Education and Rehabilitation (1-3)

EDCI 417 Home Educational Uses of Micro-Computers

EDCI 418 Children and Micro-Computer Technology (1-3)

EDCI 419 Technology in the School (1-3)

EDCI 420 Introduction to Word Processing in Elementary Education (1-3)

EDCI 617 Nontraditional Educational Uses of Microcomputers (1-3)

EDCI 618 Microcomputers Technology in Primary and Elementary Schools (1-3)

EDCI 619 Microcomputers and Educational Services (1-3)

EDCI 620 Instructional Applications of Word Processing (1-3)

Business, Youngsters, Technology, and Education Foundation

Barbara A. Nye, Ph.D.

Director

The B.Y.T.E. Foundation is a non-profit public service entity which provides the following servies in the area of technology and learning: 1) teacher, parent and administrator training, 2) child enrichment classes, 3) research, 4) conferences, 5) technical assistance and 6) a variety of public-private partnership programs.

The Foundation is administered through the Center for T/TA in the School of Education. The B.Y.T.E. Foundation also sponsors programs which offer credit from the School of Education in the area of technology and learning and conducts statewide preschool projects with microcomputer demonstration sites in schools and preschool classrooms. The Center for T/TA offers many services through its' technology and learning laboratory supported through contributions to the B.Y.T.E. Foundation. A national advisory consortium advises the B.Y.T.E. Foundation on local, state, regional, and nationwide programs.

THE SCHOOL OF ENGINEERING AND TECHNOLOGY

Edward I. Isibor, Ph.D., P.E., Dean

The School of Engineering and Technology is located in the greatest area of industrial expansion in the Southeast. It is within two hundred miles of the Tennessee Valley Authority and the Atomic Energy Commission's Oak Ridge Plant; within 80 miles of the Arnold Air Development Research Center at Tullahoma, Tennessee; and the Marshall Space Center at Huntsville, Alabama; near the foundry and steel mills of Middle Tennessee and Alabama, and in the midst of the largest source of hydro-electric power in the East.

The professional School of Engineering and Technology offers Bachelor of Science degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, General Engineering, Industrial Arts and Technology with options in Industrial Arts Education, Industrial Technology, Technical Aeronautics, and Transportation Services and Technology, Mechanical Engineering. An Associate of Science degree in Fire Science, and a certificate course in Safety Engineering are also offered by the School.

The School's curricula in these programs are structured to graduate quality students capable of taking their places in the mainstream of the engineering profession. The education of our students prepares them to satisfy the manpower needs of industry and with sufficient technical competence to tackle the complex engineering challenges facing our industrialized society.

Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience and practice is applied with judgement to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind. The successful engineer must have mental ability and alertness of a high order; must be willing to try; must recognize failures and keep on trying until he/she arrives at a satisfactory solution to the problem at hand. Therefore, the goals of engineering education at Tennessee State University include the following:

1. familiarizing the student with the systematic engineering approach followed in problem solving;
2. providing the student with a strong foundation in engineering fundamentals;
3. developing professional attitudes including understanding of the engineering profession;
4. developing habits of orderliness, carefulness and objectivity in the student;
5. developing an understanding and a sensitivity for the social, economic and environmental implications of various engineering designs in the real world.

Technology has advanced and changed so rapidly over the past few years that the professional team carrying out the engineering function has also changed in composition of responsibility. From the last century when engineers and/or craftsmen made up the team, we now have come to many combinations involving distinct occupational groups such as craftsmen, engineers, scientists, technicians and technologists. It is also projected that between now and the end of the century, society's demands on technically trained persons will range from providing and maintaining interplanetary exploration and travel to solving many earthly problems pertaining to energy, pollution, transportation, housing, preservation of the environment, and others arising from the continuing increase in population. As such, the demands can be met only by team efforts of both technical and non-technical persons.

The initial stage in seeking solutions to societal problems ordinarily is a research project seeking basic new knowledge headed by a scientist or engineer. The second stage is often engineering development and design led by an engineer assisted by technologists, technicians and craftsmen with a technologist or engineer as supervisor.

The programs of study in Industrial Arts and Technology at Tennessee State University are designed to prepare industrial technologists and teachers of industrial subjects in public schools.

The study of Industrial Arts and Technology provides a greater involvement with "HOW" rather than the "WHY" of scientific principles, theoretical concepts, devices and gadgets. The technologist is typically a practical person interested in

the application of engineering principles and in organizing people for efficient industrial production, operation and management.

The American society, having become highly complex and technologically oriented, can maintain its present state—while at the same time further advancements—only through a well educated citizenry. Such an effort requires teams of highly trained workers to adequately interpret, translate and communicate the language of industry to other members of the societal group.

The School of Engineering and Technology instructional programs are located in the following facilities:

1. The New Engineering and Technology (ET) Building—This new building with a useable space of about 48,000 square feet, built at a cost of 3.6 million dollars was occupied in Summer 1982. This building houses the environmental, materials testing, surveying, concrete, soils, structural, electrical circuits, electronics, energy conversion, control, digital logic, microprocessor, bio-engineering, microwave, electro-optics, energy and environment system, thermal science, materials, measurements, vibration and acoustic, instrumentation and control system, senior design studio and photography laboratories, drafting rooms, computer terminal room, research library, tutorial center, student development center, project display room, student and staff lounges, and the offices of the Dean, Director of Engineering Research Institute, Grants Coordinator, Recruiter/Counselor, the offices of the Departments of Architectural, Civil, Electrical and Mechanical Engineering. The B.S. in Engineering Program is housed in the downtown facility.
2. The Old Engineering Building—The ground floor of the old engineering building houses the machine shop and the other classical laboratories.
3. Industrial Arts Building—In this building are located the metals, wood technology, building construction, electronics and aeronautics laboratories, one drafting room, class rooms and offices for the Department of Industrial Arts and Technology.

ENGINEERING RESEARCH INSTITUTE (ERI)

The Engineering Research Institute is the research arm of the School that has been established to provide required services to the engineering faculty which includes the identification of possible research areas, funding agencies, coordinating proposal writing and follow-up with the agencies on research proposals. The ERI is also designed to promoting interdisciplinary research activities among its faculty and student body.

TUTORIAL CENTER

In order to alleviate academic casualties, the School maintains a tutorial center that is designed to help students in need acquire mastery of course materials. The center is adequately staffed with faculty and selected students to provide assistance to students who are referred to the center.

Students may go to the center for assistance whenever they need help in course work at any time during the hours it is open. Students are normally referred to the center by the instructor using a referral slip. However, if a weakness is detected, the academic advisor can also advise the student to seek help that is available in the center.

The Tutorial Center is located in the Engineering Building in Room 116 open from 8 a.m. to 5 p.m., Monday through Friday.

PRE-ENGINEERING SUMMER INSTITUTE

The School of Engineering and Technology at Tennessee State University conducts a Pre-Engineering Summer Institute directed toward attracting promising high school students who could probably be successful in engineering careers but have deficient high school preparation in some of the required fundamental subjects.

Students selected to participate in the institute receive 5 weeks of intensive instruction in communication skills, Algebra, Trigonometry and Physical Sciences and participate in problem sessions and field trips in engineering firms, about seven hours per day, five days per week.

At the beginning of the Institute, students are given a pre-test to determine their areas of weakness for diagnostic purposes. Near the close of the institute, a comprehensive examination is given to determine the level of preparedness of the participants. Students scoring at a satisfactory level are encouraged to enroll in engineering with the possibility of receiving some financial assistance during the Freshman year. Some students scoring below a satisfactory level are encouraged to enroll in engineering on a conditional basis. The remaining students are encouraged to enroll in a technology program or other programs available at TSU.

SCHOLARSHIPS

The School of Engineering and Technology at Tennessee State University grants scholarship awards annually to students with outstanding achievements in high school work. Scholarships available to incoming students cover tuition costs and in many cases, boarding and lodging. The basic criterion for awarding scholarships is the genuine need for financial assistance.

In addition to engineering scholarships, students qualifying for financial aid may receive supplemental assistance in the form of federally funded grants (BEOG, SEOG), loans (NDSL), work-study, work-aid, academic work-aid awards and other scholarships.

Students participating in the work-aid and work-study programs, which involves 5 to 10 hours per week of campus employment can earn between $268.00 and $536.00 per semester.

CO-OPERATIVE EDUCATION PROGRAM (CO-OP)

The School of Engineering and Technology at Tennessee State University provides opportunities for students to gain practical experience in industry while at the same time, earn money to finance their education. Under the "Co-op" program, the student devotes alternate semesters to study at the University and work in industry.

Students remain eligible for the program through their junior year. Some companies require that the student maintain a GPA of 2.0 and above out of 4.0 to remain eligible.

The work schedule for students participating in the "Co-op" program will vary slightly from year to year. In general terms, however, each work period will be approximately 4 months in length as follows:

FALL: Around the last week in August to the second week in December
SPRING: Around the first week in January to the first week in May
SUMMER: Around the first week in May or June to the second week in August

ADMISSION CRITERIA

The School of Engineering and Technology has some special requirements for admission into its engineering programs beyond the general requirements of the University. These additional requirements are stipulated below.

I. ADMISSION OF STUDENTS FROM HIGH SCHOOLS

A. High School Preparation

Upon being admitted to the University College, the students are given a series of diagnostic tests to determine their academic placement. These tests will be used to determine the student's proficiency in english, mathematics and reading. The transcripts of students who select engineering majors as their career choice will also be evaluated to determine if adequate preparation has been made in high school subject matter areas.

The student's high school preparation should include:

English	4 Units
Algebra	2 Units
Plane and Solid Geometry	½ Unit
Trigonometry	½ Unit
Physics	1 Unit
Chemistry	1 Unit
Social Science	2 Units

The student should also have, at the time of enrollment in the University College, a high school GPA of at least 2.5 or a Composite ACT Score of at least 17 and a math subtest of 18. While enrolled in the University College, students who plan to pursue engineering majors should follow the prescribed curriculum plan appropriate for their desired major and maintain a cumulative GPA of 2.5.

B. Admission to Candidacy

All students who wish to become candidates for admission to the School of Engineering and Technology must apply for admission to the School through the University College. The School's Admission Committee will review the applicant's academic record to determine if adequate preparation has been made to pursue a major in engineering. Students who are found to be deficient in academic preparation will be required to complete courses as specified by the School's Admission Committee with a grade of "B" or better. Upon the completion of these courses, as stipulated, the student may request that his/her candidacy be reconsidered.

C. Admission to the School

Near the end of every semester, the School will administer a locally prepared entrance examination to all students whose candidacy have been approved by the School's Admission Committee. Students who score 80 percent or above on this examination will be granted REGULAR ADMISSION status in the School. In some cases, students scoring between 70 and 79 percent may be admitted on a REGULATED basis with the approval of the Dean. In such cases, the student must earn a grade of "B" or better in all courses taken during the first semester of enrollment at the School. After the end of the first semester, provided these requirements have been met, the student will be granted REGULAR status. If, after the end of two semesters of enrollment at the School, the student has failed to maintain a cumulative GPA of 2.5 or better, he/she will not be allowed to continue a specialized engineering curriculum at the School. The student will be advised to pursue a general engineering or technology curriculum offered by the School or pursue some other academic program available at the University. Admission requirements to the technology programs offered by the Department of Industrial Arts and Technology are the same as the admission requirements to the University.

II. ADMISSION OF TRANSFER STUDENTS

A. Admission to Candidacy

Transfer students from other institutions of higher education who wish to enter the School of Engineering and Technology must apply for candidacy through University College. The student's transcript should show a cumulative GPA of 2.5 or above in courses taken at other institutions of higher education. The School's Admissions Committee will review the applicant's academic record to determine if adequate preparation has been made to pursue a major in engineering. Students who are found to be deficient in academic preparation will be required to complete courses as specified by the School's Admission Committee with a grade of "B" or better. Upon the completion of these courses as stipulated, the student may request that his/her candidacy be reconsidered.

B. Admission to the School

Transfer students whose candidacy have been approved will be invited to take a locally prepared entrance examination administered by the School's Admission Committee. Those students who score 80 percent or better on this examination will be granted REGULAR admission status at the School. In some cases, students scoring between 70 and 79 percent may be admitted on a REGULATED basis with the approval of the Dean. In such cases, the student must earn a grade of "B" or better in all courses taken during the first semester of enrollment at the School. After the end of the first semester, provided these requirements have been met, the student will be granted REGULAR status. If, after the end of two semesters of enrollment in the School, the student has failed to maintain a cumulative GPA of 2.5 or better, he/she will not be allowed to continue a specialized engineering curriculum at the School. The student will be advised to pursue a general engineering or technology curriculum offered by the School or pursue some other academic program available at the University.

SPECIFIC SCHOOL GRADUATION REQUIREMENTS

In addition to the University requirements for graduation, the following specific school graduation requirements must be met by engineering students:

1. Freshman students in the School of Engineering and Technology are required to participate in the Freshman Forum during their freshman year.
2. Engineering students will not be permitted to accumulate more than two "D" grades in all required engineering, mathematics, physics and chemistry courses.
3. All engineering students must take the EIT examination prior to graduation.

No student will be allowed to take any engineering, or math and science courses without having successfully completed the proper prerequisites for that course with a grade of "C" or better.

Any engineering student earning a grade of "D" in engineering or math and science courses must repeat the courses the very next time that courses is offered.

ENGINEERING CORE

The following subjects are required in all engineering fields of specialization except for the Bachelor of Science in Engineering program.

MATHEMATICS AND PHYSICAL SCIENCE	32 cr. hrs.
Calculus	11
Applied Mathematics or Differential Equations	3
Probability and Statistics	3
General Chemistry for Engineers	4
Introduction to Material Science	3
General Physics	8

COMMUNICATIONS	16 cr. hrs.
English Composition	6
Speech	3
Technical Report Writing	3
Engineering Development	1
Engineering Graphics	3

ENGINEERING SCIENCE	19 cr. hrs.
Freshman Forum	0
Computer Science	3
Engineering Mechanics	6
Thermodynamics	3
Circuits I	3
Engineering Economics	3
Senior Seminar	1

HUMANITIES AND SOCIAL STUDIES	19 cr. hrs.
American History	6
Literature	6
Social Studies Electives	3
Humanities Electives	4

UNIVERSITY REQUIREMENT	
AFROTC (Air Science or Military Science) or Physical Education	4
Total	90 cr. hrs.

INDUSTRIAL ARTS AND TECHNOLOGY GENERAL EDUCATION AND TECHNICAL CORE

MATHEMATICS AND PHYSICAL SCIENCE	20 cr. hrs.
Precalculus	4
Calculus	4
General Chemistry	4
College Physics	8

COMMUNICATIONS	9 cr. hrs.
English Composition	6
Technical Report Writing	3

ENGINEERING SCIENCE	1 cr. hr.
Freshman Forum	0
Senior Seminar	1

HUMANITIES AND SOCIAL STUDIES	19 cr. hrs.
American History	6
Humanities	4
Literature	6
Social Science Electives	3

UNIVERSITY REQUIREMENTS	
AFROTC or Physical Educ.	4
TOTAL	52 cr. hrs.

TECHNICAL CORE	27 cr. hrs.
Graphic Communications	6
Computer Science	3
Industrial and Production Mgt.	3
Industrial Internship	9
Industrial Safety	3
Senior Project	2
Senior Seminar	1
Total	76 cr. hrs.

GENERAL ENGINEERING COURSE DESCRIPTIONS

ENGR 100 Engineering Development (1). An introduction to the engineering profession including: nature of engineering; the use of a calculator; the computer, its commands and methods of creating files and the impact of computers on society technique in the analysis solution and presentation of engineering problems; lectures by engineers from industry; and field trips to local engineering projects. A minor engineering design project is required.

ENGR 110 Freshmn Forum (0). An overview of the University and School's student academic support facilities; academic and non-academic advisement; retention standards.

ENGR 111 Engineering Graphics (3). Standard engineering lettering; line and figure drawing with instruments; the correct representation of objects; models; and machine parts in orthographic isometric; and oblique projections, introduction to descriptive geometry, practice in dimensioning and the reading of drawings. Six laboratory hours per week.

ENGR 200 Circuits I (3). Fundamental concepts of charge, current, voltage and power; mesh and nodal analysis; Kirchhoff's laws, Thevenin's and Norton's Theorems, superposition, source transformations, natural and forced response of RL, RC and RLC circuits; transient and steady state analysis of linear circuits. Prerequisite: Math 164, Phy 221, Phy 221L; Co-requisite: Engr. 221.

ENGR 211 Engineering Mechanics I (3). Statics of particles; statics of rigid bodies in two dimensions; statics of rigid bodies in three dimensions; centroids and centers of gravity; friction and moments of inertia. Prerequisite: Math 164 Co-requisite: Phy 221.

ENGR 212 Engineering Mechanics II (3). Kinematics of particles including force, mass and accelaration; work and energy; impluse and momentum; kinematics of rigid bodies including force and acceleration. Introduction to mechanical vibrations. Prerequisites: ENGR 211 and Math 341.

ENGR 221 Engineering Computer Programming (3). An introduction to the use of digital computers in the solution of engineering problems; included are familiarization with the architecture of a computer and the design and coding of algorithms in one or more programming languages suitable for engineering. The course will include learning to write and read computer programs in the Fortran language. Prerequisites: Math 163, ENGR 100.

ENGR 230 Introduction to Materials Science (3). An introductory course on properties of materials, selection of materials, structure of crystalline and non-crystalline solids; mechanical behavior; electronic behavior, chemical behavior, stability and failure. Prerequisites: Chemistry 151, Math 164, Physics 221, Co-Requisite: Physics 222.

ENGR 301 Thermodynamics I (3). An introduction to the nature and domain of thermodynamics; the Zeroth Law; properties and states of pure substances; work and heat; the Frist Law applied to both open and closed systems; general observations and statements of the Second Law; the inequality of Clausius and entrophy changes for closed and open systems; vapor power and refrigeration cycles. Prerequisite: Physics 221.

ENGR 303 Applied Mathematics I (3). Solution of ordinary differential equations by classical and Laplace Transform techniques. Applications to problems from engineering systems, including electrical circuits and mechanical vibration models, introduction to matrices. Prerequisite: Math 341.

ENGR 340 Numerical Methods in Engineering (3). Numerical solutions of systems of linear and non-linear equations; numerical differentiation and integration; numerical solutions of ordinary and partial differential equations. Prerequisite: ENGR 303.

ENGR 350 Introduction to Computer Graphics (3). Software, hardware and mathematical tools for the representation, manipulation, and display of topological and two and three-dimensional objects; applications of these tools of computer-aided design (CAD), with emphasis on interactive graphics. Prerequisite: ENGR 221.

ENGR 400 Senior Seminar (1). Introduction to systems approach and system engineering; discussion of engineering case studies; professionalism in engineering; professional ethics; professional registration; professional development activities; engineers in industry, interdisciplinary design in engineering. Prerequisite: Senior standing.

ENGR 410 Introduction to Non-Linear Optimization (3). This course will deal with the fundamentals, techniques and applications of non-linear programming. It will cover both one dimension and multi-dimensional search techniques and also direct and indirect gradiant methods. Both unconstrained and constrained programming methods will be studied. Prerequisite: ENGR 303.

ENGR 411-A, B, C, D, E, F, G, H Special Topics in Engineering (3). Special subjects presented to cover current problems of unique advances in the state of the art. Prerequisite: Senior standing.

ENGR 420 Engineer in Training License Review (0). A course designed to prepare student for the EIT examination, a partial requirement for obtaining license as a professional engineer. Prerequisite: Senior standing.

ENGR 423 Legal and Ethical Aspects of Engineering (3). Legal principles underlying engineering work; laws of contracts, torts, agency, real property, problems of professional registration and ethics.

ENGR 430 Engineering Economics (3). Economic factors involved in the acquisition and retirement of capital goods in engineering practice including; interest and capitalization methods of depreciation, amotization, sinking funds, cost and rate determination. Prerequisites: ECON 211 and Junior standing.

ENGR 440 Probability and Statistics (3). Statistics and engineering; probability; probability distributions; Chebyshev's theorm; normal distribution; applications to operations research; treatment of data; hypothesis testing; method of least squares; regression; applications to engineering problems. Prerequisite: Math 341.

ENGR 450 Senior Project (2). A theoretical or experimental project in Special Topics in various fields of engineering coupled with a technical report and a seminar. Senior standing.

DEPARTMENT OF ARCHITECTURAL ENGINEERING
Walter Vincent, M.S., Head

The Department of Architectural Engineering offers a course of study leading toward a Bachelor of Science degree in Architectural Engineering. The four-year curriculum provides a study of architectural, environmental, and structural design of all building types. The program emphasizes the combined fundamentals of architectural aesthetics with the scientific and engineering aspects of planning, design, and construction of buildings.

A background of architectural subjects, such as architectural design, materials of construction, architectural history and ethics form the basic nucleus of the architectural disciplines.

A full range of engineering and structural courses in steel and concrete, with elements such as floor systems, columns, foundations, statically determinate and indeterminate framework, girders, and trusses make possible an understanding of the fundamental principles of engineering.

Unusual opportunities are available through close contact with the many other engineering courses and research programs offered by the School. The Architectural Engineering curriculum integrates these technical resources with social and cultural needs.

The graduate will find many opportunities for employment with private firms, industrial establishments or governmental agencies. With additional years of experience, the graduate architectural engineer may engage in private practice after meeting registration requirements of the state in which he/she desires to practice. Minimum semester hours required for the Bachelor of Science degree in Architectural Engineering are 142 hours.

DEGREE REQUIREMENTS

GENERAL CORE	90 Cr. Hrs.
Technical Electives	3
Architectural Engineering Core	
Architectural Design (AE 301, 302)	6
History of Architecture (AE 431)	3
Strength of Materials (CE 211)	3
Theory of Structures (CE 341)	5
Materials and Construction (AE 411)	3
Working Drawings (AE 312)	3
Environmental Engineering Systems (AE 442)	3
Senior Project (ENGR 450)	2
Fluid Mech. (CE 310)	3
Construction Management (AE 430)	2
Reinforced Concrete Design (CE 342)	3
Surveying (CE 302)	3
Steel Design (CE 344)	3
Soil Mechanics (CE 313)	3
Chemistry (CHEM 122, 122L)	4
TOTAL CREDIT HOURS REQUIRED	142

The Architectural Engineering technical electives are to be selected from the following courses:

1. CE 312. Adv. Stren. of Materials
2. EE 212. Circuits II
3. AE 441. Wood Engineering
4. ENGR 350. Computer Graphics
5. AE 443. Environmental Engineering Systems II

The Humanities electives may be chosen from the following areas: (A combination of any two fields).

Philosophy (Introduction to Philosophy—PHIL 201)
Music—Music Appreciation—MUS 131
Art—Art Appreciation—ART 133
Appreciation of Drama—THEA 120

DEPARTMENTAL CURRICULUM

Students seeking the Bachelor of Science Degree in Architectural Engineering are required to satisfy 1-2 hours of course work.

FRESHMAN YEAR	Credit Hours Fall	Spring
MATH 163, 164	4	4
CHEM 121, 122	3	3
CHEM 121L, 122L	1	1
HIST 201, HIST 202	3	3
ENG 101, ENG 102	3	3
ENGR 100, ENGR 111	1	3
PE or AERO	1	1
ENGR 110	0	
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
MATH 341, ENG 212	3	3
PHY 221, 222	3	3
PHY 221L, PHY 222L	1	1
ENGR 211, CE 211	3	3
ENG 211-A, ENGR 303	3	3
HUM ELECTIVES, ENGR 212	2	3
ENGR 221, HUM. ELECTIVES	3	2
PE or AERO	1	1
	19	19

JUNIOR YEAR	Credit Hours Fall	Spring
AE 301, AE 302	3	3
CE 341, ENG 310	3	3
ENGR 301, SPEECh 220	3	3
ENGR 440, ECON 211	3	3
CE 313, AE 312	3	3
ENGR 200, ENGR 230	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
AE 431, AE 430	3	2
CE 310, AE 411	3	3
CE 342, AE 442	3	3
CE 302, TECH ELECTIVE	3	3
CE 344, CE 442	3	2
ENGR 400, ENGR 450	1	2
ENGR 430		3
	16	18

COURSE DESCRIPTIONS

AE 301 Architectural Design (3). Principles of design and systematic approach to problem solving of Architectural Design. Emphasis are to be on form and space relationships, structural elements, building materials and methods of construction, building and site relationships. Lecture 2 hours; Lab, 6 hours. Prerequisite: Junior Standing.

AE 302 Architectural Design (3). The design of architectural problems of a complex nature involving principles of organic order and the use of structural elements, site relationships, form and concepts of space and the process of architectural composition. Problems in planning with close coordination of site, materials, human needs and structural harmony. Lecture 2 hours; Lab, 6 hours. Prerequisite: AE 301.

AE 312 Working Drawings (3). Graphical presentation of building material assembly, construction methods, framing systems and details. Prerequisite: AE 301.

AE 320 Urban Planning (3). Planning fundamentals; objectives and scope of urban planning; theories of land use patterns; population studies; regression and other quanitative analysis; cohorts survival technique.

AE 330 Basic Photography (3). Fundamental and creative uses of the camera, including controls, lenses, film and other accessories and basic darkroom procedures.

AE 331 Advanced Photography (3). A continuation of the fundamental techniques and scope of photographic exploration. Emphasis on individual projects involving creative editing, light and luminance, and exibition techniques. Prerequisite: AE 330 or prior experience.

AE 411 Materials and Construction (3). Prefabricated building materials, manufacutring processes, characteristics of new and old materials; emphasis on relationship between common use of materials and imagination; techniques directed toward limitations and potentialities. Lecture, 1 hour; Lab 2 hours. Prerequisite: ENGR 230.

AE 430 Construction Management (2). Principles and methods of cost analysis of material, labor, and equipment production cost for the building trades. Conduct of office practice, organization, contracts, legal and ethical problems; specification writing estimating and supervision of construction. Prerequisite: Senior Standing.

AE 431 Architectural History (3). A survey of Architectural styles of the past to the present time on the comparative methods. Emphasis include the Geographical, Geological, Climatic, Religious, Social and Political influences. Prerequisite: AE 301.

AE 441 Wood Engineering (3). Properties of wood; allowable stresses; proportioning of flexural, tension, and compression members; sawn timber and laminated wood; mechanical fasteners, timber connector design, special problems in the design of wood trusses and frames and plywood composites. Prerequisite: CE 341.

AE 442 Environmental Engineering Systems (3). Design and layout of heating and air-conditioning systems, illumination and wiring practice, water supply and treatment, drainage and sewage disposal systems. Prerequisite: Physics 222.

AE 443 Environmental Engineering Systems II (3). This course will deal with light sources and characteristics; lighting design; signal systems; vertical transportation and design. Fundamental Architectural Acoustics; Solar Energy and Energy Conservation concepts.

ENGR 350 Introduction To Computer Graphics (3). Software, hardware, and mathematical tools for the representation, manipulation, and display of topological and two-and three-dimensional objects; applications of these tools to computer-aided design (CAD), with emphasis on interactive graphics. Prerequisite: ENGR 221.

DEPARTMENT OF CIVIL ENGINEERING
Michael Samuchin, Ph.D., P.E., Head

The Department of Civil Engineering offers a well balanced program in engineering education that encompasses all of the major components of civil engineering activities. The students are exposed to use of materials, the structural design of buildings, bridges and dams, design of transportation systems, planning and design of water supply and sanitary systems and techniques to curb air and water pollution.

The Department has developed a close relationship with industry to provide students majoring in civil engineering with real life job experiences in the civil engineering profession.

DEGREE REQUIREMENTS

Course requirements for all engineering students	90 credit hours
Technical Elective	5
Civil Engineering Core	
Chemistry CHM 122, CHM 122L	4
Surveying CE 302, CE 302L	3
Strength of Materials CE 211, CE 312	6
Fluid Mechanics and Hydraulics CE 310, CE 311	5
Steel and Reinforced Concrete Design CE 342, CE 344	6
Environmental Engineering and Water Resources CE 322, CE 421	5
Transportation CE 332	3
Structural Testing CE 340	1
Structural AnalysisCE 341, CE 442	5
Senior Project ENGR 450	2
Soil Mechanics and Foundation Engineering CE 313, CE 313L, CE 444	5
Total credit hours required	140

CURRICULUM FOR MAJOR IN CIVIL ENGINEERING

FRESHMAN YEAR	Credit Hours Fall	Spring
ENGR 110, HIST 201	0	3
MATH 163, 164	4	4
CHEM 121, 122	3	3
CHEM 121L, 122L	1	1
ENGR 100	1	
ENGR 111, SPCH 220	3	3
ENGR 101, 102	3	3
PE or AERO	1	1
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
MATH 341; ENGR 303	3	3
PHY 221, 222	3	3
PHY 221L, 222L	1	1
ENGR 211, 212	3	3
HIST 202; CE 211	3	3
ENGR 221, ENGR 230	3	3
PE or AERO	1	1
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
HUM ELECTIVE	2	2
ENG 211		3
ENGR 200, 301	3	3
CE 340, 302	1	2
CE 302L		1
CE 310, 311	3	2
CE 312; EC 211	3	3
CE 341	3	
CE 313, 444	3	2
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
ENG 212		3
CE 322, 421	3	2
CE 342, 442	3	2
CE 332; ENGR 430	3	3
CE 344; ENGR 440	3	3
TECH ELECTIVE (300-400 level)	3	2
ENG 310; ENGR 400	3	1
ENGR. 450		2
	18	18

COURSE DESCRIPTIONS

CE 211 Strength of Materials (3). Concepts of stress and strain; stress-strain relations; stresses, strain and displacements in trusses; shafts and determinate beams. Three hours lecture. Prerequisite: ENGR. 211.

CE 302 Surveying (3). Use of surveying instruments in construction surveying, including alignment, grades and layout of buildings; field note procedure, leveling and measuring of angles; measurement of distance by tape and stadia, design, calculation and layout of circular, spiral and vertical curves. Two lectures and two hours lab per week. Prerequisites: Math 163.

CE 310 Fluid Mechanics (3). Fluid properties; fluid statics and buoyancy; fluid flow characteristics; Analysis of ideal and real fluid flows using continuity, Bernoulli and momentum equations; dimensional analysis and similitude. Prerequisite: Engr. 212.

CE 311 Hydraulics (2). Application of basic principles of fluid mechanics to study of water. Flow measurements, flow in closed conduits, uniform and non-uniform open channel flow; pumps and turbines; basic hydrodynamics. Prerequisite: CE 310.

CE 312 Advanced Strength of Materials (3). Compound stresses, stress and strain transformation, statically indeterminate problems and elastic stability of columns. Prerequisite: CE 211.

CE 313. Soil Mechanics (3). Principles of Soil Mechanics, index properties of soil, particle size and gradation. Soil identification and classification, permeability of soils, failure criteria, concept of effective stress in soils, stress distribution in soils, compaction of soils, shear strength and shear testing setttlement and consolidation tests. Two lectures and two hour labs per week. Prerequisite: CE 211.

CE 332 Water Supply (3). Planning of water supply system, population estimation, industrial and municipal water demand, hydrologic considerations of surface and ground water sources,

design of distribution systems and impoundment works, water quality criteria and water treatment processes and operations. Prerequisite: CE 311.

CE 322 Transportation (3). To introduce the student to rural and urban transportation problems and perspectives using the planning process in establishing existing travel patterns, modeling of demand, proposing alternatives, evaluation procedures, and plan implementation. To introduce the basic fundamentals for the design, construction and maintenance and operation of various transportation modes, their guideways and terminals. Prerequisites: CE 302.

CE 333 Elementary Hydrology (3). Elements of hydrology including both descriptive and quantitative aspects. Prerequisite: Engr 212.

CE 340 Structural Testing (1). Laboratory course dealing with the measurement of the engineering properties of construction materials. Prerequisite: CE 211.

CE 341 Theory of Structures I (3). Reactions; shear moments in determinate trusses and framed structures from fixed and wind loads; influences lines; moving loads. Prerequisite: CE 211.

CE 342 Reinforced Concrete Design (3). Behavior and design of rectangular and T-sections in bending and shear, bending stress and development of reinforcement, design of footings and one-way slabs. Prerequisite: CE 341.

CE 344 Steel Design (3). The analysis and design of structural elements and connections for buildings, bridges and specialized structures, including; trusses, plate girders and built-up columns, and main compression members. Prerequisite: CE 34

CE 400 Unit Operations of Environmental Pollution Control (2). Physical unit operations and chemical unit processes employed in air, land and water pollution control activities. Theoretical development of design models and evaluation of functional performances. Topics include mixing, sedimentation, filtration, mass transfer, and absorption.

CE 403 Man and His Environment (3). A study of the interaction of technology with environment, including air, water, natural resources and life support systems. Causes, analysis, and measurement of pollution. Survey of pollution control devices, systems and concepts and current research. Open to all upper division university students.

CE 421 Wastewater Treatment (2). Theory and design of wastewater collection, treatment and disposal. Effects of pollution on the environment. Prerequisite: CHEM 121 and CE 322.

CE 423 Environmental Engineering Laboratory (3). Water chemistry and water microbiology, unit operations and processes involved in water and sewage treatment, industrial waste treatment, solid waste treatment and disposal, air pollution control, noise control. Prerequisite: CHEM 121 and CE 322.

CE 432 Highway Engineering (3). To introduce the student to the concepts of design, construction, operation and maintenance of highway facilities, including the integration and application of various engineering principles and techniques of a comprehensive team project with lectures, labs and role playing. Prerequisite: CE 332.

CE 442 Theory of Structures II (2). Classical techniques of indeterminate structural analysis including slope deflection and moment distribution. Prerequisite: CE 341.

CE 443 Advanced Reinforced Concrete Design (3). Floor slab system including flat slabs and two-way slabs, integrated building unit analysis and design, retaining walls and introduction to prestressed concrete. Prerequisite: CE 342.

CE 444 Foundation Engineering (2). Lateral earth pressure; retaining walls, shallow foundations, bearing capacity of soils, spread and combined footings, raft foundations; deep foundations, piles, caissons and piers. Prerequisites: CE 313.

CE 449 Advanced Steel Design (3). Design of complete structures. Introduction to plastic design concepts. Prerequisites: CE 344.

CE 454 Computer Utilization (3). Computer use, the economic justification, and the extentent of its uses by industry. The utilization of computers for the solution of civil engineering problems.

CE 455 Engineering Behavior of Soils (3). Plastic and elastic behavior of soils, determination and use of engineering properties of in-situ soils. Two hours lectures, three hours lab. Prerequisite: CE 313.

CE 456 Stabilization of Soils (3). Mechanical stabilization of soils by compaction, drainage, and blending; chemical stablization of soils with ad-mixtures; water-proofing and modifying soils with additivies. Two hours lecture, three hours lab. Prerequisite: CE 313.

CE 460 Solid Waste Management (3). Quantities and characteristics of solid wastes; collection methods and equipment; disposal and recycle techniques; economics; planning and management. An introductory course on the concepts of air pollution; analysis of the relationship among emission sources, meterology and topographic factors and adverse effects on receptors. Engineering approaches for air pollution control. Prerequisite: CE 421.

CE 462 Airport Planning and Design (3). To introduce the student to the airport design process, including airport master planning process; air site considerations, including runway configuration, capacity, geometrics, and lighting, land site considerations, including terminal layout and design, and ground access systems and parking. Prerequisites: CE 302, CE 332.

CE 464 Traffic Engineering (3). Study of traffic congestion, road and street capacity, regulations, pedestrian control, traffic signs, and signals, traffic courts, traffic laws and regulations, traffic accidents, and street modifications. Prerequisite: CE 332.

DEPARTMENT OF ELECTRICAL ENGINEERING

Satinderpaul S. Devgan, Ph.D., P.E., Head

The department offers an EAC/ABET accredited Bachelor of Science in Electrical Engineering degree program.

The program in Electrical Engineering systematically builds upon the knowledge acquired in natural sciences, mathematics, and engineering to provide the student a broad base in the various areas of Electrical Engineering and prepares them for careers in the public and private sector.

The department offers courses in electrical circuits, linear systems, computer programming, electronics, control systems, energy conversion, power systems, electromagnetic theory, communication systems and digital logic design. The student may concentrate in control systems, power systems, or computer engineering through a choice of technical electives. A set of non-technical electives in the program help the student to a better understanding of social problems.

DEGREE REQUIREMENTS

Core Requirements for all Engineering Students	90 Credit Hours
Technical Electives	6
Electrical Engineering Core	
Electricity and Magnetism (Phy 311)	3
Electrical Circuits II (EE 212, 212L)	4
Electronics I and II (EE 331, 332, 331L, 332L)	8
Linear Systems (EE 320)	3
Electromagnetic Theory I (EE 321)	3
Energy Conversion I (EE 341, 341L)	4
Power Systems (EE 342)	3
Communication Systems (EE 350)	3
Control Systems I (EE 400, 400L)	4
Digital Logic Design (EE 310, 310L)	4
Senior Project (ENGR 450)	2
Total Credit Hours Required	137

The technical electives, courses at the 300-level or above, may be chosen from the following courses or other courses after written approval by the advisor and the department head:

EE 401—Control Systems II .....(3)
EE 413—Linear Integrated Circuits .....(3)
EE 430—Digital Computer Structures .....(3)
EE 454—Antennas .....(3)
EE 480—Introduction to Microprocessors .....(3)
ENGR 340—Numerical Methods in Engineering.....(3)
ENGR 410—Introduction to Non-Linear Optimization .....(3)
ENGR 350—Introduction to Computer Graphics .....(3)
CS 305—Programming Languages (3)
CS 410—Operating Systems .....(3)

The Humanities Electives may be chosen from two of the following fields:
Philosophy
Music
Art
Drama

CURRICULUM FOR MAJOR IN ELECTRICAL ENGINEERING

FRESHMAN YEAR	Credit Hours Fall	Spring
MATH 163, 164	4	4
CHEM 151; PHY 221	3	3
CHEM 151L; PHY 221L	1	1
ENGR 100; ENGR 111	1	3
ENG 101; ENG 102	3	3
SPCH 220; ECON 211	3	3
PE or AERO	1	1
ENGR 110	0	
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
MATH 341, ENGR 303	3	3
PHY 222, PHY 311	3	3
PHY 222L, EE 212L	1	1
ENGR 200, EE 212	3	3
ENG 310E ENGR 230	3	3
ENGR 221, HIST 201	3	3
PE or AERO	1	1
HUMANITIES Elective		2
	17	19

JUNIOR YEAR	Credit Hours Fall	Spring
EE 331, 332	3	3
EE 331L, 332L	1	1
EE 320, 321	3	3
EE 310, HIST 202	3	3
EE 310L, 341L	1	1
EE 341, 342	3	3
ENGR 211, 212	3	3
	17	17

SENIOR YEAR	Credit Hours Fall	Spring
EE 400, 350	3	3
ENGR 450, 400	2	1
TECH ELEC (300-400 level)	3	3
ENG 211, 212	3	3
ENGR 301, HUMANITIES ELECTIVE	3	2
ENGR 440, EE 400L	3	1
ENGR 430		3
	17	16

COURSE DESCRIPTIONS

EE 212, 212L Circuits II (4). Phasors and concepts of impedance; poles and zeros; steady state AC circuits; polyphase circuits; resonance networks; magnetically coupled circuits; one and two port networks. Lecture: 3 credits. Prerequisites: ENGR 200, ENGR 221. Laboratory: 1 credit. Prerequisite: PHY 221L; Co-requisite: EE 212.

EE 310, 310L Design of Digital Logic Systems (4). This course introduces techniques used for analyzing and designing digital systems. Topics covered include design of combinational and sequential circuits, stored program concepts and simple mircoprocessor architecture and programming. Lecture: 3 credits. Prerequisite: EE 212, EE 212L. Laboratory: 1 credit. Prerequisite: EE 212L. Co-requisite: EE 310.

EE 312, 312L. Circuits and Devices (4). This course is designed to provide the non-EE major with a basic knowledge of electronic and electrical devices including their construction and operation. Topics covered include review of network theorems; linear models of diodes, transistors, operational amplifiers; logic circuits and digital devices; magnetically coupled circuits; transformers and electromechanical energy conversion devices. Lecture: 3 credits. Prerequisites: ENGR 200, ENGR 221. Laboratory: 1 credit. Co-requisite: EE 312.

EE 320 Linear Systems (3). Classical analysis of linear systems; Fourier Series; Fourier Transform; Laplace Transform and its applications; transfer functions and impulse response; Z-transform; state variable techniques and state equations of networks; network analysis by tie-sets and cut-sets. Prerequisites: EE 212, ENGR 303, ENGR 221.

EE 321 Electromagnetic Theory I (3). Review of electrostatic and magnetostatic laws; boundary conditions for dielectric and magnetic materials; Poisson's and Laplace's equations; time-varying fields and Maxwell's equations; retarded potentials; propagation of uniform plane waves in free space, dielectrics and conductors; wave propagation in two-wire lines, coaxial lines and rectangular waveguides. Prerequisite: EE 212, PHY 311, ENGR 303.

EE 331, 331L Electronics I (4). Ideal and practical characteristics and models of diodes; bipolar junction transistors, and field effect transistors; small signal analysis of single-stage amplifiers and diode circuits; transistor bias, stability and design; analysis and design of multi-stage amplifiers. Lecture: 3 credits. Prerequisite: EE 212, ENGR 230, PHY 222. Laboratory: 1 credit. Prerequisite: EE 212L. Co-requisite: EE 331.

EE 332, 332L Electronics II (4). Analysis and design of multistage amplifiers, including feedback and operational amplifiers, low and high frequency analysis of above circuits, stability criterion; Bode and pole-zero analysis; introduction to integrated circuits and VLSI. Lecture: 3 credits. Prerequisite: EE 331, EE 331L. Laboratory: 1 credit. Prerequisite: EE 331L. Co-requisite: EE 332.

EE 341, 341L Energy Conversion (4). Magnetic circuits; single-phase and three-phase transformers; voltage and torque equations; theory, analysis, performance and applications of DC machines, AC synchronous machines and induction motors. Lecture: 3 credits. Prerequisite: EE 212. Co-requisite: EE 320. Laboratory: 1 credit. Prerequisites: EE 341, EE 212L.

EE 342 Power Systems (3). System model representation of synchronous machines, transformers, short, medium, and long transmission lines; per unit representations; network reduction; load flow analysis; symmetrical components and symmetrical faults. Prerequisites: EE 341, PHY 311.

EE 350 Communication Systems (3). Signal transmission and spectral analysis; amplitude, frequency and phase modulation; pulse modulation and multiplex systems; digital communications; noise and noise effects in modulation systems. Prerequisites: EE 320, ENGR 440.

EE 400, 400L Control Systems I (4). Classical control system design and analysis; transfer functions of electrical, mechanical and electromechanical systems; responses of second order systems, sensitivity, steady state error and transient analysis; stability analysis with Nyquist, Bode and root locus plots; design of cascade and feedback compensation. Lecture: 3 credits. Prerequisites: EE 320, EE 341. Laboratory: 1 credit. Prerequisite: EE 400.

EE 401 Control Systems II (3). Modern control system design and analysis using state variable methods; analysis of non-linear control systems; Popov's methods; introduction to optimal control theory and applications; controllability and observability; Pontryagin's principle and its application. Prerequisite: EE 400.

EE 413 Linear Integrated Circuits (3). Introduces basic techniques and processes used in fabrication of monolithic integrated circuits including wafer cleaning, oxidation, photo-engraving and diffusion. Applications of selected contemporary integrated circuits. Prerequisite: EE 332.

EE 430 Digital Computer Structures (3). This course deals with the architecture of digital computers. Topics covered include organization and description of computers from the register transfer level through microprogramming; memory organization and I/O; examples of current popular computers. Prerequisites: ENGR 221, EE 310, EE 310L.

EE 454 Antennas (3). This course serves as an introduction to antennas and propagation. Topics covered are basic antenna properties; near and far fields; simple antenna structures; linear arrays; aperture antennas; the radar equation. Prerequisite: EE 321.

EE 480 Introduction to Microprocessors (3). This course serves as an in-depth introduction to microprocessors. Topics covered are microprocessor hardware, software and architecture of both eight bit and sixteen bit machines; assembly and high-level languages; cross-assemblers; cross-compilers; on-line debugging tools. Prerequisites: ENGR 221, EE 310, EE 310L.

DEPARTMENT OF MECHANICAL ENGINEERING

Yvonne Y. Clark, M.S., P.E., Head

The Mechanical Engineering Program offers a comprehensive course of study in which the fundamentals of engineering are taught and a broad foundation is established for the pursuit of specialized areas in this field. Students may orient their programs toward the thermal sciences, machine design, metallurgy or industrial engineering. In this current era, when efficient and economical means of energy production is an international concern, the mechanical engineer is in the forefront to meet this challenge. Mechanical engineers are concerned with the production, transmission and use of energy. They design and develop machines that produce power, such as internal combustion engines, steam and gas turbines, jet and rocket engines and nuclear reactors. Also, their task is to design and develop machines that use power, such as refrigeration systems, air conditioning equipment and machine tools. Various specialized areas of work have been developed within this field, and since mechanical engineers are employed in nearly all industries, their work varies with the industry and functions performed. Among these specialities are motor vehicles, marine equipment, steam power, heating, air-conditioning, instrumentation and machines for specialized industries, such as petroleum, rubber and plastics and construction.

Mechanical engineers are involved in the whole industrial spectrum from research, development, testing and design work to administrative and management activities. The field is open and in great need of young minds with new ideas.

The Department offers a major program leading to the Bachelor of Science in Mechanical Engineering. Degree requirements are listed below:

DEGREE REQUIREMENTS

Engineering Core Requirements ..... 90 Credit Hours
Technical Electives ..... 6 Credit Hours
Department Core Requirements
- ENGR Graphics II ME 112 ..... 3 Credit Hours
- Strength of Materials CE 211, 312 ..... 6 Credit Hours
- Fluid Mechanics CE 310 ..... 3 Credit Hours
- Circuits and Devices EE 312 ..... 4 Credit Hours
- Thermodynamics II ME 302 ..... 3 Credit Hours
- Materials Processing ME 310 ..... 3 Credit Hours
- Kinematics, ME 321 ..... 3 Credit Hours
- Machine Design ME 322 ..... 3 Credit Hours
- Heat Transfer ME 340 ..... 3 Credit Hours
- Junior Mechanical Lab ME 351, 352 ..... 2 Credit Hours
- Senior Mechanical Lab ME 401, 402 ..... 2 Credit Hours
- Senior Project ENGR 450 ..... 2 Credit Hours
- ME Systems ..... 3 Credit Hours

136 Credit Hours

The Technical Electives are to be chosen from the following:

Physical Metallurgy, ME 311
Production and Inventory Systems, IE 406
Instrumentation and Automatic Controls, ME 410
Mechanical Metallurgy, ME 412
Analytical Techniques, ME 413
Heating and Air Conditioning, ME 420
Mechanical Energy Conversion, ME 430
Manufacturing Engineering, ME 440
Fluid Dynamics, ME 460
Mechanical Vibrations, ME 470
Advanced Machine Design, ME 480
Internal Combustion Engines, ME 490

The Humanities Electives may be chosen from two of the following fields;

Philosophy
Music
Art
Drama

CURRICULUM FOR MAJOR IN MECHANICAL ENGINEERING

FRESHMAN YEAR	Credit Hours Fall	Spring
MATH 163, 164	4	4
CHEM 151; HIST 201	3	3
CHEM 151L	1	
ENGR 111; ME 112	3	3
ENG 101, 102	3	3
HUM. ELECT.	2	2
PE or AERO	1	1
ENGR 110, 100		1
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
MATH 341; ENGR 303	3	3
PHY 221, 222	3	3
PHY 221L, 222L	1	1
ENGR 211, 212	3	3
ENGR 221, 200	3	3
PE or AERO	1	1
ENG 211; CE 211	3	3
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
ENGR 230; EE 312L	3	1
ENGR 301; ME 302	3	3
ME 321, 322	3	3
CE 310, 312	3	3
ME 310		3
ME 351, 352	1	1
Tech Elect; EE 312	3**	3
	16	17

SENIOR YEAR	Credit Hours Fall	Spring
SPCH 420; ENG 212	3	3
ME 340	3	
ECON 211; ENGR 440	3	3
ENG 310E; ENGR 430	3	3
ME SYS; HIST 202	3*	3
TECH ELECT.		3**
ME 401, 402	1	1
ENGR 450, 400	2	1
	18	17

*To be chosen from ME 311, ME 410, ME 420, ME 430, ME 440.
**Must be 300-400 level.

COURSE DESCRIPTIONS

ME 112 Engineering Graphics II (3). Representation of screw threads, fasteners, springs, auxiliary and sectional views, cams and gears and functional drafting. Working drawings of machine parts and basic descriptive geometry. Prerequisite: ENGR 111. Six laboratory hours per week.

ME 302 Thermodynamics II (3). Study of gas mixtures involving ideal gases, the Gibbs Dalton Law; properties of moist air, the psychometric chart; gas power and refrigeration cycles, thermodynamic relations, equations of state, chemical reactions, the thermodynamics of combustion; availability and irreversibility. Prerequisite: ENGR 301.

ME 310 Materials Processing (3). Application of equilibrium diagrams to the physical and mechanical properties of materials and their heat treatment. Casting, deformation processes. Gaseous and arc welding and welding principles. Metal removing machining processes. Prerequisites: ENGR 230, CE 211.

ME 311 Physical Metallurgy (3). Introductory theories of alloying. Review of equilibrium diagrams. Elementary kinetics of rate processes. Diffusion in solids. Nucleation and growth processes. Solidification. Heat treatments of alloys to produce equilibrium and nonequilibrium phases. Properties of alloys in relation to their structures. Plastic deformation, recovery and recrystallization. Corrosion and oxidation of metals and alloys. Prerequisite: ENGR 230.

ME 321 Kinematics (3). Analysis of mechanisms. A study of instantaneous centers, velocities, accelerations and forces in plane mechanisms by analytical and graphical methods. A study of rolling sliding contact including belts, chains, cams and tooth gearing in plane and epicyclic train. Prerequisites: MATH 164, ME 112, ENGR 212.

ME 322 Machine Design (3). The design of machine parts, including shafting, gears, brakes, clutches, bearings, (sliding and antifriction), springs, flywheels and frames. Prerequisites: ME 321, CE 211.

ME 340 Heat Transfer (3). Introduction of heat transfer mechanisms; conduction heat transfer including steady state; one, two and three dimensional conduction and conduction in the unsteady state; convection heat transfer including forced and free convection; radiation heat transfer; heat exchangers. Prerequisite: ENGR 301.

ME 351 Junior Mechanical Laboratory I (1). Use of basic instruments used in mechanical engineering. Measurement of basic physical properties including length, area, time, speed, mass, weight, inertia, temperature, humidity, pressure, viscosity, thermal conductivity, etc. Calibration of instruments. Statistical and uncertainty analyses of data. Prerequisite: Junior standing.

ME 352 Junior Mechanical Laboratory II (1). Introduction to basic processing methods used to shape engineering materials. Use of lathes, milling, drilling, tapping, welding and casting. Basic testing of mechanical properties of materials. Prerequisite: ME 351.

ME 401 Senior Mechanical Laboratory I (1). Introduction to relatively advanced instrumentations used by engineers including displacement and force transducers, strain gages, thermocouples, X-Y plotters, oscilloscopes etc. Behavior of zeroth, first and second order systems. Measurement of vibration, sound etc. Introduction to scanning electron microscopes and study of microstructure of materials. Prerequisite: ME 352.

ME 402 Senior Mechanical Laboratory II (1). Observation and Analysis of common mechanical engineering systems. Hydraulic Pumps and Turbines, Pneumatic fans and blowers, Internal Combusion Enginers, Refrigerators & Heat Pumps and Solar Energy System. Prerequisite: ME 352.

ME 410 Instrumentation and Automatic Control (3). Dynamic response of instruments and measurement systems. Transducers. The influence of a measuring system on the process to be measured. Transfer function representation of machines or electromechanical elements. Transient and frequency response of control elements. Linear analysis of simple closed-loop systems. Criteria of stability and improvement of systems performance. Design of simple systems. Prerequisites: ENGR 303, EE 312.

ME 412 Mechanical Metallurgy (3). Introduction to various measures of strength. Mechanical testing of polycrystalline materials. Plastic deformation of metal single crystals. Elementary geometry of dislocations. Dislocation mechanisms is the strengthening of metals through plastic deformation, solid solution and second phase dispersion and percipitation. Creep, fatigue and fracture of metals. Environmental effects. Prerequisites: ENGR 230, ME 311.

ME 420 Heating and Air Conditioning (3). Principles of heating, ventilating and air conditioning, systems in current use. Refrigeration cycles, refrigerant properties, heating, cooling loads, psychrometry; processes for heating, cooling, humidifying, dehumidifying, purifying; heat transfer principles; controls. Heat loss and gain computations. Design and layout of heating and air-conditioning systems. Prerequisite: ME 302, Co-requisite: ME 340.

ME 430 Mechanical Energy Conversion (3). Energy sources; solar, chemical, hydraulic and nuclear. Discussion of solar cells, fossil fuels, hydraulic turbines, fuel-cells, thermionic generators, thermoelectric generators, MHD generators, fission reactors and the steam power plant. Prerequisite: ME 302.

ME 440 Manufacturing Engineering (3). An introduction to operating concepts and functions present in manufacturing. Topics include, industrial organization, process planning, specifications of designs of tools, jigs and fixtures, product quality control, and automated production facilities. Case method of instruction which emphasize student participation in class discussion is used along with supplementary reading and field visits to manufacturing plants. Prerequisites: ME 310. Senior standing.

ME 460 Fluid Dynamics (3). Review of the foundations of fluid dynamics and thermodynamics as related to control volumes; introduction to compressible flow; one-dimensional isentropic flow; normal shock waves; flow in constant areas ducts with friction and flow in ducts with heating and cooling. Prerequisites: CE 310, ME 302.

ME 470 Mechanical Vibrations (3). Undamped and damped vibrations with one and two degrees of freedom. Methods of solution for -n-degree of freedom systems. Transient vibration in one degree of freedom systems. Balancing and shirling of shafts. Noise and noise control. Prerequisites: ENGR 303, ENGR 212.

ME 480 Advanced Machine Design (3). The proportioning of machine elements by the application of mechanics and the principles of strength of materials modified by practical considerations, together with an elementary study of friction and lubrication. Use of computer for kinematic analysis and stress analysis. Design exercies. Prerequisite: ME 322.

ME 490 Internal Combustion Engines (3). Fundamental principles of engine design and application including cycle analysis, gas analysis, effect of operation and engine design on air pollution, etc. Prerequisite: ME 302.

BACHELOR OF SCIENCE IN ENGINEERING PROGRAM

Mohan J. Malkani, Ph.D., Associate Dean (Coordinator)

The Bachelor of Science in Engineering program is designed to offer working students a maximum flexibility in course work selection to deal with a broad range of engineering problems. Students must declare nine (9) semester hours in one area of engineering electives and may take more courses in that area or may choose to spread their course work over many fields. This choice is left to the students to make, within the selection of courses which are offered. Areas of electives include Civil Engineering, Computer Science, Electrical Engineering, Industrial Engineering, and Mechanical Engineering.

The Bachelor of Science in Engineering requires approximately three years of common course work of all students. Electives comprise the other year. There are 9 hours of technical electives, and 4 hours of non-technical electives. In order to assure an appropriate breath in each engineering student's academic program, no more than 12 of 18 hours of engineering electives may be taken in the same discipline. The student is prepared to provide a wide variety of engineering services and may pursue one or more engineering areas further through the selection of electives.

Students seeking information about specialized engineering degrees should refer to the specific department in the School of Engineering and Technology.

DEGREE REQUIREMENTS

Core Requirements for all Students	109 credit hours
Technical Electives	9
Design Electives	9
Human Social Electives	4
P.E. or AERO	4
Total credit hrs. required	135 credit hours

CURRICULUM FOR THE BACHELOR OF SCIENCE IN ENGINEERING

FRESHMAN YEAR	Credit Hours Fall	Spring
MATH 163, 164	4	4
ENG 101, 102	3	3
CHEM 121, 122	3	3
CHEM 121L, 122L	1	1
ENGR 111; EC 211	3	3
P.E. or AERO	1	1
ENGR 110; Hum Soc. Elect.	0	2
	15	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
MATH 341, ENGR 303	3	3
ENG 211-212	3	3
ENGR 221		3
PHY 221, 222	3	3
PHY 221L 222L	1	1
ENGR 211; EE 212	3	3
ENGR 200; EE 212L	3	1
P.E. or AERO	1	1
	17	19

JUNIOR YEAR	Credit Hours Fall	Spring
HIST 201, 202	3	3
ENG 310		3
CE 310; ENGR 230	3	3
ENGR 331L	1	
ENGR 440; TECH ELECT	3	3
ENGR 301; CE 211	3	3
EE 331; ME 340	3	3
	16	18

SENIOR YEAR	Credit Hours Fall	Spring
TECH ELECT	3	3
ENGR 430; IE 322	3	3
CE 341; ENGR 423	3	3
DES ELECT	3	6
ENGR 450		2
ME 310	3	
HUM SOC. ELECT	2	
	17	17

CS 121 Introduction to Computing (3). Algorithms, programs and computers. Organization and characteristics of computers. Survey of computers, languages, systems and applications. Emphasis on design solutions to problems. Prerequisite: High School algebra.

CS 220 Computer Programming—Fortran (3). Fortran or another high-level language used for solving problems in science and engineering. Prerequisites: MATH 163; BE 141; CS 121; or permission of instructor.

CS 221 Computer Programming—Cobol (3). Cobol or other data processing language. Prerequisite: CS 121 or permission of instructor.

CS 222 Computer Programming—SNOBOL (3). Snobol or high-level language of interest to students in the Humanities. Prerequisite: CS 121 or permission of instructor.

CS 225 Advanced Cobol (3). Application of COBOL to business problems. Topics include file processing, sorting, subroutines and structured programming. Prerequisite: CS 221.

CS 230 Discrete Mathematical Structures (3). Sets, relations, Boolean algebra, propositional logic, functions and computability; graph theory and its applications to computer science; set theoretical characterizations of computing machines and computing languages. Prerequisites: CS 121, Math 163.

CS 240 Computer Organization I (3). Assembly language programming including addressing methods, representation of information, instruction executing and I/O programming. Prerequisite: CS 220.

CS 245 Computer Organization II (3). Basic computer architecture. Organization and structure of major computer components, both hardware and software. Prerequisite: CS 240.

CS 250 Data Structure (3). Data structures and algorithms for their manipulation. Arrays and lists, stacks, queues, rings, doubly-linked lists, trees, dynamic storage allocation; organization of files. Prerequisite: CS 230.

CS 305 Programming Languages (3). Comparison and analysis of programming languages, their characteristics and implementation. Languages to be discussed will include ADA, ALGOL, LISP, APL, PASCAL, PL/1, and PL/2 subsets. Prerequisite: CS 250.

CS 340 Logic Design (3). Switching algebra, logic design of combinational circuits, minimization methods; sequential circuit analysis and synthesis. Prerequisite: CS 230.

CS 345 Analog Computers (3). Analog computing; problem set-up and scaling; multipliers, function generators, operational amplifiers; stabilization; and accuracy. Prerequisite: CS 220, knowledge of differential equations.

CS 370 Data Management Systems (3). Data organization and storage techniques. Designing systems by organizing files and segmenting problems into programs to make efficient use of hardware devices. Documentation methods and techniques for modifying systems. Communication problems among individuals involved in system development. Prerequisites: CS 225, CS 250.

CS 380 Introduction to Operations Research (3). Introduction to various methods of system optimization. Simplex method; search techniques, gradient methods; dynamic programming, integer programming, and geometric programming. Applications from management science, engineering, economics and physical sciences. Prerequisites: CS 212; MATH 361.

CS 385 System Stimulation (3). Discrete simulation models, queueing theory, and stochastic processes. Comparison of simulation languages. Simulation methods including Monte Carlo techniques. Prerequisites: CS 220, ENGR 440.

CS 390 Numerical Analysis (3). Interpolation and approximation, numerical differentiation and integration, roots of equations. Prereq-uisites: CS 220, Math 341, Math 462.

CS 410 Operating Systems (3). Hardware interrupt systems and concurrence of I/O operations. Multiprogramming systems, memory management, protection, resources allocation and control, job management and task management; real time systems, time sharing systems; paging; virtual memory, schedulers, reliability, file management services and system accounting. Prerequisite: CS 245.

CS 420 Compiler Construction (3). Review of program language structure, translation, loading, executing and storage allocation. Compilation of simple expressions and statements. Organization of a compiler including compile-time and run-time symbol tables, lexical scan, syntax scan, object code generation, error diagnostics, object code optimization and overall design. Prerequisite: CS 250.

CS 440 Artificial Intelligence (3). Topics in machine intelligence. Prerequisite: CS 250.

CS 450 Computer Graphics (3). Prerequisite: CS 250.

CS 460 Microprocessors (3). Programming and use of microprocessors. Topics covered include: number systems, microprocessing hardware, memory, addressing, instructions, peripheral interfacing and programming problems. Prerequisite: CS 220.

CS 480 Computer Science Senior Project (3). Prerequisite: Senior standing.

CS 490 Special Topics (3). May be repeated for up to 6 hours credit. Individual topics as approved by the program coordinator.

INDUSTRIAL ENGINEERING

IE 322 Work Methods and Design (3). Job analysis, job evaluation, design of wage structures, design of work-place layouts, flow charting, activity chart and analysis, and methods improvement. Laboratory work included.

IE 344 Quality Control (3). Application of statistical methods to the control of quality of manufactured parts and techniques of inspection. Laboratory work included. Prerequisite: QM 201.

IE 351 Industrial Operations Research I (3). Linear Programming including simplex, transportation, and assignment models. Introduction to dynamic programming and network analysis. Prerequisites: CS 220, ENGR 440.

IE 352 Industrial Operations Research II (3). Introduction of quantitative analysis of industrial systems, including model formation, queueing theory, inventory analysis and simulation techniques. An introduction to random processes and the use of probabilistic methods in replacement and industrial analysis. Prerequisite: IE 351.

IE 406 Production and Inventory Systems (3). Fundamentals and applications of statistical forecasting for production planning, inventory analysis and control techniques. Production planning procedures, economic start quantity analysis and production scheduling and control models. The overall production process as in integrated systems. Prerequisites: IE 351 and IE 352.

IE 416 Materials Handling and Facilities Planning (3). Analysis and planning for the overall problem of moving, packing, and storing of materials; equipment comparison and selection, cost analysis; facilities planning including plant layout, materials handling and service area design. Prerequisites: IE 452.

IE 423 Scheduling Systems (3). Performance measures for job and flow shop scheduling, including both static and dynamic conditions, as well as techniques for generation production schedules. Deterministic and probabilistic dispatching conditions. Prerequisite: ENGR 440.

IE 424 Predetermined Time Systems (3). Work design and measurement using a predetermined time system, such as MTM; with applications to learning curves; standard data methods and incentive systems. Prerequisite: I.E. 322.

IE 425 Work Measurement Application (3). Application of learning curves, queueing theory, standard data methods, and incentive systems to the design of industrial work situations. Prerequisite: IE 322.

IE 454 Industrial Development (3). Factors other than mechanical or chemical which enter into the successful establishment of manufacturing enterprise. Cost and location studies and market analysis to determine the commercial feasibility of new plants of projects.

IE 459 Simulation (3). Generation of outcome of a complex random process by computer. Models of complex systems using available simulation languages, simulation as a design tool in industrial systems. Prerequisite: ENGR 221.

IE 481 Human Factors in Work Design (3). Human capabilities and limitations affecting work place layouts, working environment, design of tools and equipment and communications and response to man-machine systems. Prerequisite: IE 322.

SAFETY ENGINEERING CERTIFICATE
Y. Y. Clark, P.E., Coordinator

The area of Safety Engineering has expanded considerably in the last decade, greatly increasing the need for trained, experienced professionals. Where can either the engineering student, or the graduate already in industry learn the methods and procedures required of the Safety Professional? Tennessee State University has recognized the need for formal, professional training in this area, and has developed the Safety Engineering Certificate Program to produce qualified Safety practitioners for industry and government.

Upon completion of the required curriculum, the Safety Engineering Certificate recipient should be able to organize and develop a company safety program, will be knowledgeable of OSHA requirements, will be able to measure and control noise problems, will have performed industrial hygiene analyses of toxic materials and vapors, and will have had professional training in Industrial Fire Hazards.

SAFETY ENGINEERING CERTIFICATE

Required Courses

Industrial Safety SE 331	3
Industrial Occupational Safety & Health I SE 410	3
Industrial Occupational Safety & Health II SE 412	3
Noise SE 413	3
Industrial Hygiene SE 416	3
Hazardous Materials SE 421	3
Human Factors in Work Design IE 481	3
Industrial Fire Hazards—Fire Science 232	3

SAFETY ENGINEERING COURSE DESCRIPTIONS

SE 331 Industrial Safety (3). Accident prevention and control, with emphasis on industrial safety programs and development of safety organization.

SE 410 Industrial Occupational Safety and Health I (3). The Occupational Safety and Health Act of 1970; historical development, standards; reporting, recording and logging, inspection procedures and penalties; standards on buildings; protective equipment; materials handling and storage; machinery, and hazardous materials.

SE 412 Industrial Occupational Safety and Health II (3). Safety requirements related to compressed gas and air equipment; hand and portable power equipment; welding, cutting, brazing; electrical systems; special industries; safety training and education; illumination; hoists and elevators; cranes and derricks; signs, signals and barricades; traffic control; blasting; concrete forms and shoring; walking and working surfaces; floor and wall openings; stairs and runways; fire prevention and control; housekeeping; personal protective equipment; ladders and scaffolds; flammable liquids and excavation and trenching.

SE 413 Noise (3). Characteristics of noise; generation, transmission and suppression; measurement; function of the ear in receiving and processing sound; adverse effects of noise environment; measurement of hearing loss; federal and state regulations pertaining to noise.

SE 416 Industrial Hygiene (3). A study of the effects of occupational health hazards on workers in industry; emphasizing the recognition of toxic agents by utilization of appropriate engineering and management controls. A strong emphasis is on standard utilization of Industrial Hygiene monitoring of control equipment so that class members may acquire practical experience to prepare them for actual industrial requirements.

SE 421 Hazardous Materials (3). Chemical characteristics relative to storage, handling, and transporting hazardous materials including oxidizing and combustible solids, flammable liquids, and radioactive compounds. Appropriate emergency actions, fire fighting and control.

DEPARTMENT OF INDUSTRIAL ARTS AND TECHNOLOGY
John E. Howlett, Jr., M.A., Acting Head

The Department of Industrial Arts and Technology is designed to offer instruction for the purpose of preparing and upgrading teachers of industrial subjects, safety and driver education and technological middle management positions for industry, government and other agencies.

The department offers a program leading to the Bachelor of Science Degree with options in the following areas: Technical Aeronautics, Industrial Arts Education, Industrial Technology and Transportation Services and Technology. The department also offers a program leading to the Associate of Science Degree in Fire Science. Students must have at least a 2.0 average in all lower division courses before enrolling in upper division area courses. The student is expected to complete a minimum of 135 semester hours of course work to earn the Bachelor of Science degree.

Courses are offered in Driver and Safety Education, technical and industrial education leading to teacher certification.

CURRICULUM FOR THE INDUSTRIAL TECHNOLOGY PROGRAM
John E. Howlett, Jr., Coordinator

Industrial Technology is a field of study which draws upon the principles of management, science, and the technology of industry. These principles are applied to the development of ideas and the solution of products and services, and to the management and supervision of the personnel involved.

The curriculum in Industrial Technology is designed to prepare personnel for positions in industry which require technical competency, managerial ability, and a broad liberal background. More specifically, the curriculum leads to a Bachelor of Science in Industrial Technology with a concentration in one of the following technology areas: Construction, Electronics and Printing.

The construction option is designed to meet the needs of students who wish to acquire principles of small commercial building construction which will enable them to obtain positions as construction supervisors, materials salesmen, contractors, and building inspectors. The electronics option is designed to prepare individuals for positions as electronics engineering aides, industrial electronics technicians and communication technologists. Students pursuing the Printing option may secure positions as plant managers, foremen, supervisors and salesmen within the printing industry.

The courses required in Industrial Arts and Technology options are listed below:

CONSTRUCTION CONCENTRATION

IAT 111	Woodworking Tech.	3
IAT 212	Masonry Const.	3
IAT 304	Electrical Wiring I	3
IAT 321	Const. Drawing I	3
IAT 322	Const. Drawing II	3
IAT 330	Concrete Tech	3
IAT 412	Estimating	3
IAT 432	Industrial Wiring	3
AE 312	Working Drawing	3
AE 430	Construction Management	2
CE 302	Surveying	2
CE 302L	Surveying Lab	1
		32

PRINTING CONCENTRATION

IAT 142	Relief Presswork	3
IAT 151	Introduction to Printing	3
IAT 201	Linotype Operation	3
IAT 202	Makeup and Imposition	3
IAT 301	Offset Fundamentals	3
IAT 302	Cost Finding, Estimating	3
IAT 401	Production	3
IAT 402	Production	3
IAT 413	Foremanship Training by Conf. Methods	3
IAT 431	Curriculum Planning in Industrial Ed.	3
		33

ELECTRICAL CONCENTRATION

IAT 231	Basic Electricity	3
IAT 232	Basic Electronics	3
IAT 304	Electrical Wiring I	3
IAT 305	Electrical Wiring II	3
IAT 321	Construction Drawing I	3
IAT 322	Construction Drawing II	3
IAT 331	Electronics Communication I	3
IAT 332	Electronics Communication II	3
IAT 412	Estimating	3
IAT 432	Industrial Wiring	3
IAT 442	Avionics	3
		33

SUGGESTED ELECTIVES

DSED 400	Driver Education and Traffic Safety	3
DSED 412	Advanced Problems in Driver and Traffic Safety	3
AT 314	Industrial Education	3
AT 331	Electronics Communication I	3
AT 413	Foremanship Training by Conference Method	3
AT 432	Industrial Wiring	3
CE 302	Surveying	2
CE 302L	Surveying Lab	1
E 211	Materials and Construction	3
		24

CURRICULUM IN INDUSTRIAL TECHNOLOGY OPTION

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3
MATH 161, 163	4	4
IAT 101, 102	3	3
CHEM 121, 121L, IAT 103	4	3
UC 100, HEALTH 151	1	2
PE or AERO	1	1
HUM. ELECT, HUM. ELECT	2	2
ENGR. 110	0	
	18	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
PHY 211, 211L,	4	
PHY 212-212L	4	4
HIST 201, 202	3	3
ENGR 221, ENG 212	3	3
ENG 211, ACCT 211	3	3
ECON 211, MG 101	3	3
PE or AERO	1	1
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
IAT 311, IAT 305	3	3
IAT 310E; ELECT	3	3
TECH OPT ELECT	3	3
IAT 304, ECON 335	3	3
IAT 330, IAT 412	3	3
CE 302-302L	3	
	18	15

SENIOR YEAR	Credit Hours Fall	Spring
BL 323, TECH. OPTION ELECT	3	3
AE 430		3
IAT 450, HUM. ELECT	2	2
ENGR 400, ELECT (300-400)	1	3
AE 411, IAT 314	3	3
TECH. OPTION ELECT.	3	
	12	14

Summer—IAT 374 Industrial Internship (9)
Total Semester Hours Required: (138)

CURRICULUM FOR THE TECHNICAL AERONAUTICS OPTION

Cecil M. Ryan, Coordinator

The Technical Aeronautics Curriculum is an academically oriented program of study directed toward training for gainful occupations in general aviation, aerospace industries, airplane manufacturing corporations, or private aeronautical service enterprises. The wide background provided through this curriculum enables a graduate to qualify for positions as support personnel working directly with engineers on a technical level. (Because of a policy of allowing academic credit for graduates of approved armed services schools or those holding current F.A.A. licenses in specified areas, this program should be especially attractive for those active or ex-service personnel who meet college entrance requirements and who desire to further their training toward a B.S. degree.)

CURRICULUM IN TECHNICAL AERONAUTICS

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, ENG 102	3	3
IAT 101, IAT 102	3	3
IAT 131, IAT 132	3	3
IAT 134, IAT 135	3	3
MATH 161, MATH 163	4	4
PE or AERO	1	1
ENGR 110, UC 100	0	1
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, ENG 212	3	3
IAT 221, IAT 222	3	3
PHY 211-211L,	4	
PHY 212-212L		4
HIST 201, HIST 202	3	3
HUM ELECT	2	
ART 133; IAT 370	2	3
PE or AERO	1	1
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
IAT 341, IAT 342	3	3
IAT 371, IAT 372	3	3
IAT 381, IAT 382	3	3
MG 215, IAT 324	3	3
BL 323, HEALTH 151	3	2
IAT 373, AC 211	3	3
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
IAT 441, IAT 442	3	3
IAT 451, IAT 473	3	3
IAT 450; SOC SCI	2	3
ELEC (300-400)	3	3
ENGR 400, ENG 310E	1	3
IAT 314	3	
	15	15

Summer — IAT 452 Aeronautics Workshop (3)
Total Semester Hours Required: (138)

Total Semester Hours Required for a Minor: (18)
Consisting of IAT 135, 370, 371, 381, 382, 451

INDUSTRIAL ARTS EDUCATION OPTION

William S. Merriman, Jr., Ph.D., Coordinator

The Industrial Arts curriculum is organized to offer experiences that will prepare young men and women as teachers of Industrial Arts in junior and senior high schools, and to provide experiences of all students who wish to develop an appreciation for and an understanding of the technological society in which they live.

Students in Industrial Arts Education must meet all requirements of the University with regards to its Teacher Education Program. Such requirements are listed under the School of Education as "General Information on the Teacher Education Program."

Requirements for Certification in Industrial Arts Education

The student must complete a core of major courses selected from the areas listed below:

(70) Industrial Arts—Semester Hours (36)

Sem. Hrs.

Construction Tech. & Manufacturing (12)
IAT 111 Woodworking Technology
IAT 312 Machine Woodworking
IAT 121 General Metalworking
IAT 324 Machine Tool Technology

Communication Technology (12)

IAT 101 Graphic Communication I
IAT 102 Graphic Communication II
IAT 151 Intro. to Printing
IAT 142 Relief Presswork
CS 121 Introduction to Computing

Transportation & Power Technology (12)

IAT 231 Electricity
IAT 232 Basic Electronics
IAT 361 Power Technology I
IAT 362 Power Technology II

In addition to the above 36 semester hours of general industrial arts requirements, 6 hours of Industrial Arts Education electives are also required. These electives should be used to secure single subject endorsements in various areas in industrial arts. Single subject endorsements may be obtained in any one of the following areas by completion of the hours indicated below: (Note: courses in the five major areas of major courses may be included in the single subject endorsement).

Sem. Hrs.

(71) Communication & Media Technology (12)
(72) Power and Energy Technology (12)
(73) Materials and Processes Technology (12)

CURRICULUM FOR THE INDUSTRIAL ARTS EDUCATION OPTION

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, ENG 102	3	3
MATH 161, MATH 163	4	4
IAT 101, IAT 102	3	3
IAT 111, IAT 121	3	3
CS 121, IAT 151	3	3
PE or AERO	1	1
ENGR 110, UC 100	0	1
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212	3	3
HIST 201, HIST 202	3	3
SCI 121, SCI 122	3	3
EDCI 201; PSY 242	3	3
IAT 231, IAT 232	3	3
PERSONAL DEV. ELEC.	2	
HUM ELEC		2
PE or AERO	1	1
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
EDCI 301; PSY 312	3	3
IAT 316, EDSE 465	3	3
IAT 324, IAT 312	3	3
IAT 361; IAT 362	3	3
IAT 414, IAT 142	3	3
ELECT AREA ENDORSE, HUM ELEC	3	2
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
IAT 431, IAT 344	3	3
EDCI 387, EDRD 491	3	3
IAT 343, EDCI-0	3	0
SOC SCI ELECT,	3	
IAT 472		9
ELECT AREA ENDORSEMENT	3	
ENGR 400	1	
IAT 450	2	
	18	15

Total Semester Hours Required: (139)

CURRICULUM FOR THE TRANSPORTATION SERVICES AND TECHNOLOGY OPTION

Thomas Brooks, Jr., Coordinator

The Transportation Services and Technology Curriculum offers education designed for the rapidly growing transportation industry. It is envisioned as an interdisciplinary program designed to prepare students for positions in the areas of Transportation, Travel, and Tourism. Upon successful completion of the curriculum, the student possesses the following competencies:

(1) Have a broad overview of transportation and the various industries that are allied with it. (2) Be able to understand and cope with the problems of a large complex organization designed to serve the needs of individuals and groups of travellers as well as the handling of freight and cargo from aircraft, railroads, trucks, pipelines; seaports, and barges and inland waterways. (3) Be familiar with problems relative to leisure travel and tourism. (4) Be able to perform supervisory, administrative and technical tasks relative to the organization, management and personnel for Transportation, Travel and Tourism. (5) Be technically competent to entrance levels in the transportation services.

Courses required for a option in Transportation Services and Technology are listed below:

IAT 314	Industrial and Production Management	3
IAT 210	Fundamentals of TST	3
IAT 306	Transportation Rates and Economics	3
IAT 307	Transportation Managing and Marketing	3
IAT 317	Physical Distribution and Transportation Management	3
IAT 318	Transportation Terminal Management	3
IAT 377	Internship TST	6
IAT 415	Tourism Development	3
IAT 416	Problems in Transportation	3
TST	Electives	6
	Total	36

PROGRAM FOR CERTIFICATION IN DRIVER EDUCATION

Students may meet certification requirements in Driver Education by completing the following courses:

DSED 400	Driver Education and Traffic Safety	3
DSED 410	Teaching Methods in Driver and Traffic Safety Education	3
DSED 412	Advanced Problems in Driver and Traffic Safety Education	3
DSED 420	General Safety Education	3
HED 302	First Aid	2
		14

CURRICULUM FOR TRANSPORTATION SERVICES AND TECHNOLOGY

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3
MATH 161, MATH 163	4	4
HUM ELEC	2	
HEALTH 151, IAT 102	2	3
PE or AERO	1	1
IAT 101; MG 215	3	3
ENGR 110, HUM. ELECT	0	2
UC 100	1	
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212	3	3
PHY 211-211L; GEO 271	4	3
IAT 210; PHY 212-212L	3	4
ECON 211	3	
PE or AERO	1	1
HIST 201, HIST 202	3	3
	17	14

JUNIOR YEAR	Credit Hours Fall	Spring
IAT 306, IAT 307	3	3
IAT 317, IAT 318	3	3
IAT 311, IAT 314	3	3
IAT 325, IAT 370	3	3
BL 323; ENG 310E	3	3
IAT 372, IAT 326	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
IAT 405, IAT 406	3	3
IAT 415, IAT 416	3	3
IAT 450, ACCT 211	2	3
SOC 461, SPCH 220	3	3
ELEC 300-400	3	3
ENGR 400	1	
	15	15

IAT 374 Internship in TST (9 hr. cr.) must be taken the summer following completion of junior year.

Total Semester Hours Required: (138)

Total Semester Hours Required for a Minor: (18)

PROGRAM FOR CERTIFICATION IN INDUSTRIAL EDUCATION

Students may meet certification requirements in Industrial Education by successfully completing the following courses:

IAT 316—Foundation of Industrial Education	3
IAT 343—Shop Organization and Management	3
IAT 344—Materials and Methods for Teachers of Shops and Related Subjects	3
IAT 375—Methods of Teaching Education	3
IAT 413—Foremanship Training by the Conference Method	3
IAT 414—Job Analysis	3
IAT 431—Curriculum Planning in Industrial Education	3
IAT 435—Problems in Trade and Industrial Teaching	3
IAT 436—Problems in Trade and Industrial Teaching	3
Total	27

Associate of Science Degree in Fire Science

John E. Howlett, Jr., Coordinator

The Associate of Science in Fire Science is a recently developed program that recognizes a growing national trend toward enhanced professionalism and changing qualifications in fire science. This Associate Degree is the first stage of a possible career ladder sequence which also includes the opportunity to pursue a Bachelor's Degree, with minimal loss of credits earned in the Associate Degree program. Course work covers communication and management skills, as well as 39 hours in technical courses. Six (6) hours of electives allow the student flexibility to prepare for future educational objectives. Courses are scheduled and delivered to permit those persons presently employed with fire departments to participate with little conflict to their variable work schedules.

CURRICULUM FOR THE PROGRAM IN FIRE SCIENCE

FIRST YEAR	Credit Hours Fall	Spring
ENG 101, ENG 102	3	3
MATH 111, Math 112	3	3
FS 210, CHEm 121-121L	3	4
FS 211, FS 220	3	3
FS 212, FS 231	3	3
ELECT	3	
	18	16

SECOND YEAR	Credit Hours Fall	Spring
ENG 211, Eng 212	3	3
SOC 211, PSY 201	3	3
SPCH 230, FS 262	3	3
FS 232, FS 243	3	3
FS 260, FS 244	3	3
SE 421, ELECT	3	3
	18	18

Total Semester Hourse Required: (70)

COURSE DESCRIPTIONS INDUSTRIAL ARTS AND TECHNOLOGY (IAT)

IAT 101. Graphic Communication I. (1-4-3) Instruction in the use of drafting tools, lettering, sketching, geometrical construction, multi-view projection, auxiliary views and revolutions, sectioning and dimensioning as applied to industrial graphic. One hour lecture and four hours laboratory.

IAT 102 Graphic Communication II. (1-4-3) A study of pictorial drawings, thread design and working drawing, intersection experience in drafting practices and theory. One hour lecture and four hours laboratory.

IAT 103 Residential Construction Methods and Materials. (1-4-3) Tools and materials of frame construction, laying out and sketching of a building. Construction methods. One hour lecture and four hours of laboratory. Prerequisite: IAT 102.

IAT 111 Woodworking Technology. (1-4-3) An introduction to the tools materials, processes and personnel used in the woodworking industry. One hour lecture and four hours laboratory.

IAT 121 General Metalworking. (1-4-3) An introducton to the tools, materials, processes, and personnel of the metalworking industry. One hour lecture and four hours laboratory.

IAT 131 Aerospace Basic Science. (3-0-3) This course includes a basic study of the physical properties of air, elements of aerodynamics, airfoil design and reactions in accordance with Newton's laws and Bernoulli's principles, as applied to bodies in motion. Also blueprint reading standards, materials and hardware. Aircraft structural design and structural frame requirements for fuselage and wing components including wing loading and stress analysis. Three hours lecture.

IAT 132 Power Plants I. (1-4-3) Energy conversion principles and practices. Thermodynamic working fluids and pressure force-torque conversion processes. Fourstroke cycle and two strike cycle engine principles and design, carburetion and induction system design and requirements. Battery and Ignition system design, precombustion activities and the combustion process, cooling and lubrication systems. One hour lecture and four hours laboratory.

IAT 134 Model Building. (3-0-3) Deals with nomenclature, structure, design, and the building of various aircraft models. Three hours lecture.

IAT 135 Aircraft Familiarization. (3-0-3) A survey course designed to acquaint the student with the basic areas of concentration within the field of aviation. Three hours lecture.

IAT 142 Relief Presswork. (1-4-3) Skills are developed in the care and maintenance, registration, making-ready, and feeding of handfed platen and automatic cylinder presses. Prerequisite: IAT 151. One hour lecture and four hours laboratory.

IAT 151 Introduction to Printing. (1-4-3) An introduction to the tools, materials, processes, and personnel of the Printing Industry. One hour lecture and four hours laboratory.

IAT 201 Linotype Operation. (1-4-3) The development of manipulative skills on the linotype keyboard and the performance of first and second echelon maintenance. One hour lecture and four hours laboratory. Prerequisite: IAT 142, 151.

IAT 202 Make-up and Imposition. (1-4-3) Emphasis on the development of skills in the make-up and imposition of books, newspapers, pamphlets, brochures, and broadsides, and reproduction proofs. One hour lecture and four hours laboratory. Prerequisite: IAT 201.

IAT 210 Fundamentals of Transportation, Travel and Tourism. (3-0-3) An introductory study of the various modes of transportation and their relationships to travel and leisure activities. Study of the growth, use, progress and need for rapid transit systems.

IAT 212 Masonry Construction. (1-4-3) Tools and materials, block construction, brick veneer construction, curtain wall, screen walls, different types of mortar, adhesive for masonry walls, fireplace construction and design. One hour lecture and four hours laboratory.

IAT 221 Airframe Structures I. (1-4-3) Basic hydraulic and pneumatic systems. Compressibility and thermal expansion of fluids. Fluidity and viscosity effects. Viscosity index graphs. Transmission of pressure in liquids and demonstration of the principles of Pascal's law that makes possible the tranmission of force through liquids, problems and solutions in mechanical advantages and loses. Basic hydraulic system design and essential unit functions, plumbing for aerospace systems, pressure of mechanical instruments, Gyro instruments. One hour lecture and four hours laboratory. Prerequisite: IAT 131, 134.

IAT 222 Power Plants II. (1-4-3) Engine starting systems and essential units design and function. Performance and power calculation. Maintenance techniques and acceptable tune-up procedures. Output power torque measurement. Engine overhaul practices and procedures, disassembly cleaning, visual and micrometric procedures, inspection of engine parts, magnaflux inspection, and non-destructive testing. Engine control systems. Engine installation; test and final run-up and final inspection. Prerequisite: IAT 131, 132

IAT 231 Electricity. (1-4-3) An introduction to the tools, materials, processes, and personnel of the electronics industry with emphasis on basic circuits, magnetism, and electrical principles. One hour lecture and four hours laboratory. Prerequisite: Math 163.

IAT 232 Basic Electronics. (1-4-3) A study of basic electronics principles and acceptable practices in the utilization of electronics devices, generation, transmission, and use of electric power. One hour lecture and four hours in laboratory. Prerequisite: Math 163.

IAT 301 Offset Fundamentals. (1-4-3) Principles and practices of the offset processes are studied. Care, maintenance and operational skills of the offset presses are developed. Techniques of copy preparation, camera work stripping, opaquing, line and half-tone negatives and platemaking are developed. One hour lecture and four hours laboratory. Prerequisite: IAT 201, 202.

IAT 302 Cost Finding, Estimating and Bindary Operation. (1-4-3) Copy fitting and estimating the cost of producing all types of printed matter. Standard sized, weights and proper uses of cover cards, book and bond papers are studied. The development of skills in the operation of the power cutter, folder, stitcher and perforator. One hour lecture and four hours laboratory. Prerequisite: IAT 301.

IAT 304 Electrical Wiring I. (2-4-3) Practice in residential wiring, calculating and determining the size of service and circuits, methods and procedures in wiring. This course includes elementary lighting theory, fixture selection and maintenance, rules and regulations as prescribed by the current National Electrical Code. Prerequisite: IAT 231. Two hour lecture and four hours laboratory.

IAT 305 Electrical Wiring II. (2-4-3) A continuation of IAT 304 with the emphasis on commercial and industrial wiring. Prerequisite: IAT 304. Two hour lecture and four hours laboratory.

IAT 306 Transportation Rates and Economics. (3-0-3) A study of the basic economic factors involved in transportation; scope of transport economics, transport pricing, rates, laws, rules and regulatory agencies that govern transportation. Prerequisite: IAT 210.

IAT 307 Transportation Managing and Marketing. (3-0-3) A study of the basic principles and existing practices used in managing and marketing transportation materials. Prerequisite: IAT 306.

IAT 311 Industrial Safety. (3-0-3) Development of the industrial safety movement; psychology in accident prevention; appraisal of accident cost factors, severity and frequency; job analysis and corrective measures; plant inspection and preventive maintenance; storage and handling of materials; fire prevention; education and training of employees.

IAT 312 Machine Woodworking. (1-5-3) Emphasis is placed upon the proper maintenance and operation of such power woodworking machines as circular saws, bandsaws, planers, jointers and lathes. Projects are constructed that involve the use of these machines. Prerequisite: IAT 111. One hour lecture and five hours laboratory.

IAT 314 Industrial and Production Management. (3-0-3) A general survey of the problems in organizing, planning and controlling the use of men, money, materials and machines for production and construction. This course also provides the theoretical foundations for production management as well as the applications of decision-making techniques to the production problems of industry. Prerequisite: Senior Standing.

IAT 316 Foundation of Industrial Education. (3-0-3) History and development of Industrial Education; social and economic reasons for present educational movements; types of modern industrial schools and courses; apprenticeship system and training of workers in modern industry.

IAT 317 Physical Distribution and Transportation Management. (3-0-3) A study of the management and organization of physical distribution transportation, warehousing, inventory control, material handling, industrial packaging, order processing, and location analysis. Prerequisite: IAT 210.

IAT 318 Transportation Terminal Management. (3-0-3) Study methods used for receiving and shipping, filing systems, bill of laden and enroute documentation, special filing systems for receiving and instant rerouting of intransit materials. General office equipment records, communication systems, pick-up delivery, and storage space allocation. Employment and personnel problems. Labor unions, seniority rights and promotions. Prerequisite: IAT 317.

IAT 321 Construction Drawing I. (1-4-3) Study of modern house and small commercial building construction methods, drawing details of carpentry and masonry construction; modern materials, plots. Layout contour maps, preliminary sketches, architectural symbols. Prerequisite: IAT 102, 103. One hour lecture and four hours laboratory.

IAT 322 Construction Drawing II. (1-4-3) Basic house design, site consideration, modular aspects, drawing a complete set of plans. Two points perspective; designing small commercial buildings, steel framing drawings, concrete structural drawings. Prerequisite: IAT 321. One hour lecture and four hours laboratory.

IAT 323 Sheetmetal Working. (1-4-3) Introduction to sheetmetal working, developing pattern, laying-out cutting, bending, framing, forming, making seams, wiring edges, turning a burr, crimpting, riveting, spot welding, and soldering sheetmetal. Planning and making projects and developing subject matter as taught on the junior and senior high levels. One hour lecture and four hours laboratory. Prerequisite: IAT 121.

IAT 324 Machine and Tool Technology. (1-4-3) A study of the various methods of changing the shape of metals with machine tools. Instruction will consist of basic manufacturing processes and techniques with emphasis on the engine lathe, drill press, milling machine, shaper, and grinder. One hour lecture and four hours laboratory. Prerequisite: IAT 323.

IAT 325. Personal Travel Planning. (3-0-3) Evaluation of existing systems used in daily commuter travel; study of scheduling problems, vehicle required speed, safety factors and cost analysis. Customer complaints, terminal and transfer travel, airplane and automobile rental services. Physical and legal practices and requirements for leisure and group travel. Prerequisite: IAT 210.

IAT 326 Articulation, Communication and Sales. (3-0-3) Study of various modes and methods used in transportation and commuter travel operations, to determine the physical probability and economic feasibility of combining all operations to improve articulation of materials and commuter travel from one system to another. Finding solutions to the inherent problems of communications and selling these services to the public. Three lecture periods each week. Prerequisite: IAT 325.

IAT 330 Concrete Technology. (1-4-3) Designs of footing and foundations, forming and handling concrete, reinforced concrete construction, insulating and water proofing, etc. One hour lecture and four hours laboratory. Prerequisite: IAT 103, 212.

IAT 331 Electronics Communication I. (1-4-3) This course deals with testing, repair, service and construction of AC devices, radio receivers and other electronic equipment used in communication. One hour lecture and four hours laboratory. Prerequisite: IAT 232.

IAT 332 Electronics Communication II. (1-4-3) A continuation of IAT 331 with emphasis on the testing, repair, service and construction of A.C. devices, radio receivers and other electronic equipment used in communication. Prerequisite: IAT 331. One hour lecture and four hours laboratory.

IAT 341 Airframe Structures II. (1-4-3) Methods and materials of fabrication of aerospace structures, use of MIL and AN standards: FAA technical standard order (TSO), type certificates (TC), supplemental type certificates (STC).

Classification of repairs, and alternations. Reports, forms, drawings and recordation requirements. Repair station requirements and practices. Prerequisite: IAT 221. One hour lecture and four hours laboratory.

IAT 342 Thrust Conversion. (1-4-3) A study of fundamental engineering designs and stress analysis of aircraft propellers. Design principles and operational characteristics of fixed-pitch, variable-pitch, and constant-speed propellers. Propeller governors and r.p.m. control devices; also fuels and lubricants for aircraft and aerospace vehicles. One hour lecture and four hours laboratory. Prerequisite: IAT 222.

IAT 343 Shop Organization and Management. (3-0-3) Securing equipment, making inventories and arranging for proper storage of materials, supplies and tools. Typical shop layouts, arrangements for tool rooms, stock rooms and storage facilities; keeping records and accounts. Personnel management of students and the organization of students' participation in shop management and safety.

IAT 344 Materials and Methods for Shops and Related Subjects For Teachers. (3-3) Detailed study, combined with actual operation of each of the several standard types of projects; lesson planning for teaching specific units involving audiovisual aids; maintenance, and repair of projection equipment. The design and construction of static and dynamic models selected for use in specific teaching units.

IAT 352 Plastics Technology. (1-4-3) A study of the kinds and uses of plastics and an application of the fundamental principles and techniques of design and construction of plastic projects as used on the secondary school level. One hour lecture and four hours laboratory.

IAT 353 General Craft. (1-4-3) An introduction to the tools, materials, processes, and personnel of the general crafts industry. Instruction consists of creative craft activities and work in wood, metal, leather, and other suitable materials. One hour lecture and four hours laboratory.

IAT 361 Power Technology. (1-4-3) A study of methods of generating, transmitting, controlling and applying power and energy, and the function of power systems in our present-day society. One hour lecture and four hour laboratory.

IAT 362 Power Technology. (1-4-3) Continuation of 361 with emphasis on the operation, design maintenance and repair of power engines and machines. One hour lecture and four hour laboratory.

IAT 370 Meterology. General effects of weather phenomena, special study of its relation to aviation. Three hours lecture. Prerequisite: IAT 135.

IAT 371 Communications. (3-0-3) The development of methods of communication, radio navigation, morse code, air traffic control, etc. Prerequisite: IAT 370. Three hours lecture.

IAT 372 Federal Aviation Regulations. (3-0-3) Federal, state and local safety regulations with their application to aviation. Three hours lecture. Prerequisite: IAT 371.

IAT 373 Link Operations. (1-4-3) The principles involved in the GAT-1 Simulator, its operation and maintenance. One hour lecture and four hours laboratory.

IAT 374 Industrial Internship. (9) A summer cooperative venture between the university and industrial enterprises which provides actual on-the-job experiences for industrial technology majors in the department. All technology majors are required to take Industrial Internship at the end of their junior years. The Head of the Department of Industrial Arts & Technology must approve all internships before students are permitted to enroll. Internship may be conducted in a commercial establishment or at Tennessee State University. Efforts will be made to arrange with contracting agencies who cooperate in the Industrial Internship program to assist the financing subsistence needs of students. However, a student enrolled in Industrial Technology should arrange to finance himself during his internship. Forty laboratory hours each week. Prerequisite: Senior Standing.

IAT 375 Methods of Teaching Industrial Education. (3-0-3) Lesson planning, techniques of the demonstration, plans for related instruction, and methods of testing studied. Prerequisite: Admittance to the Teacher Education Program.

IAT 381 Theory of Flight and Engines. (3-0-3) The laws of aerodynamics and nature as applied to aviation; also the principles, familiarization and operation of the internal combustion and jet engines. Three hours lecture. Prerequisite: IAT 222.

IAT 382. Navigation. (3-0-3) The principles involved in scientifically going from one place to another by means of air travel. Practical experience is offered in this course. Three hours lecture. Prerequisite: IAT 381.

ENGR 400 Senior Seminar. (1-0-1) (See course description for senior seminar under General Engineering course descriptions.)

IAT 401-402 Production. (0-6-3) These courses are designed to round out the student's training by concentrated application of principles and techniques gained in previous courses. Twelve hours laboratory. Prerequisite: IAT 302.

IAT 403 General Shop. (1-4-3) A study of general concepts, purpose, organization and administration of the general shop, instruction is offered in a variety of industrial arts activities. One hour lecture and four hours laboratory.

IAT 405 Leisure Travel. (3-0-3) A study of factors related to the sociology and marketing of leisure travel. Exploration of existing parks and recreational facilities, local and national. Prerequisite: IAT 325.

IAT 406 Tourism Services. (3-0-3) A study of services to tourist centers, hotel, motel, convention and trade show facilities, and other enterprises which might attract people. Prerequisite: IAT 326.

IAT 412 Estimating. (2-2-3) Specification writing, materials take off. Labor and subcontractors, calculating cost of materials and labor for residential and commercial structure. Job planning, requisition of materials, building permits, codes and restructions. Prerequisite: Senior Standing.

IAT 413 Foremanship Training by the Conference Method. (3-0-3) A study of the use of the conference as an instructional device; special methods, techniques, and procedures to be used in foreman training, duties and responsibilities of the typical industrial foreman. How to follow up foreman conferences by means of foreman's clubs and plant educational programs.

IAT 414 Job Analysis. (3-0-3) A study of the techniques of defining, identifying, classifying, organizing and expressing teachable elements of occupations for instructional purposes. Practice in analyzing trade jobs for production, auxiliary and related technical content.

IAT 415 Tourism Development. (3-0-3) A study of ways and techniques of promoting and developing the tourist industry; leisure industry facilities. Prerequisite: IAT 326.

IAT 416 Problems in Transportation. (3-0-3) Problem study of selected areas in transportation, travel and tourism to meet the needs of students having a professional interest in the field. Prerequisite: IAT 415.

IAT 423 Welding and Heat Treating. (1-4-3) An introduction to arch, tig and acetylene welding. Fundamentals foundry practice and heat treatment of metals. One hour lecture and four hours laboratory. Prerequisite: IAT 324.

IAT 431. Curriculum Planning In Industrial Education. (3-0-3) Arranging course materials in trade students; follow-up results of job analysis; preparing check sheets and individual job sheets in both trade and related subjects. Prerequisite: IAT 414.

IAT 432 Industrial Wiring. (2-4-3) A course to acquaint the students with electronic application in industry, electronics control of machine operation and product grading, counting, inspection and other electronically operated electromechanical innovations are studied. Two hours lecture and four hours laboratory. Prerequisite: IAT 305.

IAT 435-436 Problems in Trade and Industrial Teaching. (3-0-3) Individual or group work on assigned or chosen problems involving the preparation, use and evaluation of instructional materials for use in vocational industrial classes. Research involving the compilation and study of student records, employment placement, job progress, earnings, wage scale and similar items may also be carried out. Three hour lecture periods each week.

IAT 441 Aircraft Electrical Systems. (1-4-3) This course covers the basic fundamentals of aircraft electricity and deals with the design principles and functional operation of aircraft and aerospace electrical accessories and appliances, and includes basic theories and simulated functional operation of direct current systems and 400 cycle A.C. systems as used in aerospace vehicles. Prerequisites: IAT 131, 222. One hour lecture and four hours laboratory.

IAT 450 Senior Project. (0-4-2) Each senior is required to select and execute a project under the supervision of his major advisor. It may involve the designing and making of the project complete with drawings, pictures, specification and detailed data involved in its construction; or a research and compilation of a subject within the field of the student's interest. Four hours lab.

IAT 451 Flight Training I. (1-4-3) How to fly with actual flight experience and instruction. Ten clock hours of dual flight instruction. One hour lecture and four hours laboratory. Prerequisite: IAT 373.

IAT 452 Aeronautics Workshop. (3-0-3) Designed primarily for in-service teachers whose objectives are to enrich their curriculum by weaving air age materials into their specific subject area. Development of classroom procedures. Three hours lecture.

IAT 472 Student Teaching. (9) Provides an opportunity for each prospective industrial education teacher enrolled at this institution to engage in the actual observation and reaching of industrial education classes in the secondary schools in this state. Student teacher schedules should be arranged to enable the student to devote full time to student teaching.

DRIVER SAFETY EDUCATION (DSED)

DSED 400 Driver Education and Traffic Safety. (2-2-3) Designed to teach the beginning driver to drive according to standards of the American Automobile Association. Two hours lecture and two hours laboratory.

DSED 410 Teaching Methods in Driver and Traffic Safety Education. (1-4-3) Designed to prepare teachers, administrators, and supervisors of driver education. It involves practice in both classroom and behind-the-wheel phases of the program. Prerequisite: (Open only to licensed, experienced drivers approved by the instructor). One hour lecture and four hours laboratory.

DSED 412 Advanced Problems in Driver and Traffic Safety Education. (3-0-3) Presentation and consideration of safety and traffic education research, issues and teaching problems. Relationships within school, community and related agencies.

DSED 420 General Safety Education. (3-0-3) A study of the general program of safety education in public schools. Covers safety problems in school, recreation, industry, home, and other public areas.

FIRE SCIENCE (FS)

FS 210 Introduction to Fire Control. (3) Identification and definition of the fire problem and what different organizations are doing to control it. A study of the history and philosophy of fire protection and prevention and discussion of different methods of educating the public in fire prevention. Each student will design and develop his own fire prevention program.

FS 211 Principles of Fire Protection Chemistry. (3) Relationships of fire to the physical world through chemistry and physics. Develops understanding of heat transfer and its effects on combustibles. Shows how modern extinguishing agents chemically extinguish fires. Must be taken before any other Fire Science Courses.

FS 212 Basic Hydraulics. (3) Basic fluid mechanics. Preparation for more advanced courses in specialized hydraulics, such as extinguishing system design and fire ground hydraulics. Prerequisite: Math 111; Fire Science 211.

FS 220 Inspection Practices and Procedures for Fire Safety. (3) Proper inspection practices and procedures. Fixed and portable fire extinguishers; fire detection and alarm systems; application of building and fire codes to fire inspections. Each student will conduct his own fire inspection.

FS 221 Fire Protection Evaluation. (3) Evaluation of public fire defenses in municipality; organization, physical resources, etc. Actual evaluations will be done by students. Prerequisite: Fire Science 220.

FS 231 Building Construction and Fire Codes. (3) Building construction as related to fire protection, fire resistance ratings of construction of building materials. How to read codes and standards properly.

FS 232 Industrial Fire Hazards. (3) Fire hazards associated with industrial operations and processes, minimization of industrial fire hazards, and an introduction to high property risk management. Prerequisite: Fire Science 211.

FS 240 Fire Fighting Hydraulics. (3) Advanced level hydraulics in the fire fighting field. Prerequisite: Fire Science 212.

FS 242 Municipal Fire Administration. (3) Systems approach to planning public fire safety. Fire Department organization, administration and operation.

FS 243 Fire Fighting Strategy and Tactics. (3) Methods and procedures of size-up and condition determination. Aspects of company operations and performance levels. Prefire planning, assigning duties and fire ground operations. Prerequisite: Fire Science 242.

FS 244 Legal Aspects of Fire Science. (3) Legal rights and responsibilities of firemen, liabilities of firemen, mutual aid and assistance of fire departments, jurisdictional domain, organizational procedure. Prerequisite: Fire Science 243.

FS 250 Fire Resistance Test Methods and Procedures. (3) In depth study of fire resistance testing as done by nationally recognized testing laboratories such as the American Society of Testing Materials and Underwriter's Laboratories. Applying the results of these tests to do designing proper fire protection systems.

FS 251 Structural Fire Protection Design. (3) Designing structural systems to meet fire code requirements. Protecting structural members and proper building techniques to insure hourly rated structural systems against fire. Prerequisite: Fire Science 250.

FS 252 Sprinkler and Standpipe Design. (3) Designing sprinkler and standpipe systems. Selection of systems to fit building needs and adjusting present systems to meet needed changes. Prerequisite: Fire Science 251.

FS 260 Fire Protection and Prevention Design Project. (3) Integration of concepts, ideas and fundamentals of fire protection and prevention involving research, analysis, and the development of fire protection and prevention projects. Prerequisite: Permission of Fire Science advisor. Student will work in groups.

FS 262 Fire Science Research. (3) Each prospective graduate is required to select and execute a project involving Fire Science Research under the supervision of the major advisor.

SCHOOL OF NURSING

Regina Monnig, MSN, Ph.D., Dean

As a part of a land grant institution with futuristic goals, the role and scope of the School of Nursing are defined in terms of the characteristics of the learning environment as it relates to enhancing the potential of individuals to function productively in a changing society. Nursing, a progressive art and science, is built on an ever-expanding body of scientific knowledge and provides an essential service aimed at improving the quality of life of all people. The following objectives reflect Tennessee State University School of Nursing's commitment to improve nursing and health care services through quality educational programs, community service, and related research activities:

1. To provide competent practitioners of nursing at professional and technical levels to meet the health needs of society.
2. To meet the learning needs of diverse students.
3. To provide an atmosphere conducive to quality education.
4. To provide opportunities for enlarging the scope of nursing knowledge.
5. To promote the goals of higher education.

The School of Nursing offers two undergraduate degrees in nursing; an associate degree (two-year technical program), and a baccalaureate degree (four-year professional program). Both programs are approved by the Tennessee Board of Nursing for purposes of being eligible to take the licensing examination to become a registered nurse (R.N.). Both programs are also fully accredited by the National League for Nursing. In addition, the school conducts continuing education in nursing programs.

Tennessee State University contracts with twenty-two agencies and health care institutions which provide excellent experiences for nursing students. All nursing faculty have graduate degrees and experience in a specialized clinical field. The nursing student association is actively involved in productive activities on the campus, in the community, and at the state and national levels. Students participate on the school and university committees to enhance their opportunities for decision making.

SOURCES OF FINANCIAL AID

Besides federal financial aid sources, which include Nursing Student Loan and Nursing Student Scholarship monies, the School of Nursing has a variety of private sources for financial assistance. Students may also seek funding through the National Student Nurses Association, hospitals, churches, banks and many other community organizations. Tennessee State University awards a special scholarship to students who graduate from the top ten percent (10%) of their graduating class.

ACADEMIC POLICIES FOR CONTINUATION IN THE BACCALAUREATE AND ASSOCIATE DEGREE NURSING PROGRAMS

A student is required to achieve at the C level or better in nursing courses. One opportunity is provided to repeat a nursing course. Students who receive a grade of D or below twice in the same nursing course or in any two nursing courses will be dropped from the nursing program. Continuation in the program is contingent upon compliance with ethical and professional standards of conduct. Students whose cumulative grade point average falls below 2.0 will be unable to continue in the nursing sequence until they achieve a 2.0 cumulative average.

SCHOOL OF NURSING GRADUATION REQUIREMENTS

Besides the graduation requirements established by Tennessee State University, all nursing candidates are reviewed by a school committee to determine if each candidate has met all objectives of the respective program. (See School of Nursing Student Handbook for details.)

POLICIES REGARDING READMISSION TO THE BACCALAUREATE AND ASSOCIATE DEGREE NURSING PROGRAMS

See School of Nursing Student Handbook.

DEPARTMENT OF BACCALAUREATE DEGREE NURSING

The program is designed to prepare a generalist in nursing for entry into practice at the professional level. Upon completion of the Bachelor of Science Degree Program in Nursing, the graduate will be able to:

1. Synthesize and utilize theoretical and empirical knowledge from the natural, behavioral, and nursing sciences and humanities as a basis for making practice decisions.
2. Utilize the nursing process to promote, maintain, and restore health to individuals, families and communities.
3. Demonstrate the leadership role in professional nursing by making relevant judgements and serving as a change agent.
4. Collaborate with multidisciplinary health team members to improve the health care delivery system.
5. Demonstrate a positive attitude toward continuing education and graduate education in order to maintain professional competency.
6. Utilize the research process and its findings in the practice and development of professional nursing.

ADMISSION REQUIREMENTS

Upon admission to the University, the student may proceed to take the arts and sciences courses required for the first two years of the program. This portion of the curriculum is commonly referred to as the lower division. In order to be admitted to the upper division, which includes the junior and senior level nursing courses, the student must complete all lower division courses with a 2.5 cumulative average. The number of students admitted to the upper division each year is dependent on the program resources, (availability of clinical resources and number of faculty). Policies regarding advanced standing and transfer of credits are published in the School of Nursing Brochure.

ADMISSION REQUIREMENTS FOR REGISTERED NURSES AND TRANSFER STUDENTS

Registered nurses and/or graduates of diploma and associate degree nursing programs must also adhere to the above procedures. After completion of the lower division courses, the registered nurse student must enroll in Nursing 210 at which time an opportunity is provided to challenge up to twenty (20) credits in the junior level nursing courses. All baccalaureate nursing students must complete twenty-five (25) hours in nursing courses at the University. Transfer baccalaureate nursing students from traditional and nontraditional nursing programs may not transfer nursing courses. However, they may challenge junior year clinical nursing courses, (N301, N302, and N303).

REQUIREMENTS FOR THE BACHELORS DEGREE

All Tennessee State University graduates must meet the requirements for the Bachelor of Science degree as presented in the catalogue. The curriculum as outlined below includes the University and the Nursing requirements.

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101 & 102	3	3
Orientation	1	
*PE 11 & 12B	1	1
American History 201 & 202	3	3
MATH 111 & 112	3	3
ZOO 201 & 202	4	4
Humanities Elective (Art or Music Appreciation Speech, Drama)	2	
	17	17

Summer Sessions	Credits
PSY 310 & 351	6
ECON 211	3
SOC 211	3
	12

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211 & 212	3	3
CHEM 121 or 131 & 121 or 132	4	4
MICRO 250 and lab	4	
PHIL 201 & 250	3	3
PSY 311		3
CHEM 250		3
*PE #3 & #4	1	1
CL 100U, CL 100UL	3	
	18	17

Summer Sessions	Credits
**Nursing 210	3

JUNIOR YEAR	Credit Hours Fall	Spring
NURS 301, 302	6	8
ENG 310	3	
ZOO 470, 471	4	4
SOC 360		3
	13	15

Summer Session	Credits
NURS 303	6
Elective	3
	9

SENIOR YEAR	Credit Hours Fall	Spring
NURS 401, 402	8	8
ELEC	3	
NURS 422, 423	3	3
NURS 425		3
	14	14

*Physical Education Requirements for Students under 25 years of age.
**Nursing 210 for R.N.'s and Transfer baccalaureate nursing students.

BACCALAUREATE DEGREE NURSING COURSE OFFERING

CHEM 250 Introduction to Pharmacology (3.0). Chemical analysis of drugs according to classification. Focused on physiological effects on bio-psychosocial functions of man.

NURS 210 Dimensions of Professional Practice (3.0). Limited to R.N. or transfer BSN students only. This course is designed to introduce the technical nurse into professional nursing, and to orientate the student to the philosophy and conceptual framework of the TSU-BSN program. Health Assessment and the nursing process will be included. Preparation for challenge of junior year clinical nursing course will be completed. (Must complete all lower division courses the semester which the student has enrolled.)

NURS 300 Special Topics (1-8). Student or faculty generated course. Scope of subject matter to be determined by student/instructor with approval of the Program Director.

NURS 301 Concepts Basic to Nursing (6.0). An introduction to selected concepts of health as they relate to man's bio-psychosocial and cultural needs through the life cycle. Includes the nursing process as utilized in health history, physical examination and basic nursing techniques. Emphasis will be given to history, trends, legal, ethical, and communication components of nursing practice. Lecture 3, Lab 3.

NURS 302 Family Nursing I (6.0). Focus is on the application of the nursing process in the delivery of care to expanding families and children. Emphasis is on developmental theory as it relates to coping effectively with maturational and situational stress through young adulthood. Incorporates concept of mental health and community nursing. Prerequisite Nursing 301. Lecture 4, Lab 4.

NURS 303 Family Nursing II (6.0). Focus is on the application of the nursing process in the delivery of care to clients and families with commonly occurring medical, surgical and psychiatric health problems. Emphasis is on environmental factors and the application of developmental systems and stress theories as they relate to the health care of middle age and older adults. Prerequisite Nursing 301 and Nursing 302. Lecture 3, Lab 3.

ENG 310 Technical Report Writing (3.0). A study of fundamentals of written reports in a variety of professional fields, with emphasis on grammar, sentence structure, and style, as well as on specialized techniques. For application to Nursing see School of Nursing Student Handbook.

NURS 325 Physical Assessment (3 hours). Basic physical assessment techniques Focuses on adult. Prerequisites NURS 301, 302, 303.

NURS 401 Community Health Nursing (8). Utilization of nursing process in care of families in changing situations. Emphasis is on in-depth study of comprehensive family care and community assessment. Specific experience in applying developmental stress and system theories is provided through family case analysis. Emphasis is upon physical assessment techniques in the home. Prerequisite: Nursing 301, 302, 303. Lecture 4, Lab 4.

NURS 402 Acute Crisis Nursing (3.0). Application of the nursing process in a variety of clinical situations requiring crisis intervention. Experiences include comprehensive health assessment and evaluating care for the client and his family in the hospital and/or community. Prerequisites: Nursing 301, 302, 303. Lecture 4, Lab 4.

NURS 422 Nursing Research I (3.0). Introduction to the research process and preparation of a proposal. Relates research process to nursing process. Prerequisite ENG 310N.

NURS 423 Nursing Research II (3.0). Critiques of published research and grant proposals. Observation of research methodology. Practical problems in collection, analysis, and interpretation of data. Active participation in a nursing research project under guidance of a faculty sponsor. Prerequisite N422.

NURS 425 Professionalism in Nursing (3.0). Identification and application of management processes as they relate to the merging and changing roles of the professional nurse. For BSN senior students only.

NURS 426 Nursing Elective—Legal and Ethical Issues in Nursing (3.0). In-depth study of legal and ethical responsibilities in nursing. The student will have the opportunity to analyze critically and discuss both classical and current legal and ethical cases in nursing service and education.

NURS 427 Nursing Elective—Nursing in Developmental Disabilities (3.0). Nursing assessment and intervention with the developmentally delayed child and his family from conception through adolescence. Prerequisites: Nursing 301, 302, and 303. Lecture 1½ and Lab 1½.

NURS 428 Nursing Elective—Gerontological Nursing (3.0). In-depth application of nursing process in maturational and situational crisis experienced by the older adult. Emphasis on the psychosocial factors influencing health, and institutional and community based clinical alternatives to health care. Prerequisites: Nursing 301, 302, and 303. Lecture 1½ and Lab 1½.

DEPARTMENT OF ASSOCIATE DEGREE NURSING

The two-year program is designed to prepare a nurse who can perform the functions related to assessing patient needs, developing a plan of care, implementing the plan of care with technical expertise and evaluating the effectiveness of nursing care in situations involving commonly occurring illnesses in the hospital or extended care facility. Upon completion of the Associate of Science Degree Program, the graduate will be able to:

1. Utilize principles and concepts from biological and social sciences to assess the nursing needs of patients with well defined health problems.
2. Apply problem solving techniques to the planning process of nursing interventions for patients in structured settings.
3. Make nursing decisions based on holistic approach in collaboration with a professional nurse.
4. Select appropriate nursing actions for assisting man in his interactions with his environment as related to health.
5. Perform nursing intervention at a competent level of skill, combining cognitive, psychomotor and affective capabilities.
6. Evaluate patient's responses to health care using established criteria.
7. Utilize communication techniques to establish therapeutic relationships and to share information effectively with patients, colleagues, and others.
8. Manage care of individuals and groups within the legal and occupational realms of practice.
9. Teach patients and families principles and concepts of health care.
10. Support and reinforce teaching plans of other health professionals and evaluate the effectiveness of learning.
11. Demonstrate personal accountability for acts of an ethical nature within the profession of nursing.

ADMISSION REQUIREMENTS

The specific procedure and requirements for admission to the Associate of Science Degree Nursing Program are as follows:

1. Students are admitted to nursing once a year in the fall semester.
2. The first phase in the admissions process is to file an application in the Admissions Office before April 1 of the admitting year.
3. The high school transcript and official college transcript of credit (if any earned) must be submitted to the Office of Admissions and Records by April 1. All applicants must have completed the following:
   a. one unit of high school chemistry or its equivalent (one semester of college chemistry) with a grade of *C* or better
   b. two units of high school mathematics (or one semester of college math) with a grade of *C* or better
   c. achievement of a cumulative grade point average of not less than 2.25 (college or high school)
   d. GED score of *50* for applicants who have not completed high school (you must also submit high school credits earned).

Those students who do not meet these minimal requirements will be notified by the Admissions and Records Office of their standing.

4. Those students who meet the high school prerequisites and demonstrate potential for full-time study will be scheduled to take a written pre-nursing examination. A score of *40* on the scholastic aptitude is considered the minimum.
5. The second phase in the screening will be based on a review of the pre-nursing test scores and the high school transcript.
6. Those students who are not selected will be notified, counseled and requested to enroll in Nursing 100 A & B and other support courses.
7. The final selection will be made as soon as all information is compiled.
8. Those students who are accepted into the nursing program will be sent an orientation package with information on health forms, uniforms, and other necessary information.

Students seeking admission into the nursing program from other majors must complete a Change of Major Form, and this form will be used as an application to the nursing program.

*Nursing 100 A—Preparation for Nursing

Designed to develop cognitive skills needed to develop nursing competencies and to admit students to the Nursing environment.

Nursing 100B—Continuation of Nursing 100A

INTERNATIONAL STUDENTS

International students with superior scholastic records are considered for admission as transfer students. An applicant whose native language is not English is required to submit a test score of 500, as the minimum acceptance level of performance on the Test of English as a Foreign Language (TOEFL).

Students who wish to take the test should write directly to TOEFL, Educational Testing Service, Princeton, New Jersey 98540. The application, complete official scholastic records, and TOEFL score must be in the Office of Admissions at least 60 days before the beginning of the semester in which admission is desired. If complete documents are not on file by this deadline, the application will be considered for the next scheduled registration period. The application must be accompanied by a non-refundable fee of $5.00.

International applicants must indicate the availability of sufficient funds to meet all costs while studying at the University.

For further instructions see the Tennessee State University Undergraduate Catalog.

ADMISSION REQUIREMENTS FOR LICENSED PRACTICAL NURSES

Licensed practical nurses who have a minimum of two years experience, and meet the admission standards, may apply for advanced standing through proficiency testing. The applicant should enroll in *N200 Special Topics*, for 2 semester hours. Through independent study, the following objectives should be met:

1. Understanding of the philosophy and conceptual framework of the associate degree nursing program.
2. Association of mental health concepts with the promotion of health.
3. Comprehension of the roles of the associate degree nurse as they relate to the nursing process.

The applicant must also challenge or complete *Zoology 201* and *Math 110*.

Upon receipt of a *C* or above in *N200, Zoology 201,* and *Math 110,* the student may challenge *N101* for credit. All other program requirements must be completed as presented.

ADVANCED STANDING FOR TRANSFER STUDENTS FROM PROGRAMS PREPARING FOR REGISTERED NURSE LICENSE

Advanced standing is defined as placement beyond the entering course, (N101), based on transfer or validation of credit.

1. Applicant must first meet admission requirements for the program.
2. If applicant has completed nursing courses at 75 percent or above level in a NLN accredited program for registered nurses, the courses will be considered for transfer credit. The applicant must present a course syllabus and evidence of satisfactory clinical performance.
3. A second option is to take a written challenge examination and a clinical proficiency test (or submit evidence of clinical proficiency).
4. Applicants are held to the same grading standards as the enrolled nursing students.
5. Applicants may challenge N101 (6 credits), N102 (7 credits), and N120 (4 credits) in sequence if they have met the course prerequisites.
6. Applicants must meet the requirements for the comprehensive level examinations and take the respective NLN achievement tests.
7. University policy does not permit the assignment of grades (A, B, C, etc.) for proficiency testing.

REQUIREMENTS FOR ASSOCIATE OF SCIENCE DEGREE

FIRST YEAR	Credit Hours Fall	Spring
Nursing 101, 102	6	7
Zoology 201, 202	4	4
Mathematics 110	1	
English 101, 102	3	3
Psychology 201, 310	3	3
	17	17

SUMMER (10 WEEKS)	Credits
Nursing 120	6
Psychology 351	3
Total	9

SECOND YEAR	Credit Hours Fall	Spring
Nursing 201, 202	9	9
Microbiology 250	4	
Sociology 211	3	
Nursing 220		1
Elective		6
	16	16

Nursing Credits	38
Non-nursing Credits	37
Total	75

ASSOCIATE DEGREE NURSING COURSE OFFERINGS

Nursing 101 Fundamentals of Nursing (6 hours). Introduction to the concept of man, environment and health needs throughout the life cycle. Basic skills related to maintenance of normal functioning is emphasized. Pre or co-requisite, Zoology 201, Math 110.

Nursing 102 Nursing Care In Selected Major Health Problems (7 hours). Assessment, planning and intervention in care of surgical patients with digestive, gynecological, and urological disturbance and medical patients with immunological, circulatory, skeletal and hormonal disturbances.

Nursing 120 Care of Patients with Medical-Surgical Problems/Conditions (6 semester hours). The terminal objectives of the program are met through learning experiences which require, on the part of the nursing student, increased clinical judgements and responsibilities and self directive actions in cases of crisis. Learning experiences are focused upon assessment, planning and interversion in the care of patients with cardiopulmonary conditions, renal failure, management of emergency and life threatening situations. Prerequisites: Nursing 102

Nursing 201 Care of Patients with Long-term Illness (9 hours). Emphasis is placed on the psychosocial, preventative and rehabilitative aspects of caring for patients with complex and massive limitations, (neuro-muscular, cancer, psychiatric disorders). The student learns to assist the patient and family to cope with changes in health status which require extended care.

Nursing 202 Family-Centered Approach to Maternal-Child Health Nursing (9 hours) Utilizing the nursing process, the students learn to assume increasing responsibility for judgments in patient situations requiring understanding of concepts and principles of Maternal-Child Health Nursing. (Includes obstetrics and pediatrics.)

Nursing 220 Nursing Seminar (1 credit). Current issues and trends in the practice of nursing and the relationships with past events. This course includes legal aspects, nursing ethics, and those aspects of professional adjustments related to making the transition from student to graduate practitioner. Co-requisite with Nursing 202 or 201.

Nursing 200: Special Topics. (1-4 hours) Students or faculty generated course. Scope of subject matter to be determined by students/ instructor with approval of the Program Director.

GRADUATION REQUIREMENTS

Besides the graduation requirements established by Tennessee State University, all nursing candidates are reviewed by a school committee to determine if each candidate has met all objectives of the respective program. (See School of Nursing Student Handbook for details.)

CONTINUING EDUCATION IN NURSING PROGRAM

Programs of continuing education are planned to meet needs of nurses in the community who wish to upgrade and/or update their knowledge and skills.

The objectives for the continuing education program are:

1. Plan activities that are consistent with the philosophy and objectives of the parent institution and the Division of Nursing.
2. Plan activities that are compatible with quality educational criteria.
3. Plan activities that meet the expressed criteria of Southern Association of Schools and Colleges, Standard IX and professional nursing organizations.
4. Devise continuing education programs for interdisciplinary professional group regarding health issues of mutual interests and concerns.
5. Cooperatively plan educational activities with consumers to meet their expressed needs.
6. Plan programs that will contribute to the individual nurse's re-entry into practice.
7. Plan programs that encompass varied teaching methodologies eg. lecture, discussion, laboratory, group sessions panels, etc.
8. Plan programs that will expand the professional nurse's practice and knowledge for improved nursing care.
9. Plan programs to increase the competencies of the professional nurse in her new and expanded roles.

AEROSPACE STUDIES

Thomas Saulsberry
Lieutenant Colonel
USAF, Professor of
Aerospace Studies

PURPOSE AND OBJECTIVES

The Air Force Reserve Officers Training Corps (AFROTC) provides precommission training for college men and women who desire to serve as commissioned officers in the United States Air Force. When combined with the academic disciplines offered at the college level, the program provides the student a broad based knowledge of management, leadership, and technical skills required for commission and subsequent active duty service in the Air Force. Graduates are commissioned as Second Lieutenants and called to active duty within one year. The duration of obligated active service is four years for those in a non-flying category, five years for navigator training and six years for Pilot training. Provisions are available for educational delays for non-flying graduates who desire to pursue advanced degrees prior to entry on active duty. The main objectives of producing officers through the AFROTC program are:

1. To procure officers with a broad educational base.
2. To provide a basic military education for college students.
3. To teach fundamentals and techniques of leadership, management, and decision-making.
4. To develop, in conjunction with other academic disciplines, individual character and attributes required of a commissioned officer in the United States Air Force.

AFROTC CROSS-TOWN ENROLLMENT

Full-time students enrolled at any one of the colleges or universities listed below are eligible to participate in the AFROTC program hosted by Tennessee State University:

Vanderbilt University
Middle Tennessee State University
Fisk University
David-Lipscomb College
Trevecca Nazarene College
Belmont College
Meharry Medical College
Volunteer State Community College
Aquinas Junior College
Western Kentucky University

Students who participate in AFROTC under provisions of cross-town agreements receive all benefits, privileges, and compete for scholarships on the same basis as full-time students enrolled at Tennessee State University.

UNIVERSITY CREDITS AND CURRICULUM

A minor in Aerospace Studies consists of 22 semester hours and is available to those students who successfully complete the General Military Course (GMC) and the Professional Officers course (POC).

FRESHMAN—(GMC)	
AERO 151	1
AERO 152	1
	2
SOPHOMORE—(GMC)	
AERO 251	1
AERO 252	1
	2
JUNIOR—(POC)	
AERO 351	3
AERO 352	3
Elective*	3
	9
SENIOR—(POC)	
AERO 451	3
AERO 452	3
Elective*	3
	9

*Courses may be taken at any time during the Junior or Senior year and must be selected from 300 to 400 level Social Science offerings.

The General Military course (GMC) is composed of the first four semesters of Aerospace Studies. All of the Basic requisite courses are acceptable in lieu of activity courses in Physical Education. (Two courses in Aerospace Studies will be accepted for two activity courses in Physical Education).

COURSES DESCRIPTIONS

AERO 151, 152, 1-1. *The U.S. Air Force Today.* Freshman Year. An introduction course which outlines the history and doctrine of the United States Air Force. Comprises a study of United State strategic offensive and defensive forces, the Air Force mission and organization, and relationships in supporting security throughout the free world. The course also includes a study of United States general purpose and aerospace support forces within the military complex.

AERO 251, 252 1-1. *The Development of Air Power.* Sophomore Year. This course examines the development of air power over the past 60 years. It traces the evolution of various concepts of air power employment and focuses upon factors which have promoted research and technological change. A variety of events and elements in the history of air power are stressed, particularly where these events provide a significant example of the impacts of air power on strategic and tactical thought.

AERO 351, 352 3-3. *Air Force Leadership and Management—The Professional Officer.* Junior Year. These courses are designed to further develop the student's managerial and leadership abilities. Emphasis is placed on group discussions, seminars, writing and speaking assignments, and appropriate lectures. A detailed examination of the meanings of professionalism and integrity are discussed and exercised through practical experiences. Courses include problem solving exercises and theories of leadership and management.

AERO 451, 452 3-3. *National Security Forces in Contemporary American Society.* Senior Year. These courses are designed to improve the ability to speak and write with accuracy, clarity and dignity of style. Focus is on the Armed Forces as an integral element of society and includes an examination of the broad range of American civil-military relations and the environmental context in which defense policy is formulated. Special themes include; the role of the professional officer in a democratic society, socialization process within the armed services, requisites for maintaining adequate national security forces, political, economic, and social constraints upon the national defense structure, and the impact of technological and international developments upon strategic preparedness and the overall defense policy-making process.

SCHOLARSHIP PROGRAM

High School seniors, college freshmen and sophomores are eligible to compete for four-year, three and one-half, three-year, and two-year scholarships respectively. Scholarships provide payment of full tuition and fees, and costs of required textbooks, plus a tax free $100.00 per month subsistence allowance. Selection is based primarily on Air Force Officers Qualifying Test scores, academic performance, and evaluation by a Scholarship Selection Review Board. Interested individuals should contact the Professor of Aerospace Studies or Department Recruiting Officer.

FLIGHT INSTRUCTION PROGRAM

The Flight Instruction Program (FIP) is an integral part of the AFROTC program. This training provides a nationally standardized evaluation device using Federal Aviation Administration performance standards. The objectives of the FIP are:

1. To motivate qualified AFROTC cadets toward a career in the Air Force.
2. To encourage qualified GMC cadets to enroll in the POC as pilot training applicants.
3. To provide a screening mechanism that will identify those pilot training applicants who lack the basic aptitudes for Air Force pilot training.

The course of flight instruction provides 25 hours of actual flying in a light, land aircraft of 100-200 horsepower with a separate and independent rudder, evaluation

or horizontal stabilator, aileron control systems, operable wing flaps, tricycle landing gear, and approved by the FAA for flight instruction. This program also includes ground school instruction in weather, navigation, and FAA regulations.

FIELD TRAINING

SIX-WEEK FIELD TRAINING COURSE: This course is designed to prepare the student for enrollment into the POC (AS 300). Primarily, it enables transfer students and others who are unable to enroll in the GMC an opportunity to pursue the Advanced Course and thereby receive a commission in two years of study, coincident with conferral of the Baccalaurate Degree.

FOUR-WEEK FIELD TRAINING COURSE: This course is designed for the cadet who has participated in the GMC and prepares for enrollment in the POC. This is the cadet's first extended exposure to an actual Air Force environment. Activities include survival training, junior officer training, aircraft and aircrew indoctrination, physical training, junior officer training, aircraft and aircrew indoctrination, physical training, career orientation, small arms familiarization, first aid training and a first hand look at the organization and functions of an active Air Force base.

SPONSORED ACTIVITIES

The Department of Aerospace Studies sponsors the following activities:

1. The AFROTC Drill Team—This team is composed of approximately 30 selected men and women who have demonstrated leadership potential. The team regularly performs at athletic events, parades, and other formal ceremonies.
2. The Arnold Air Society—A national society of AFROTC cadets who excel in character, academics, and exhibit interests in the study of aerospace technology.
3. The Honor Guard—Exceptional General Military Course cadets who perform selected duties at University functions.
4. NCO Academy—An organization of selected cadets whose aim is to develop leadership potential through proficiency in drill and ceremonies.
5. Angel Flight—A national auxiliary of the Arnold Air Society composed of selected coeds who promote esprit de corps, morale, and participate in local community affairs and events.

ELIGIBILITY FOR PROFESSIONAL OFFICER COURSE ENROLLMENT

The following are prerequisites for entry into the AFROTC Professional Officers Course (POC):

1. Have either completed the General Military Course, or the six-week Field Training Course. The GMC may be accredited for certain prior military service applicants who meet specific criteria.
2. Have two academic years of college remaining (either graduate or undergraduate).
3. Have achieved a qualifying score on the Air Force Officer Qualifying test (AFOQT).
4. Execute a written agreement to complete the program and successfully complete the applicable Field Training Course at the specified time and accept an Air Force Reserve Commission, when tendered.
5. Be selected by the Professor of Aerospace Studies.
6. Meet certain specified age requirements and medical standards.

BENEFITS/GENERAL

All students enrolled in the AFROTC program are provided texts and uniforms at no expense. At the completion of AFROTC courses or when the student withdraws from the course, all texts and uniforms must be returned to the Military Property Custodian. Students who fail to clear their accounts will be reported to appropriate University officials. This may result in delays in receiving clearance for graduation.

Professional Officer course students (Juniors and Seniors) and all scholarship students receive a monthly subsistence allowance of $100.00. Those cadets who attend either Field Training Course are paid air travel to and from the encampment, plus a stipend based on current active duty pay scales (approximately $450.00).

SUPPLEMENTAL COURSE PROGRAM (SCP)

The AFROTC Supplemental Courses Program exists to enhance the career and officer performance of persons commissioned through ROTC. Contract cadets are required to take the supplemental courses in addition to the Aerospace Studies courses.

ENGLISH COMPOSITION: Scholarship cadets must successfully complete a course in English Composition (3 credit hours). Four-year scholarship cadets must complete the course by the end of the GMC.

MATHEMATICS: Professional Officer Course cadets must successfully complete a course in mathematical reasoning (3 credit hours) prior to commissioning.

FOREIGN LANGUAGE: Scholarship cadets must successfully complete at least one quarter/semester of college instruction in a major Indo-European Asian language prior to commissioning.

LEADERSHIP LABORATORY

Leadership Laboratory is required for **all** cadets one hour per week in addition to the enrollment in one of the AFROTC academic courses, during each term. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. Leadership Laboratory involves studying Air Force customs and courtesies, and drill and ceremonies.

THE GRADUATE SCHOOL

James H. Reeves, Ed. D., Dean

Graduate studies leading to the Master's degree at Tennessee State University were authorized by the General Assembly in 1941, and programs in teacher education were initiated during the following year. Sometime later the Graduate School was established, and several other graduate offerings were added.

Authorization to offer the Specialist in Education degree was granted in 1974. Authorization to offer the Doctorate in Education was granted in 1980.

Currently, the following graduate degrees and major fields are offered:

MASTER OF ARTS
- Biology
- English
- Speech Communication and Theatre

MASTER OF ARTS IN EDUCATION
- Administration and Supervision
- Adult Education
- Business Education
- Elementary Education
- Health and Physical Education
- Home Economics Education
- Vocational Industrial Education
- Industrial Education
- Music Education
- Reading
- Secondary School Instruction
- Special Education

MASTER OF BUSINESS ADMINISTRATION

MASTER OF EDUCATION
- Administration and Supervision
- Adult Education
- Business Education
- Elementary Education
- Guidance and Counseling
- Health and Counseling
- Health and Physical Education
- Home Economics Education
- Vocational Industrial Education
- Music Education
- Reading
- Secondary School Instruction
- Special Education

MASTER OF SCIENCE
- Agricultural Sciences
- Biology
- Chemistry
- Guidance and Counseling
- Music Education
- Psychology
- Recreation
- Speech Communication and Theatre

MASTER OF CRIMINAL JUSTICE
(Joint Program with MTSU)

MASTER OF ENGINEERING

MASTER OF PUBLIC ADMINISTRATION

SPECIALIST IN EDUCATION
- Administration and Supervision
- Curriculum and Instruction

DOCTORATE IN EDUCATION
- Administration and Supervision
- Curriculum and Instruction
- Psychology and Guidance

Requirements for these programs are described in the current Graduate School Bulletin. Further information may be obtained by writing to:

The Dean of the Graduate School
Tennessee State University
3500 John A. Merritt Boulevard
Nashville, TN 37203

All applications, test scores, and transcripts should be mailed to the above address.

Doctor of Education (Ed.D) degree applicants must submit all application materials at least six (6) weeks before the beginning of the term for which entry is intended.

OFFICE OF INTERNATIONAL AFFAIRS

Dr. Bernard G. Crowell, Executive Administrator

The Office of International Affairs (OIA) was established in the Fall of 1984. It is the out growth of the Institution's Five Year Master Plan which included rewriting of the Institutional Mission Statement. This mission statement included with a very high propriety the establishment and implementation of an area of International Affairs. This Five Year Master Plan including the new mission statement and its establishment and implementation of an Office of International Affairs in its organizational structure was approved by the State Board of Regents—the governing board for The State University and Community College System of Tennessee. The Office of International Affairs is located in the Learning Resource Center (LRC) Building on the campus of Tennessee State University at 3500 John A. Merritt Blvd.

PURPOSES

The Office of International Affairs is involved in finding ways for the administration, faculty, staff and students of Tennessee State University to become participants in the delivery of technology to the lesser developed countries of the world.

These involvements may include:

Implementation of short-term research proposals

Long-term involvement (more than six months) in a developing country

Collaborate with NAFEO in the implementation of the NAFEO/USAID Agreement

Collaborate on research projects with other Universities and/or with students from lessor developed countries

Institutional development to internationalize the University

Short-term involvement (up to six months) on special projects being conducted in a lesser developed country

Work with international students who wish to take courses or pursue a degree at Tennessee State University

Provide assistance for the implementation of the Tennessee State University Title XII Strengthening Grant Program

Seek advice, recommendations and assistance for the Internal Advisory Committee and External Advisory Council

Organization and implementation of the International Student Club and International Intrigue

SERVICES

The staff of Tennessee State University's Office of International Affairs makes every effort to achieve and fulfill its purposes by providing an institutional program of development and general coordination of activities assisting this development. In this endeavor the staff strives

To provide library assistance toward internationalizing the institution

To provide conferences, workshops, and seminars for administration, faculty, staff and students

To provide information to faculty and students on opportunities for international services, including employment and exchange programs

To provide assistance with international visitors to the campus

To provide international cultural programs to the University and Community

To provide information on the range of program activities conducted by the Office of International Affairs

To provide assistance to agencies (federal, international and others) in placement on our campus of sponsored students

To provide assistance with campus and community activities that are of an international nature

CONTINUING EDUCATION, EXTENSION AND PUBLIC SERVICE

James E. Farrell, Ed.D. Associate Vice President

Introduction

Almost every institution of higher education today finds itself in the middle 1980's inevitably involved in an ever-increasing role for credit and non-credit public service and continuing education courses, programs, and activities. Today, more than ever before, many adults are engaged annually in some type of planned continuing education activity. It has been predicted that credit and non-credit adult and continuing education programs will become a major component of American's education systems during the eighties. Tennessee State University is committed to playing a significant role in these activities by providing relevant continuing education and public service programs of quality for professional and public agencies, business, industry, government, and the public in general.

Tennessee State University has a particular commitment in providing continuing education, extension and public service programs for a society confronted with problems of economic growth, energy, health care, civil rights, aging, high technology and many other issues. These issues demand the attention of special interest groups and the publics who seek the University's support as they struggle to maintain professional competence and a sense of real worth in the midst of competing forces.

Mission

Continuing Education, Extension and Public Service is the administrative division of the University which is responsible for coordinating the institution's overall efforts to serve non-traditional students both on and off-campus. The Division's responsibility for these students includes credit, non-credit, Continuing Education Unit (CEU), special training, technical assistance, and the Cooperative Agricultural Extension Service programs. The Division plans, conducts, and evaluates these programs in conjunction with the seven academic schools of the University.

Programs offered through the Division are designed to meet the professional, career development, personal, and civic awareness needs in the University's service area and selected client groups on a statewide basis. In particular, programs are planned to meet the needs of students who are unable to or disinterested in attending current academic programs of the University. Specific needs are identified and instruction or assistance is provided on and off campus at times convenient to the learner or the sponsoring organization. All services are delivered in formats which facilitate individual adult participation, learning, achievement and/or organization development.

The Division is responsible for managing those activities of the University which are identified in the accrediting standards for continuing education and public service of the Commission on Colleges, Southern Association of Schools and Colleges. The Division is also responsible for initiating new and innovative, self-supporting programs which may become part of the on-going institutional structure and efforts of the University.

Student Population

The students served by this division of the university cover the widest of age, professional and economic status ranges. Efforts by the division range from special learning programs for children to ongoing continuing education, extension

and public service programs for high school students, working adults, senior citizens and low-income elderly, professional organizations, state agencies, business, industry and government employees and managers.

Goals and Developmental Plans

1. To provide night and day credit courses, at centers or on weekends, for adults who are unable to undertake regular, full-time or part-time study at the University.
2. To provide non-credit programs, courses, conferences and institutes for special groups and the general public.
3. To provide continuing education and public service programs designed to meet the occupational, vocational and avocational needs of adults in the community.
4. To provide opportunities for employment training to improve skills and knowledge needed in current and projected occupations.
5. To improve managerial skills of individuals employed in business, industry, and government.
6. To provide assistance in planning programs of community health, community development, family life and leisure time activities.
7. To increase citizen participation in civic affairs through greater awareness of public affairs; community and national problems; local, state and national government.
8. To provide cultural enrichment of the community in such areas as art, literature, music, drama, speech and reading.
9. To provide specialized extension programs and staff to serve the urban community and its special needs along with the rural communities now served by the 1890 Cooperative Agriculture Extension Program.
10. To provide extended programs throughout Middle Tennessee and the rest of the state in response to the Land Grant mission and emerging comprehensive urban University status of the institution.
11. To seek and obtain external funding for public services and special projects of both short-term and long-term duration which can either supplement or be adopted into on-going programs and educational services of the University.
12. To provide for internal faculty and staff development programs which will serve the needs of all academic and administrative units at the institution.
13. To increase cooperative planning and delivery of educational services with other state agencies and institutions and selected private institutions.
14. To provide outreach sites and centers for the delivery of credit classes and special programs.

Organization and Structure

Designed to assist Tennessee State University in fulfillment of its mission of community service, the division reports directly to the President of the University and to the Continuing Education and Public Service Council, a panel of representatives from all the academic schools of the University which assists in planning. The Public Service Advisory Committee, a selected group of leaders and lay representatives from both the private and public sector of the community, contributes to the identification of service needs and establishment of priority of continuing education and public service efforts to serve the local area and state.

The standards of the National University Continuing Education Association, the Association for Continuing Higher Education, and the Council on the Continuing Education Unit are met in all continuing education affairs.

Conclusions

The Decade of the Eighties and Ninties will see a continuing expansion of the University's involvement in providing outreach and extension of its academic expertise to the community and state. Continuing Education enrollments will increase in both non-credit and credit programs. Cooperative Extension will continue to grow as federal, state, and foundation support increases: Public Service programs will increase with a particular emphasis upon services to the urban community. The overall result will be the development of new student and client groups which use the University's services, facilities and faculty resources to further their particular educational needs.

Units	Departments	Programs
Continuing Education	Non-Credit Instruction	CEU Courses and Programs
	Public Service Center	CEU and Special Programs
	Conferences and Institutes	Conferences, Institutes and Workshop
	Extended Credit and Off-Campus Programs	Credit Courses and Programs
Cooperative Agriculture Extension Service	1890 Programs	Land Grant Extended Services and Programs
Public Service	Center for Labor/ Management Relations	Labor Studies and Labor/ Management Relations
	Contact Testing Administration	Test Administration for Professional Organizations and State Agencies
	Military Training Programs	Contracted Educational Services
	Tourism Education	Hospitality Training and Promotion
	Energy Education Institute	Energy Workshops, Internships, Seminars, and Training

GRANTS AND CONTRACTS DEVELOPMENT

The institutional search for supplemental funding of educational service and applied research is coordinated from within the division by the Grants and Contracts Development Office. An advisory committee serves both the faculty and staff and the Office of the Vice President in goal identification and priority determination in search for external funding support. This effort is coordinated with the Office of the Vice President for Research and Development. Assistance to faculty and staff in grant and contract proposal development is rendered in those instances where grants and contracts are not initiated and developed within this office. This office maintains a resource library of materials related to grant writing and funding search. Program and application files are kept for most major federal and state agencies as well as private foundations.

An advisory council of project directors advises the office in making recommendations to the President and appropriate Vice Presidents regarding policies and procedures of the University which impact on development and operations of sponsored projects. The Director of Grants and Contracts also serves as an ex officio member of the University's Research Advisory Committee representing concerns related to development of sponsored projects as well as continuing education and public service. In addition, the Director assists the Vice President for Continuing Education, Extension and Public Service and the Vice President for Academic Affairs in reviewing and approving all university contracts for Continuing Education courses and Public Service programs.

CONTINUING EDUCATION

Edward N. Cullum, Director of Extended Credit and Off-Campus Centers
Cathy J. Leeton, Director of Conferences and Institutes

Tennessee State University invites and extends opportunities to individuals to continue vocational, avocational or professional education and training through on and off-campus credit and non-credit classes, seminars, conferences, institutes, and foreign travel and study. Additionally, the selected provisions for open and closed-circuit television instruction, proficiency and C.L.E.P. examinations in numerous courses, cooperative work-study programs in several disciplines, correspondence offerings, and liberalized early admission procedures for entering freshmen are a few examples of the University's commitment to its mission of Continuing Education.

Special courses of study delivered on and off-campus have long been a distinct service of Tennessee State University. Presently, Continuing Education activities are also being fused with innovative, nontraditional, flexible modes through which credit and degrees may ultimately be earned.

EXTENDED CREDIT AND OFF-CAMPUS CENTERS

In cooperation with other agencies and educational institutions as well as through its own initiatives, Tennessee State University provides a variety of undergraduate and graduate credit courses within the Middle Tennessee area. Some of the present locations in the Nashville area where courses are offered are Columbia, Franklin, Gallatin, Ransom Teachers Center, and McGavock and Whites Creek Comprehensive High School.

CONFERENCES AND INSTITUTES

Continuing Education, through its Department of Conferences and Institutes, provides an opportunity for participants, members of the University community, and highly qualified resource persons to share new information and explore new ideas that will improve their job performance or complement their academic interest. These conferences and institutes are tailored to reflect the needs of the requesting client group.

The format used in short workshops and seminars varies with the type of program but always is designed and tailored to meet expressed needs of the services groups. Whether credit or non-credit oriented, institutes and conferences are designed by the division to reflect the sponsorship of selected academic schools of the University.

EARLY START PROGRAM

This program is designed to admit high school seniors to the University for the purpose of enrolling in Freshman English, History or Mathematics. Applicants must possess a 3.00 grade point average on a 4.00 system for the high school work completed. The recommendation of either the principal or guidance counselor at the student's respective high school must accompany the application and high school transcript.

Three (3) semester hours of credit will be awarded for each 45 clock hours of acceptable classroom performance by each student. Students may enroll in a maximum of six (6) credit hours at any given term. The fees charged per semester hour will be the same as other undergraduate courses.

The courses are English 101, 3 hrs. credit; History 201, 3 hrs. credit; Math 111, 3 hrs. credit. The following charges are made for students entering TSU: application fee of $5.00 and current fee per credit hour.

This program is sponsored jointly by the Metropolitan Community Education Schools Program and the University. The Centers are located at Glencliff, East and Pearl High Schools. However, the courses are available to all high school students who qualify.

NON-CREDIT INSTRUCTION

One of the largest areas of instructional effort at the University occurs through the Department of Non-Credit Instruction. The Department of Non-Credit Instruction plans both on an academic term as well as in response to special needs of client groups and the public on and off-campus.
This instruction is supported by regular and part-time faculty alike and is designed to meet the special needs of learners, both vocationally and avocationally. Planning for such learning occurs with direct input from learners and all instruction is also based upon participatory evaluation rendered by those who are enrolled. Most instructional activities are offered for enrollment on an individual fee basis, but selected activities are planned with client groups and delivered under special contracts. Standard IX of the Southern Association of Colleges and Schools is followed in the presentation of all instruction. Continuing Education Units (CEU), as provided by the Southern Association, are awarded to participants in that selected instruction planned within the Association's guidelines. Institutional records of such learning are maintained by the Admission and Records Office and are available upon student request.

Continuing education (CEU) courses offered by the division have credit value measured in continuing education units (CEU). One CEU is defined as "ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction." Programs in Continuing Education are interdisciplinary in nature, thereby encompassing a wide variety of offerings based upon the Continuing Education and Public Service needs of the community from time to time. The University will work with any individual or organization in designing an educational program around their needs.

PUBLIC SERVICE CENTER

The Public Service Center coordinates all Main Campus Non-Credit Continuing Education Activities. The center includes six categories of Continuing Educaton activities.

(1) Non-Credit Instruction through CEU courses.
(2) Special Training Grants and Contracts.
(3) Human Service Research Activities.
(4) Workshops and Seminars.
(5) Center for Government Training Courses.
(6) Senior Citizen Enrichment Program and Consumer Education Workshops.

COOPERATIVE AGRICULTURE EXTENSION SERVICE

James E. Farrell, Administrator

The mission of the Cooperative Extension Service of the University is to extend information, which has been collected and assembled, to the citizens of Tennessee.

This program involves the maintenance and improvement of agricultural exterprises, including herds (dairy, beef cattle, and swine), flocks, farm crops, pasture and hay crops, vegetable crops, fruit crops and ornamental plants. Other aspects of the service include:

—farm record keeping and marketing of farm products;
—the dissemination of agricultural literature through local, regional, and state farm and home institutes;
—the promotion of the business of farming through fairs, exhibits, horse shows, and publicity;
—the supply of important agricultural information to farmers from state and federal sources;
—the improvement of rural and urban family living through education and proper use of resources; and
—the promotion of low-cost homes and farm buildings for rural and low-income families.

In 1911 the General Assembly enacted legislation which enabled Tennessee State University to apply for and benefit from funds appropriate under the Morrill Act of 1862, the Hatch Act of 1887, and the Morrill Act of 1890, but no subsequent action was taken by this body to allow the University to participate in the Smith-Lever funds that come to the State for the Statewide Cooperative Extension Serivce. The Statewide Cooperative Extension program has received Smith-Lever funds since May 1, 1914.

The Cooperative Agriculture Extension Service is the educational arm of the United States Department of Agriculture. This service was created by an Act of Congress of 1914 known as the Smith-Lever Act. The Cooperative Agriculture Extension Service in the various states is based on the campuses of the land-grant Colleges and Universities. In the South and in the border States two types of land-grant colleges exist: the historically white college, known as the 1862 institution and the historically black college, known as the 1980 institution. In Tennessee, the 1862 school is the University of Tennessee at Knoxville.

In 1971, special funds were set aside by the Congress to enable the 1890 schools and Tuskegee Institute to carry out a Cooperative Agriculture Extension program. This Act specified that only one extension program should exist in each State and that the 1862 and the 1890 land-grant institutions would administer the program jointly. Subsequent to the Act, Tennessee State University and the University of Tennessee entered a memorandum of understanding which described the manner in which the two institutions would plan and administer programs jointly. Such togetherness was unique to Cooperative Agriculture Extension programs in States having an 1890 land-grant institution.

Most efforts of Tennessee State Universi-ty staff and the staff of the University of Tennessee are concerned with training County staff and serving in a professional resource capacity. The County staff in turn are responsible for programming for the general public.

Cooperative Agriculture Extension staff based on the two universities are termed specialists. The nature of the work of these specialists is concerned with informational supply and problem solving for the County extension leaders. In the ultimate, the aim of the specialist is to elevate the quality of life of the people living within a given sector. To be more specific, the specialist's time is devoted to study and research; construction of audio-visual aids; preparation of handout materials; and writing articles, papers, and radio and TV scripts. In addition to this, the specialist visits County Extension offices, conducts workshops, and participates in staff and in-service meetings.

The Statewide Cooperative Agriculture Extension Service receives funds from Congress through the Department of Agriculture and from the State and County. The Cooperative Agriculture Extension Service of Tennessee State University receives regular funds from the Department of Agriculture and from no other source.

PUBLIC SERVICE

The Division of Continuing Education, Extension and Public Service serves as a broker for the delivery of University technical assistance to the community. In addition to coordination of consultant services delivered by selected staff and faculty to industrial and business firms, governmental agencies and groups, the Division searches from within the broader University and statewide community for resources to assist in answering requests for services. Readily available to the University are institutions within the State Board of Regents System and such University of Tennessee System agencies as: Municipal Technical Advisory Service; County Technical Assistance Service; Center for Government Training; Center for Industrial Services; and the Technical Assistance Center.

An important direct service offered by the Division of Continuing Education, Extension and Public Service is its public service projects. This activity involves the University in special skills training and service programs in conjunction with local and state government as well as the private sector. The Division supports a variety of projects directly and through various academic schools.

SENIOR CITIZENS ENRICHMENT PROGRAM AND CONSUMER EDUCATION WORKSHOPS

The senior citizens enrichment program and the consumer education program provide an opportunity for faculty, staff persons, and the Tennessee State University community to extend their knowledge and expertise to interested community persons through a service of workshops covering a wide variety of topics based upon community needs. This includes classes for senior citizens and young adults. These workshops are held at various locations in the community and are particularly aimed at minority or disadvantaged senior citizens and youth.

CENTER FOR LABOR/ MANAGEMENT RELATIONS
Douglas Davis, Director

The Center for Labor/Management Relations is a State of Tennessee Department of Labor funded educational unit. The Center, formerly known as the Tennessee Learning Center, is formed through a contract between the University and the State Department of Labor and is headquartered at the University's downtown campus. All its educational services to companies, labor union members and their organizations are delivered by and through a consortium of State Board of Regents and University of Tennessee institutions located throughout the state.

The programs of the Center provide instruction in all areas of labor studies, including labor/management relationships and negotiation, labor law, arbitration, grievance procedures and steward training, interpersonal communication and relationships, leadership, and other such related subjects. These programs are conducted in class rooms of institutional consortium members throughout the state, in union halls or in other available meeting rooms conducive to the learning process.

The Center serves Tennessee, the 26th state to provide continuing education service for the labor community. It is an institutional member of the University and College Labor Education Association.

TOURISM EDUCATION
Ed LeJeune, Director

The Tourism Education Project is a jointly funded effort from the Nashville Metropolitan Tourist Commission and the University. The project provides educational training to tourism and travel-related personnel in business, industry and government agencies in the Nashville area to assist them in more effectively relating to tourists visiting Nashville. Training is provided to employees at their work sites through the use of video, tapes, lecture and discussion. A series of credit courses for travel and tourism studies are also made available through the University's regular academic credit schedule.

CONTRACT TESTING ADMINISTRATION
Charlotte Hall-Austin, Director

An important service to selected governmental agencies and professional groups is fulfilled in the form of contract testing. The University not only provides this service to the convenience of the Middle Tennessee area but also it supervises contracted test centers for the State Department of Insurance in Memphis, Jackson, Chattanooga, and Knoxville. Additionally, individual correspondence and standardized examinations of other agencies and organizations are proctored as requested by students or faculty at the Downtown campus of the University.

ENERGY EDUCATION INSTITUTE
Arie Halachmi, Director

The Institute was established as the result of funding in 1981 from the Department of Energy to provide education programs for teachers and to develop energy education curriculum for high school use. The Institute's role was expanded in 1983 under a Cooperative Development Project with the Department of Energy to include training and technical assistance to minorities and women seeking employment or business opportunities in energy industries. Currently the Institute supports various university efforts to develop and seek funding for energy-related faculty research, energy training activities, and career development programs for students.

PUBLIC SERVICE PROJECTS LOCATED IN ACADEMIC SCHOOLS

Several public service projects which are administered through the academic schools of the university receive assistance and support from the Division of Continuing Education, Extension and Public Service. These projects include:

1. Center for Community Education, School of Education, serves as the statewide facilitator to develop partnerships between public schools and the community to improve the overall quality of life. The center receives a Mott Foundation Grant for this purpose.

2. The Center for Training and Technical Assistance, School of Education, administers offices and programs which provide training and support to education and human service delivery agencies for children and families. These offices and programs include services that encompass credit, non-credit, and public service activities. Described below are the offices and programs currently located in the Center for T/TA.
   - -Continuing Education and Public Service Instruction Office
   - -Head Start Training Resources Office
   - -Exploring Parenting Curriculum and Training Program
   - -After School Child Care Technical Assistance Office
   - -Volunteer Services and Private - Sector Initiative Office
   - -Child Development Associate Training Program
   - -Social Services Competency Based Training Program
   - -Technology and Learning Program

3. The B.Y.T.E. Consortion, School of Education is a non-profit public service entity which provides the following services in the area of technology and learning: 1) teacher, parent and administrator training, 2) child enrichment classes, 3) research, 4) conferences, 5) technical assistance and 6) a variety of public-private partnership programs. The Consortium is administered through the Center for T/TA in the School of Education. The B.Y.T.E. Consortium also sponsors programs which offer credit from the School of Education in the area of technology and learning and conducts statewide preschool projects with microcomputer demonstration sites in schools and preschool classrooms. The Center for T/TA offers many services through its technology and learning laboratory supported through contributions to the B.Y.T.E Consortium. A national advisory consortium advisers the B.Y.T.E. Consortium on local, state, regional, and nation-wide programs.

4. Educational Resource Development Council, School of Education, is a consortium of Middle Tennessee schools systems with the School of Education. The ERDC Project works with systems to bring together the school's faculty expertise with public school personnel to resolve local problems and to provide in-service training.

5. Robert A. Taft Institute of Government Seminars in Practical Politics, School of Arts and Sciences, is a funded project designed to improve High School Teachers' understanding of the practical and applied concepts of government at the local, state, and national level.

6. Management Development Institute, School of Business, was established to provide a centralized resource for professional development activities for middle and upper management. Each year the Management Development Series presents five one-day seminars designed to offer practical and relevant ideas to the Nashville business community by using both national and locally recognized experts as resource speakers.

7. Center for Real Estate Education, School of Business, serves the educational needs of students who are working toward licensure in the real estate field or who are already licensed and want to continue their professional development. The courses provided are approved by the Tennessee Real Estate Commission to meet various regulatory standards. Currently, in addition to standalone programs, the Center co-sponsors programs with the Nashville Board of Realtors, the Building Owners and Managers Association, and the Institute for Real Estate Management.

8. Small Business Development Center, School of Business, utilizes university personnel, governmental agencies, and private sector resources through a networking process to address all types of counseling needs. Administered on a statewide basis under the SBA's Management Assistance program, the SBCD provides short term and long term services lasting from one hour to one week in addition to workshops and seminars for small businesses.

9. Small Business Institute, School of Business, is an extension of the Small Business Administration's Management Assistance program created for the purpose of providing indepth counseling to small business. The counseling, provided by an SBI team consisting of advanced students and a professor, normally lasts from three months to a year.

10. Economic Development Center, School of Business, is funded and administered by the U.S. Department of Commerce Economic Development Administration. The Center concentrates on providing services to start-up and existing minority enterprises through one-to-one counseling drawing on both university and external resources.

UNIVERSITY PERSONNEL AND INSTRUCTIONAL FACULTY

THE INSTRUCTIONAL FACULTY

THE GRADUATE SCHOOL

James Reeves	EdD	Dean

SCHOOL OF AGRICULTURE AND HOME ECONOMICS

Roland Norman	PhD	Dean

Rural Development

Gul M. Telwar	PhD	Professor (Head)
Surendra P. Singh	PhD	Asso Prof
Sammy Comer (Adjunct and Research Faculty)	MS	Asst Prof
Rex Butler	MS	

Animal Science

Roland Norman	PhD	Professor (Dean)
Constantine Fenderson	PhD	Asso Prof (Head)
Richard Coppings	PhD	Asst Prof
Kieu Van Vo	PhD	Asst Prof

Plant Science

Hazo Carter	PhD	Professor
Desh R. Duseja	PhD	Asso Prof
Kenneth Hillsman	PhD	Asso Prof (Head)
William Hayslett	MS	Asst Prof
Rufus Jones	PhD	Asst Prof

Home Economics

Osen Ozgener	EdD	Professor
Dolores A. Harris	MS	Professor
Hazel B. Jackson	PhD	Professor (Head)
Ruth A. McDowell	MEd	Asso Prof
Gearldean Johnson	EdD	Asso Prof
Julia Dinkins	PhD	Asst Prof
Karen Weddle	PhD	Asst Prof
Troy Wakefield	PhD	Asst Prof
Sandria Godwin	PhD	Asst Prof
Jenna Kuttruff	MS	Instructor

SCHOOL OF ARTS AND SCIENCES

Wendolyn Y. Bell	PhD	Acting Dean
Bobby L. Lovett	PhD	Act Asso Dean

Art

Theodore J. Jones	MFA	Professor
Herman Beasley	EdD	Professor (Head)
Nina L. Edoho-Eket	MS	Instructor

Biological Sciences

Roy P. Peterson	PhD	Adjunct Prof (Interim President)
Edward L. Risby	PhD	Professor (Exec. Asst to Interim President)
John Mallette	PhD	Professor
Gus Tomlinson	PhD	Professor
Prem N. Narula	PhD	Professor
James A. Campbell	EdD	Professor
Prem S. Kahlon	Ph.D.	Professor
James Wilson	PhD	Professor
Richard A. Hogg	PhD	Professor
Alexander C. Wells	PhD	Asso Prof
James Adams	PhD	Asso Prof
Gregory Komives	PhD	Asso Prof
Robert Newkirk	PhD	Asso Prof
Jacqueline Martin	PhD	Asso Prof
William Cumming	MA	Asst Prof
Dorothy Exum	MS	Asst Prof

Chemistry

Frederick S. Humphries	PhD	Professor (Emeritus)
Lonnie Haynes	PhD	Professor
Andrew Bond	PhD	Professor (Dean, Allied Health)
Edward Covington	PhD	Professor
Fu-Ming Chen	PhD	Professor
David Holder	PhD	Professor (Head)
Rama I. Mani	PhD	Asso Prof
Ying-Ming Lin	PhD	Asso Prof
Audrey Prather	MS	Asst Prof
Rudolph Woodberry	MS	Asst Prof

Communications

Jamye C. Williams	PhD	Professor (Head)
William D. Cox	MA	Asso Prof
J. Weldon Stice	PhD	Asso Prof
Harriette L. Insignares	PhD	Asso Prof
Douglas Davis	PhD	Asso Prof (Dir, Tn Lrng Ctr)
Donald Page	PhD	Asso Prof
Lawrence James	PhD	Asso Prof
Daniel Owens	EdS	Asst Prof (Dir, Radio Station WTSU)
Karen Brown	PhD	Asst Prof
Herman Brady	MS	Instructor
Sandra Holt	MS	Instructor

Criminal Justice

David K. Wheaton	PhD	Professor
Larry Woods	JD	Professor
C. Bruce Mallard	PhD	Asso Prof (Head)
Loren Gaiters	MS	Asst Prof

English

Mary W. Burger	PhD	Professor (VP Academic Aff)
Alberta G. Barrett	PhD	Professor
McDonald Williams	PhD	Professor (Dir Honors Program)
Tyree Miller	EdD	Professor (Dean Univ Coll)
Clayton C. Reeve	PhD	Professor (Head)
Jo Helen Railsback	PhD	Asso Prof
Donald Menchise	PhD	Professor
Barbara J. Conder	PhD	Asso Prof
Wayne Billings	PhD	Asso Prof
Judy Simpson	PhD	Asso Prof
Vesta Wheaton	MA	Asst Prof
Helen Cotton	PhD	Asst Prof
Stephen Stedman	MA	Asst Prof

Government and Public Affairs

Bruce Rogers	PhD	Professor
Harry Fuchs	PhD	Professor
Arie Halachmi	PhD	Professor
Hoyt King	PhD	Asso Prof (Head)
H. Coleman McGinnis	PhD	Asso Prof
Jyotsne Paruchuri	PhD	Asso Prof
Alexander Arthur	PhD	Asst Prof

History and Geography

Paul Phillips	PhD	Professor
Samuel H. Shannon	PhD	Professor
Joseph H. Udelson*	PhD	Asso Prof
Bobby Lovett	PhD	Professor (Act Asso Dean)
Phyllis K. Leffler	PhD	Asso Prof (Act Head)
Harriet A. Peterson	JD	Asst Prof
James E. Haney	PhD	Asso Prof

*On Leave

SCHOOL OF EDUCATION

Douglas J. Simpson	PhD	**Dean**
Richard Renfro	EdD	**Asst Dean**

Curriculum and Instruction

Richard O. Renfro	EdD	**Professor (Asst Dean)**
Darlene Huddleston	EdD	**Professor Dean)**
Edward N. Cullum	EdD	**Professor**
Evelyn Fancher	PhD	**Professor (Dir, Lib)**
Douglas Simpson	PhD	**Professor (Dean)**
Dean B. Roberts	PhD	**Professor (Asso VP and Dir Evng Prog)**
Chrystal Partridge	PhD	**Asso Prof**
Tee T. Peacock	MS	**Asst Prof**
Gwendolyn Simmons	MS	**Asst Prof**
Mary Bess Dunn	PhD	**Asst Prof**
Ruby W. Martin	Ed.D.	**Professor (Acting Head)**

Educational Administration

Bernard G. Crowell	EdD	**Professor (Exec Admin International Aff)**
Franklin B. Jones	EdD	**Professor (Head)**
George W. Cox	EdD	**Professor (Dir, Summer Sessions)**
James Reeves	EdD	**Professor (Dean, Grad School)**
Paul Caraher	PhD	**Professor**
Paul M. Madden	EdD	**Asso Prof**
Helen Bain	PhD	**Asso Prof**
Leslie Carnes	PhD	**Asso Prof**
Joe Carnellus	PhD	**Asso Prof**
Edward Hantel	PhD	**Asst Prof (Coord, Comm Educ)**
Barbara Nye	PhD	**Asst Prof (CTTA)**
Lovelle Atkisson	PhD	**Asst Prof**
Robert Boone	PhD	**Asst Prof (Dir, Weekend College)**
Alphonse Thompson	PhD	**Asst Prof**

Health, Physical Education and Recreation

Joe W. Gilliam	MA	**Asso Prof**
Harry Beamon	PhD	**Asso Prof (Head)**
Edward A. Martin	MEd	**Asso Prof**
Richard A. Miller	MS	**Asso Prof**
Fred M. Sawyer	PED	**Asso Prof**
Hezekiah Foreman	PhD	**Asso Prof**
Peggy Williams	MA	**Asst Prof**
Richard Grooms	EdD	**Asst Prof**
Samuel Abernathy	MS	**Asst Prof**
Jesse James	MS	**Asst Prof (Coach)**
William A. Thomas	MS	**Asst Prof (Head Coach, Football)**
Johnny L. Carey	MS	**Asst Prof**
James I. Bass	MS	**Instructor**
Edna F. Overall	MS	**Instructor**
Allen Robinson	MS	**Instructor (Coach Baseball)**
Judy Gentry	MS	**Instructor**
Catana Starks	MA	**Instructor (Coach Swimming and Golf)**

Psychology

Pearl G. Dansby	PhD	**Professor**
Calvin O. Atchison	EdD	**Professor (VP Dev)**
James Threalkill	EdD	**Professor**
Joseph M. Cozy	PhD	**Professor**
Roger W. Jones	PhD	**Professor**
David H. Martin	PhD	**Professor**
Helen R. Barrett	PhD	**Professor**
Dorothy Granberry	PhD	**Professor (Dir, THEC Evaluation)**
Michele Thomas	PhD	**Professor (Act Head)**
Deena Fuller-Smith	EdD	**Professor**
Harold L. Phelps	MS	**Asso Prof**
John Joyner	PhD	**Asso Prof**
Alberta Herron	PhD	**Asso Prof**
James H. Stewart	EdD	**Asso Prof**
Gloria Lewis	MS	**Asst Prof (Asst Dean Stud Aff)**

Reading and Special Education

Ruby W. Martin	EdD	**Professor (Head)**
Dolores Mathis	PhD	**Professor**
Carole F. Stice	PhD	**Professor**
Barbara O'Connor	PhD	**Asso Prof**
Merriel Bullock	PhD	**Asso Prof (Dir, Cen of Excellence)**
Marino Alvarez	PhD	**Asso Prof**

SCHOOL OF ENGINEERING AND TECHNOLOGY

Edward I. Isibor	PhD	**Dean**
Mohan Malkani	PhD	**Asso Dean**
Andrew Ryal	PhD	**Asst Dean**

General Engineering

Mohan Malkani	PhD	**Professor (Asso Dean)**

Architectural Engineering

Feng-chih Chen	PhD	**Professor**
Nipha Kumar	MS	**Asso Prof**
Ronald Harris	BS	**Asso Prof**
Hinton C. Jones, Jr.	MS	**Asso Prof**
Walter Vincent	MS	**Asso Prof (Head)**
Dwight D. Martin	MS	**Instructor**

Civil Engineering

Edward I. Isibor	PhD, PE	**Professor (Dean)**
Michael Samuchen	PhD	**Professor (Head)**
Macon G. Hinton	MSE, PE	**Professor**
Juda Rozenberg	PhD	**Professor**
Palley P. Palley	PhD	**Professor**
Natthu S. Parate	PhD	**Asso Prof**
Charles Chung-Cha Liu	PhD	**Asst Prof**
Ida Watson	ME	**Instructor**

Electrical Engineering

Sidney Tetenbaum	PhD	**Professor**
Mohan J. Malkani	PhD	**Professor (Asso Dean)**
Stainderpaul Devgan	PhD., PE	**Professor (Head)**
Rucele Consigny	PhD, PE	**Asso Prof**
K. S. Chung (Visiting Adjunct Prof from Bell Labs)	PhD	**Asst Prof**
Elliott Slutsky	PhD	

Mechanical Engineering

Yvonne Y. Clark	MS, PE	**Asso Prof (Head)**
Vadili Sastry*	PhD, PE	**Professor**
John W. Weatherly, III	PhD	**Professor**
Dilip Chaudhuri	PhD	**Professor**
William McCain	PhD	**Asso Prof**
Vincent Mitchell	MS, PE	**Instructor**
Sudarshan P. Dev	MS	**Instructor**

Industrial Arts and Technology

William A. Merriman	PhD	**Asso Prof**
Andrew J. Ryal	EdD	**Asso Prof (Asst Dean)**
Cecil M. Ryan	MS	**Asso Prof**
Thomas J. Brooks	MS	**Asst Prof**
John E. Howlett	MS	**Instructor (Head)**
William Wockenfuss	Ed.D.	**Professor, AUPAA**

Fire Science (Associate Degree)

*On Leave

Modern Foreign Languages

Wendolyn Y. Bell	PhD	Professor (Act Dean)
Joan C. Elliott	PhD	Professor (Head)
Martin O. Deschenes	PhD	Professor

Music

Guy A. Bockman	PhD	Professor
Ralph Simpson	PhD	Professor (Head)
Edward Graves	MS	Asso Prof (Dir, Univ Bands)
Donald E. Barrett	MMus	Asso Prof
Carol E. Stone	MMus	Asso Prof
David L. Walker	PhD	Asso Prof
Charlotte A. Rhodes	MMus	Asst Prof
Benjamin Kirk	MS	Instructor
Lorenzo Hainsworth	MEd	Instructor

Philosophy

John H. Arthur	PhD	Professor (Head)
William H. Shaw	PhD	Asso Prof
Johnny Washington	PhD	Assoc Prof

Physics and Mathematics

Donald D. Savoy	MA	Professor
James Holloway	PhD	Professor
Patricia G. Hull*	PhD	Professor
Sterlin N. Adams*	MS	Asso Prof
Ronald Atkinson	PhD	Professor
John Propes	PhD	Asso Prof
Raymond Richardson	PhD	Asso Prof (Head)
Sandra N. Scheik	PhD	Asso Prof
Govindaswamy Nagarajan	PhD	Asso Prof
Marsha Williams	PhD	Asso Prof
Amiri Gamshodzahi	PhD	Asso Prof
Kofi Semenya	PhD	Asst Prof
Mary A. Love	MS	Asst Prof (Dir, Spec Services)
Nancy R. Ledett	MS	Asst Prof
Willard Smith	PhD	Asst Prof
Kenneth Daniels	MS	Instructor

Social Welfare

Robert Castor	PhD	Asso Prof (Dir, Cntr on Aging)
Roderic Burton	MSSW	Asst Prof (Act Head)
Waldine DeBerry*	MSW	Asst Prof
Hollace Brooks*	MSSW	Asst Prof
Mary Ruddiman	MSSW	Instructor
Patricia Lockert	MSSW	Asst Prof

Sociology

Edna Masuoka	PhD	Professor (Act Head)
Clinton M. Lipsey	PhD	Professor
Levi Jones	PhD	Professor
Ernest Rhodes	PhD	Professor
Baqar A. Husaini	PhD	Professor
Andrew Jackson	PhD	Professor
Edward S. Temple	MS	Asso Prof (Coach)
Lynn E. Dwyer	PhD	Asso Prof
Nora L. Roy	MA	Asst Prof
Dorothy A. Stephens	MA	Asst Prof

SCHOOL OF ALLIED HEALTH PROFESSIONS

Andrew Bond	PhD	Dean

Dental Hygiene

Elzer S. Chandler	EdS	Asso Prof (Dir)
Nancy W. Austin	MEd	Asst Prof
Marion Patton	MEd	Asst Prof
Eva J. Morris	MS	Instructor
Thedis C. Newbern	BS	Instructor
Rosalyn Word	MPA	Instructor
Eloise Jackson	MPH	Instructor

*On Leave

Speech Pathology and Audiology

Harold R. Mitchell	PhD	Professor (Head)
Jacqueline Mitchell	PhD	Professor
Zenobia Bagli	PhD	Asso Prof
Carol Barach	MS	Asst Prof
Marcella Mosely	MS	Instructor
Bertha Clark Smith	PhD	Asst Prof (P/T)

Medical Record Administration

Sarah Wills	MEd	Instructor
Elizabeth Kunnu		Instructor (Director)

Medical Technology

Ann Mitchell-Hinton	MS	Educ Coord
David Thompson	BS	Asst Prof

Health Care Administration

Beverly G. Bass	MPA	Asst Prof (Act Dir)

Respiratory Therapy

Diana Luder	MS	Asst Prof

SCHOOL OF BUSINESS

Tilden J. Curry	PhD	Acting Dean
Augustus Bankhead	EdD	Asst Dean, Undergrad Studies

Accounting and Law

Charles Rolen	PhD (CPA)	Professor (Head)
Lewis L. Laska	MBA/JD	Asso Prof
Lewis D. Howell	MS/JD	Asso Prof
Thomas Rodgers	MBA (CPA)	Asso Prof
Kenneth Lea	PhD (CPA)	Asso Prof
Ruthie Reynolds	PhD (CPA)	Asso Prof
Alfred Blaeur	MBA (CPA)	Instructor
John W. Coker	PhD (CPA)	Asst Prof
Louis E. Mullen	PhD	Professor

Business Administration

Martin L. King	PhD	Professor (Coord, Marketing)
Louis Miller	PhD	Professor
John E. Reynolds	PhD	Professor (Head)
Bernard Tucker	PhD	Professor
William Perry	PhD	Professor
Tilden J. Curry	PhD	Asso Prof (Asso Dean)
D. S. Desai	PhD	Professor
Vassuedo Sardessia	PhD	Asso Prof
J. Byron Pennington*	PhD	Asso Prof
Donald Richard	PhD	Asst Prof
Millicent Lownes	PhD	Asst Prof
Stephen Brown	PhD	Asso Prof
Allen Miller	PhD	Asst Prof

Business Education and Office Administration

Augustus Bankhead	EdD	Professor (Head)
Donzaleigh Patterson	EdD	Professor
James Elzy	EdD	Professor (Dean, Admissions and Rec)
Rena C. Elzy	EdD	Professor
Thelma Baxter	MS	Asst Prof
Elizabeth Robertson	MBA	Asst Prof

Economics and Finance

Robert Vowels	PhD	Professor
Bruce R. Boals	PhD	Professor
Abdel-Monem Fareed	PhD	Professor
John B. Hasty	PhD	Professor
S. Thomas Holbrook	PhD	Professor
John T. Masten	PhD	Professor (Dean)
Gayle D. Riggs	PhD	Professor
Charles E. Weis	PhD	Professor
George B. Hartmann	PhD	Asst Prof
Madhu Paruchuri*	MA	Asst Prof
Stanley Chervin	PhD	Asst Prof

SCHOOL OF NURSING

Regina Monnig	PhD	Professor (Dean)
Christine P. Sharpe	MSN	Assoc Prof
Anna Payne	EdD	Asst Prof (Dir, BS Program)
Carol Thigpin	PhD	Asst Prof (Dir, Cont Educ)
Alethia D. Nicholson	EdS	Coord Stud Affairs

Associate Degree Program

Christine P. Sharpe	MSN	Asso Prof
Carol C. Chapman	MS	Asst Prof
Josephine Wright	MSH	Asst Prof
Margaret Dahlhauser	PhD	Asst Prof
Helen S. Eastland	MS	Asst Prof
Jean M. Jenkins	MS	Asst Prof
Lily Z. Pablo	MS	Asst Prof
A. Marie Everson	MSN	Asst Prof
Bernadeen Fleming	MSN	Asst Prof
Verla Vaughn*	MSN	Instructor
Helen Allie	MSN	Instructor
Minnie Hairston	MSN	Instructor
Joan Jones	MSN	Instructor
Ramona Whittaker	MSN	Instructor

BSN Program

Mary Helms	MS	Asst Prof
Mary Pleas	MSN	Asst Prof
Betty L. Wilson	MS	Asst Prof
Mary Konguth	MSN	Asst Prof
Kathryn T. Jordan	MPH	Instructor (P/T)

LIBRARIES/LEARNING RESOURCES

Evelyn P. Fancher	PhD	Professor (Dir)
Earline Hudson	EdS	Asso Prof
Helen Chen	PhD	Asso Prof
Susan McCrumbly Sparkman	MLS	Asst Prof
Yildiz Binkley	MLS	Asst Prof
Martha Parker	MLS	Asst Prof
Jessie Hughes	MLS	Asst Prof
Fell Propes	MLS	Asst Prof
Donald Joyce	PhD	Asso Prof
Charles Gray*	MS	Asst Prof
Sharon Johnson	MLS	Instructor
Vallie Pursley	MLS	Instructor
Shirley Caldwell	MLS	Instructor
Joan Williams	MSLS	Instructor (P/T)
James Lamp	MLS	Instructor
Murle E. Kennerson	AMLS	Instructor
Wanda Mathews	MLS	Instructor
Fletcher Moon	MLS	Instructor

AEROSPACE STUDIES

Lt. Col. Thomas Saulsberry	MS	Professor (Head)
Capt. Gus Bell	MA	Asst Prof
Capt. Carlos Cherry	MS	Asst Prof
Capt. J. D. Hamilton, Jr.	MS	Asst Prof
Capt. Charlie B. James	MS	Asst Prof

EXTENSION AND CONTINUING EDUCATION

James E. Farrell	PhD	Professor (Asso VP Pub Serv)
Ozie L. Adams	PhD	Professor
Joseph Morris	PhD	Professor
David C. Gandy	MS	Asso Prof
Alma Hobbs	EdD	Asst Prof
Alvin Wade	MS	Asst Prof
Richard Winston	MS	Asst Prof

*On Leave

UNIVERSITY COLLEGE

Tyree Miller	EdD	Dean
John Joyner	PhD	Dir, Placement and Evaluation
Timothy Quain	MA	Asst to Dean

Art

Geraldine Pletcher	PhD	Asso Prof (Coord, Hum and HPER)
Paul Zepplin	MFA	Asso Prof
Viola Wood	MFA	Asst Prof

Biological Sciences

Samuel Whitmon	MS	Asso Prof
Lauree Lane	PhD	Asso Prof
Alice Smith	MA	Instructor
Martha Stratton	MAT	Instructor
Eva B. Landers	MS	Instructor
Katie K. White	MS	Asst Prof

English

Helen R. Houston	DA	Professor
Michael Darby	PhD	Asso Prof
James Head	PhD	Asso Prof
Peter Jordan	PhD	Asso Prof
Asalean Springfield	PhD	Asso Prof
Dorothy Samuel	MA	Asso Prof
Alonzo Moody	MA	Asst Prof
James Byrdsong	MA	Asst Prof
Gloria Johnson	MA	Asst Prof (Coord, English)
Louise Watkins	MA	Asst Prof
Helen Cotton	PhD	Asst Prof
Monetha Reaves	DA	Asst Prof (Dir, Writing Clinic)
Jewell Parham	MA	Instructor

Health, Physical Education and Recreation

Mary S. Watkins	PhD	Asso Prof

History

H. Leon Prather	PhD	Professor
Samuel Shannon	PhD	Professor
Samuel B. Smith	PhD	Professor
John Cooke	PhD	Professor
George L. Davis	PhD	Professor
Juanita Gaston	PhD	Asso Prof (Coord, Soc Sci)
Elizabeth McClain	MS	Asst Prof
James Haney	PhD	Asso Prof
Jimmuir Cotton	MS	Asst Prof
Sandra H. Franklin	MA	Asst Prof
Harriet Peterson	JD	Asst Prof
Johnny L. Burchett	MS	Instructor

Mathematics

Roberta Dabney	PhD	Professor
Calvin King	PhD	Professor
Win Myint	MS	Professor
Arnold Dean	PhD	Asso Prof
Charles Williams	MA	Asso Prof
Jeanetta Williams	MA	Instructor (Dir, Math Lab)
Elizabeth Wayt	MA	Instructor

Modern Foreign Languages

Joan C. Elliott	PhD	Professor
Martin Deschenes	PhD	Professor
James E. Williams	PhD	Asso Prof

Reading

Fannie Cathey	PhD	Assoc. Prof (Dir, Dev Stud)
Bobby L. Jones	EdD	Asst Prof
Elnora O. Roane	PhD	Professor (Dir, Reading Center)

Sociology

Vernaline Watson	PhD	**Asso Prof**

Music

L. Grenetta Simpson	EdD	**Asst Prof**
Thomas Davis	MMus	**Instructor**

Advisor

Wilma E. Rucker	MS	**Instructor**
Juliet Mason	MS	

UNIVERSITY PERSONNEL

THE STATE BOARD OF REGENTS

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Named By Statutory Act:

Governor Lamar Alexander, Chairman ..... Nashville
Dr. Arliss L. Roaden, Executive Director, Tennessee Higher Education Commission ..... Nashville
Mr. Robert L. McElrath, Commissioner of Education ..... Nashville
Mr. William H. Walker, III Commissioner of Agriculture ..... Nashville
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Named From Congressional Districts and At-Large

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Mr. Thomas J. Ingram ..... Nashville
Mr. Harold T. Conner ..... Martin
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Mr. David White ..... Knoxville
Mrs. Gwen R. Awsumb ..... Memphis
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President Emeritus ..... **Walter S. Davis,** B.S., M.S., Ph.D.
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Executive Assistant to the President ..... **Edward L. Risby,** B.S., M.S., Ph.D.
Executive Assistant to the President ..... **Richard G. Rhoda,** B.A., M.A., Ph.D.

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Associate Vice President ..... **Dean B. Roberts,** B.S., M.A., Ed.D.
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Dean of the School of Agriculture and Home Economics ..... **Roland Norman,** B.S., M.S., Ph.D.
Acting Dean of the School of Arts and Sciences ..... **Wendolyn Bell,** B.S., M.A., Ph.D.
Acting Associate Dean of Arts and Sciences ..... **Bobby Lovett,** B.A., M.A., Ph.D.
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Dean of the School of Education **Douglas Simpson,** B.S., M.S., Ph.D.
Assistant Dean of the School of Education ..... **Richard Renfro,** B.S., M.S., Ed.D.
Dean of the School of Engineering and Technology ..... **Edward Isibor,** B.S., M.S., Ph.D.
Associate Dean of the School of Engineering and Technology ..... **Mohan Malkani,** B.S., M.S., Ph.D.
Director of Library ..... **Evelyn Fancher,** B.S., M.S.L.S., Ed.S., Ph.D.
Acting Dean of the School of Business Programs ..... **Tilden J. Curry,** B.A., M.B.A., Ph.D.
Assistant Dean of Undergraduate Business Programs ..... **Augustus Bankhead,** B.S., M.S., Ed.D.
Dean of the School of Nursing **Regina Monnig,** B.S.N., M.S.N., Ph.D.
Director of Aerospace Studies ..... **Lieutenant Colonel Thomas Saulsberry** U.S. Air Force: B.S., M.P.A.
Dean of Admission(s) and Records ..... **James Elzy,** B.S., M.S., Ph.D.

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Associate Vice President for Student Affairs and Dean of Student Services ..... **Bruce Hancock,** B.A., M.S., Ed.D.
Assistant Vice President and Dean of Students ..... **Gloria Lewis,** B.S., M.S.
Director of Residence Life and Associate Dean of Students ..... **Ronald Myles,** B.S., M.S., Ed.S.
Director of Career Development Center ..... **Dorothy Lockridge,** B.S., M.S.
Interim Director of Athletics ..... **Gale Sayers,** B.S., M.S.
Director of Student Financial Aid ..... **Homer Wheaton,** B.S., M.S.
Director of Student Health Services ..... **Ivan Davis,** A.B., M.D.
Director, Student Development Services ..... **David L. Terrell,** B.S., M.S., Ph.D.
Director, Child Care Center ..... **Richard Scofield,** B.S., M.S.
Director, Special Services ..... **Mary Love,** B.S., M.S.
Supervisor, Testing Center ..... **Brenda Coleman,** B.S., M.S.
Coordinator, Counseling Services ..... **Fannie H. Perry,** B.S., M.S.
Evening Programs ..... **Mark D. Bandas,** B.A., M.A., Ph.D.

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Vice President for Business Affairs ..... **Ronald Dickson,** B.S., M.B.A.
Director of Personnel .....
Director of Purchasing and Business Services ..... **Frank Battle,** B.S., M.P.A.
Director of Finance and Accounting ..... **Sarah Wood,** B.S., M.B.A.
Director of Safety and Security ..... **James Robertson,** B.S., M.S.
Director of Physical Plant ..... **Alexander Murray,** B.S.
Director of Facilities Planning ..... **George Morgan,** B.S.

MANAGEMENT SERVICES

Director of Computer Services .....
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INDEX

Academic Information 16
Academic Support Programs, ...42
Access to Student Records—Policy 19
Accommodations 24
Accreditation 6
Admissions 12
  Admission with advanced standing 13
  Crosstown AFROTC Program 14
  Disabled citizens 14
  Early admissions 12
  First time freshman 12
  International students 14
  Re-admission—TSU students 13
  Senior citizens 14
  Special students 14
  Transfer students 13
Advisor, Major 37
Aerospace Studies, Department of 177
AFROTC Scholarship Program 177
Afro-American Studies 97
Agriculture and Home Economics, School of 44
  Animal Science and Animal Husbandry 44
  Home Economics 46
  Plant Science and Conservation 54
  Pre-veterinary medicine 44
  Rural Development 56
Allied Health Professions, School of 58
  Dental Hygiene 60
  Health Care Administration and Planning 65
  Medical Record Administration 67
  Medical Technology 69
  Respiratory Therapy 58
  Speech Pathology and Audiology 70
Animal Science 44
Architectural Engineering 159
Art Education 75
Arts and Sciences, School of 73
  Art 75
  Biological Sciences 78
  Chemistry 81
  Communications 84
  Criminal Justice 88
  English 90
  Government and Public Affairs 94
  History and Geography 97
  Honors Program 99
  Mathematics and Physics 111
  Modern Foreign Languages 104
  Music 107
  Philosophy and Religious Studies 110
  Social Welfare 120
  Sociology 117
Athletics 25
  Intercollegiate 25
Attendance 18
Auditing Courses 16

Bachelor's Degree 20
  Foreign Language Requirement (BA Degree) 21
  Minimum University Requirements 20
  Teacher Education Requirements 22
Band 107
Biological Sciences 78
Buildings, location of 7
Business, School of 123
  Accounting 124
  Business Administration 125
  Business Education and Office Management 127
  Economics and Finance 126

Calendar of the University, 1985-87 9
Career Development Center 26
Chemistry 81
Choir 107
Civil Engineering 160
Classification of Students 17

Class Loads 16
  Maximum 17
    Normal and Minimum 16
    Probationary 17
    Reporting Dropping the Student 18
    Substitution of Courses 19
    Veteran 29
College-Level Examination Program (CLEP) 14
Clerical Occupations 127
Communications 84
Computer Science (See Engineering, Math,
  Management Information Systems) 111, 132, 164
Conference and Institutes 182
Continuing Education Unit Credit Courses 182
Cooperative Agricultural Research Program 44
Counseling Center 25
Curriculum and Instruction 135

Data Processing 111, 132, 164
Degree Requirements 20
Degrees Offered 10
Dental Hygiene 60
Dependent Children of Deceased Veterans, Benefits for 23
Developmental Studies Program 43
Driver Education 173

Early Childhood Education 48
Early Start Program 183
Economics and Finance 126
Education, School of 134
  Curriculum and Instruction 135
  Health, Physical Education, and Recreation 143
  Library Services 137
  Psychology 156
  Reading and Special Education 139
  Educational Administration 138
  Elementary Education 138
Engineering and Technology, School of 159
  Architectural Engineering 159
  Civil Engineering 160
  Electrical Engineering 167
  General Engineering 164
  Industrial Arts and Technology 166
  Mechanical Engineering 163
  B.S. in Engineering 164
English 90
English Proficiency Examination 17
Ensembles, musicals 107
Examinations 17
  Collegel-level Examination Program 17
  English Proficiency 17
  For Credit 17
  High School Equivalency 17
  Teacher Education ....
Continuing Education, Extension in Public Service, Division of 180
  Agriculture Extension Service
  Health and Nutrition
  Community Resource Development
  Agriculture Economics
  Textiles and Clothing Workshops
  Food Workshops
  Sewing Workshops
  4-H
  Gardening
  Consumer Education
Credit Courses, Continuing Education Units 183
General Education Development Program 183
Adult Education 183
  Master's Degree Program (See Graduate Education
  Catalog) ....
  Workshops, Seminars, and Short Courses 183
Public Service 183
Fees and Expenses 2
  Disabled and elderly persons 1

General ... 27
Grants and Contracts ... 182
Incidental fee schedule ... 28
Payment of fees ... 27
Refund procedures ... 28
Undergraduate fee schedule ... 29

Financial Aid ... 30
Financial Regulations ... 31
Foreign Languages ... 104
French ... 106
German ... 106
Spanish ... 106

General Education Core ... 21
Bachelor of Arts Degree ... 21
Bachelor of Science Degree ... 21
General Engineering ... 164
Geography ... 97
German ... 106
Glossary ... 4
Government and Public Affairs ... 94
Grading System ... 18
Graduate Credit ... 23
Graduate Degrees Offered ... 10, 179
Graduate Major Fields ... 179
Graduate School ... 179

Handbook, Student ... 25, 26
Handicapped Students ... 14
Health Care Administration and Planning ... 65
Health Education, Instruction ... 143
Health, Physical Education, and Recreation ... 143
History ... 97
Home Economics ... 46
Honors ... 20
Dean's List ... 20
Degrees with ... 20
Honors Program ... 99

Incomplete Grade ... 18
Industrial Arts Education ... 166
Industrial Technology ... 166
International Students ... 14, 26, 36

Library Services ... 137
Living Accommodations ... 24
Loads, Course ... 16
Veterans ... 23

Management ... 125
Management Information Systems ... 132
Marketing ... 126
Mathematics ... 111
Mechanical Engineering ... 163
Medical Record Administration ... 67
Medical Technology ... 69
Modern Foreign Languages ... 104
Music ... 107
Music Education ... 107

Nursing, School of ... 173

Off-Campus Centers ... 182
Office Management ... 127
Organizations, Student ... 25, 46
Orientation for New Students ... 25

Personnel, University ... 186
Administration ... 190
Philosophy and Religious Studies ... 110
Physical Education ... 143
Physics ... 111
Placement Service ... 26
Plant Science ... 54
Pre-Dentistry ... 78
Pre-medicine ... 78
Probation ... 16

Psychology ... 150
Public School Field Experience ... 134

Readmission to the University ... 13
Reading Center ... 42
Recreation ... 143
Refund of Fees ... 28, 33
Regents, State Board of ... 190
Registration ... 15
Repeat Grades ... 19
Residence Halls for Men ... 24
Residence Halls for Women ... 24
Residence Halls, Opening and Closing ... 24
Room and Board ... 24
Room Reservation ... 24
Rural Development ... 56

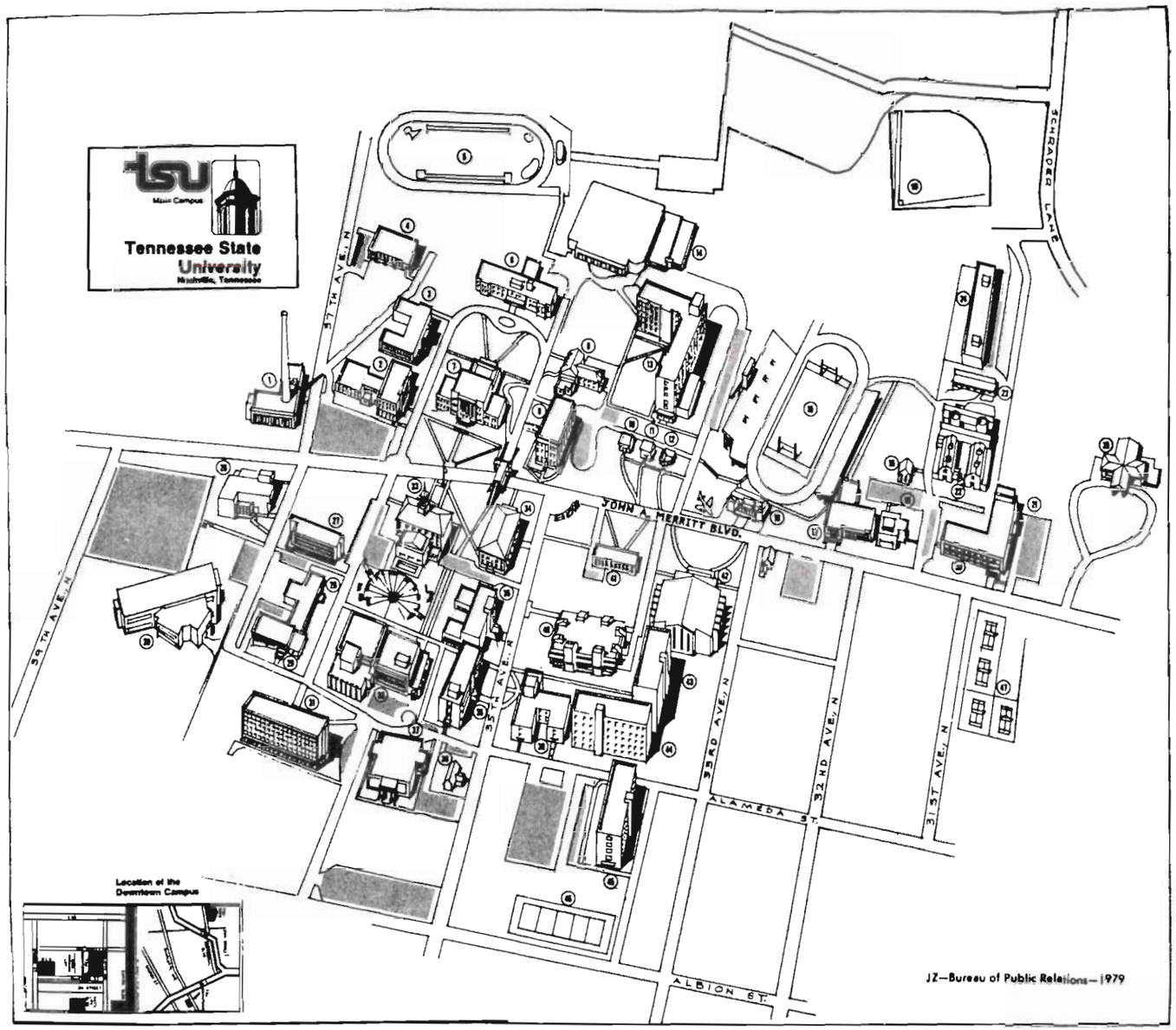
Scholarships ... 23, 73
Second Bachelor's Degree ... 23
Social Welfare ... 120
Sociology ... 117
Spanish ... 106
Special Education ... 139
Special Services ... 25
Speech ... 85
Speech Pathology and Audiology ... 70
Student Development ... 25
Student Personnel Services ... 25
Student Records ... 19
Substitution of Courses ... 19

Teacher Education Program ... 21
Admission Requirements ... 21
Council of Teacher Education ... 21
Retention Requirements ... 22
Bachelor of Science Degree in ... 22
Technical Aeronautics ... 167
Theatre ... 85
Transportation Services and Technology ... 168

University ... 6
Buildings ... 7
Campus Map ... 194
Historical Statement ... 5
Purpose ... 6
University College ... 36
Academic Support Programs, Courses ... 42
Admission ... 36
Advisement ... 37
Course Descriptions ... 38
Curriculum ... 38
General Education Courses, Associate Degrees ... 38
General Education Courses, Bachelor Degrees ... 38
Transfer to Degree-Granting Schools ... 37

Veterans, Benefits of ... 23

Withdrawal from the University ... 18



INDEX

1 Power Plant
2 Jane Elizabeth Hall (Women's Building)
a Art Department
b Social Sciences Department
c Sociology Department
d Education Department
3 Old Main Hall (Harned Hall, Nine Hole Hall)
a Biology
4 Queen Washington Health Service Center
a Student Health Center
b Counseling Center
5 Edward S. Temple Track
6 Edna Rose Hamlet Hall (Women's Dorm)
7 Learning Resource Center
a Honors Program
b Testing Center
c Writing Clinic
d Media Center
e University College
f WTSU Studio
8 Harned Hall of Science (Science Building)
Biological Sciences
9 Gaspard Manor
10 Auxiliary Enterprises
11 Institute of Atmospheric Physics
12 Security
13 Mary E. Wilson Hall (ROTC—Women's Dorm)
14 Howard C. Gentry Complex
a Health and Physical Education
b Athletic Director's Office
15 W.J. Hale Stadium (Football field)
16 W.J. Hale Field House (AFROTC)
17 W.W. Lawson Agriculture Building
a Animal Science Department
b Plant Science
c Rural Development Department
d CARP Annex
18 Farm Area
19 Farm Manager
20 Walter S. Davis Home Economics & Nursing Education Complex
a Home Economics Building
(1) Home Economics Department
(2) Early Childhood Education Department
b Nursing
(1) Nursing Education Department
21 Same as number 20
22 Dairy Barn
23 Central Receiving
24 Operations Building
25 President's Residence
26 Lewis R. Holland Hall (School of Business Building)
a Center of Excellence
b English Department
27 Hubert B. Crouch Hall (Graduate School Building)
a Government and Public Affairs Department
b History and Geography Department
c Modern Foreign Language Department
d Communication Department
e Graduate School
f Speech Pathology and Audiology Department
28 Chemistry Building
a Chemistry
29 A.V. Boswell (Physics—Mathematics Building)
a Physics and Mathematics Department
b Criminal Justice Department
30 A.P. Torrence Engineering Building
a Architectural Engineering Department
b Civil Engineering Department
c Electrical Engineering Department
d Mechanical Engineering Department
31 Harriett Hodgkins Hale Hall (DRC—Women's Dor
32 Joseph A. Payne Student Union Building
a Office of Vice President of Student Affairs
b University Post Office
c University Bookstore
d Office of Dean of Students
e Office of Student Affairs
f Office of Residence Life
g Student Housing Office
h Centennial Room (Student Cafeteria)
i Career Development Center
j Students Government Association
k Beauty Salon
l Snack Bar
m Game Room
33 Administration Building
a Office of Admissions and Records
b Business Office (Cashiers)
c Financial Aid Office
d President's Office
e Office of Vice President for Academic Affairs
f Office of Vice President for Business Affairs
g Office of Vice President for Research And Development
34 Industrial Arts Building
a Industrial Arts and Technology Department
b School of Allied Health Professions
c Respiratory Therapy Department
d Medical Records Department
e Medical Technology Department
35 Florence McCord Building
a Biological Sciences
36 Robert E. Clay Education Building
a Elementary Education Department
b Reading Program
c Psychology Department
37 Marie Brooks Strange Music Building
a Music Department
38 1915 35th Ave. N
a Special Programs/Upward Bound
39 Earle G. Clement Hall
a Dental Hygiene Department
b UT School of Social Work
40 The Martha Brown Lois Daniel Art Library
41 Alumni Building
a Snack Bar
b Personnel
c Purchasing
d Alumni Affairs
42 Henry Arthur Kean Hall (Gymnasium)
a Recreation
b Football Coaches
c Baseball Coach
d Public Relations
43 Henry Allen Boyd Hall (Men's Dorm)
44 Lena B. Wilkes Hall (Men's Dorm)
45 Merle H. Edge Hall (Men's Dorm)
46 Basketball Courts
47 Tennis Courts
48 Baseball Field (at northern end of Hale Stadium on Schrader Lane)

Parking