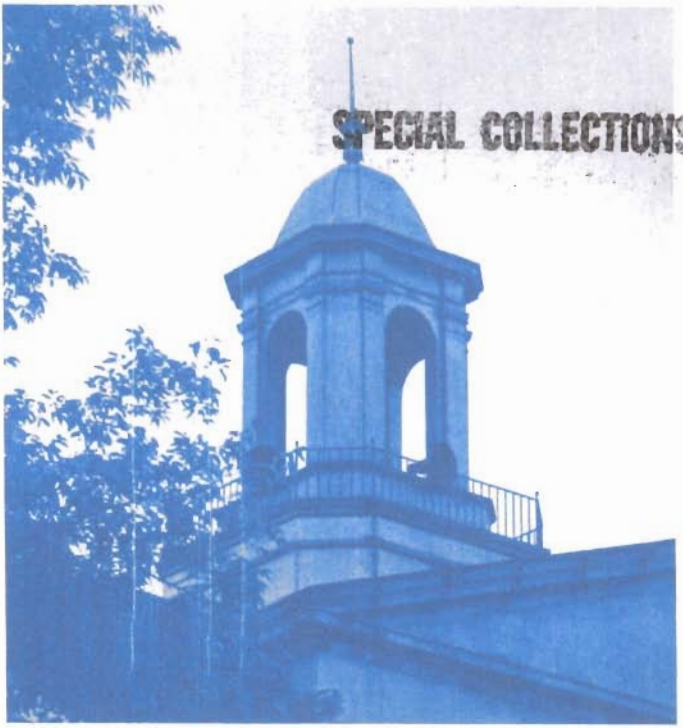

SPECIAL COLLECTIONS

UNDERGRADUATE CATALOG 1976 - 1979

TENNESSEE STATE UNIVERSITY

NASHVILLE, TENNESSEE

announcements 1976-1979

CATALOG

UNDERGRADUATE

VOL. LXII - 1976-79

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

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HOW TO USE THIS CATALOG

The first few weeks of your university experience may well be the most exhilarating experience of your life. These weeks will also be confusing and hectic. You'll just begin learning your way around campus, choosing a course of study, paying expenses, and making many important decisions. The Tennessee State University Catalog will be one of the most important problem solvers which you'll have; therefore you should know how to use it effectively.

You'll find the catalog an important tool in answering some of your immediate questions and you'll also refer to it many times in the next few years for answers to questions concerning degree requirements.

First, you should thoroughly familiarize yourself with the General Information section of the catalog before doing anything else. This section provides you the answers to questions concerning location and facilities of the University, requirements for admission and how to apply, financial aid information, campus life concerning student services and information, housing, regulations, academic programs, credits, grades, etc.

Then, if you know what area of study you are interested in, such as political science, psychology, mathematics, English, or business, turn to that particular section for information about its facilities and degree requirement listings. Also in this section, you can find out what courses are offered in your field and a brief description of each.

The schools are arranged in alphabetical order, each with its course listings by department and course number.

If you are undecided about what major field of study to pursue, you should enroll in the School of Arts and Sciences. Here you can take a broad range of liberal arts courses which will prepare you for a variety of majors. By your junior year you should have decided upon your major field of study.

Your primary guide to the catalog will be the Table of Contents. For anything you can't find in the Contents, look in the Index. The Index provides a more specific guide to the catalog. For terms which you do not understand, look in the Glossary. Major events, holidays, and semester schedules are listed in the University Calendar.

GLOSSARY

Accreditation: Recognition granted schools and colleges upon examination by groups of visting 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: 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 Students: 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 in which he is enrolled over any given period.

Major: A major is the academic area in which one specializes. A new student may choose a major at once or be classified as "undecided" until he is able to decide on the major he desires.

Matriculation: Enrollment in the University or in 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 132 units or semester hours in order to graduate. The number of hours earned in a given quarter 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 other colleges attended. The submission of a transcript is one of the most important prerequisites for admission to the University.

In Addressing Mail to Tennessee State University, Please Direct Your Requests for Information as Follows:

APPLICATIONS, ADMISSIONS AND ENROLLMENT
To: Dean of Admissions and Records

ALUMNI CORRESPONDENCE
To: Coordinator of Alumni Affairs

INFORMATION ON ATHLETICS
To: Director of Athletics

NEW STUDENT ORIENTATION
To: Vice President for Student Affairs

ACADEMIC ADVISEMENT
To: Head of Department in which student plans to major

FINANCIAL AID
To: Director of Financial Aid

INFORMATION ON STUDENT ORGANIZATIONS
To: Director of Student Activities

INFORMATION ON MEN'S DORMITORIES
To: Dean of Men

INFORMATION ON WOMEN'S DORMITORIES
To: Dean of Women

PAYMENT OF ACCOUNTS AND INFORMATION ON FEES
To: Vice President for Business Affairs

TRANSCRIPTS OF RECORDS
To: Dean of Admissions and Records

INFORMATION ON VETERANS' BENEFITS
To: Office of Veterans Affairs

INFORMATION ON GRADUATE PROGRAMS
To: Dean of the Graduate School

INFORMATION ON OFF-CAMPUS COURSES
To: Dean of Extension and Continuing Education

INFORMATION ON EVENING AND SATURDAY CLASSES
To: Director of Evening Program

INFORMATION ON AIR FORCE ROTC PROGRAM
To: Professor of Aerospace Studies

Address: Tennessee State University
3500 Centennial Boulevard
Nashville, Tennessee 37203

GENERAL INFORMATION



President Frederick S. Humphries

THE PRESIDENT'S STATEMENT

We here at the University are pleased that you have expressed interest in Tennessee State University. Through this Catalog we trust that we have answered some of your questions, giving you an introduction to our programs, opportunities, and our University Community. Should you desire to do so, visit our campus where you may become better acquainted with the University.

As a Land-Grant, comprehensive, State-supported institution of higher education, we are endeavoring to advance both the concept and the reality of the kind of broad-based institution dedicated to assisting students in their personal development. We continually strive to produce men and women of highly-trained intelligence, professional capability and integrity, with a commitment to personal and social values—a commitment that actually does make a difference to those around them. Our students compare favorably with those across the country.

Tennessee State University enjoys the status of a small University, ideally located in an exciting urban area. This environment allows for the development of new dimensions in learning. You will find us among those institutions concerned, on both the national and international scale, with the world's knowledge as curriculum, the world's problems as responsibilities, and a world community of scholars and students working positively together. We welcome all those who are willing to share our dedication to the development of the individual in a strong institution of higher education.

Frederick S. Humphries
President

THE UNIVERSITY
Historical Statement

The Agricultural and Industrial State Normal School at Nashville was opened on June 19, 1912, under an act of the General Assembly of 1909, which authorized the establishment of the State Normal Schools of Tennessee.

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 were first offered in several branches of teacher education. The first master's degree was awarded by the College in June, 1944.

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 adding schools later, respectively in agriculture, business and home economics.

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, August, 1958, included: A School of Agriculture and Home Economics, School of Engineering, School of Arts and Sciences, School of Education, Graduate School, Division of Business, Division of Extension and Continuing Education, and Department of Aerospace Studies. A School of Allied Health Professions was authorized in 1974. In 1976, the School of Business was authorized.

The University is supported from State and Federal funds, as well as from contributions by alumni and private sources.

PURPOSE OF THE UNIVERSITY

Tennessee State University is a land-grant institution and, hence considers instruction, research, and service to be its mandates. It proposes to make a maximum contribution to the advancement of all who seek and can profit from its broad educational program, which includes liberal, professional, and vocational offerings.

The purpose of the University is to stimulate the student to reach his full potential through a respect for inquiry and an understanding of the cultural tradition of which he is a part; to go forth to imbue others

with a desire to develop basic knowledge and skills that will allow them to make their way in a practical world; to develop the leadership urgently needed for continuing advancement of the society; and finally, to enlarge the major bodies of knowledge and to direct their application toward improving the quality of life for citizens of the state and nation.

More specifically, the University aims:

1. To maintain high standards of instruction in general or basic education and in the curricula and fields of specialization through which degree programs are offered.
2. To encourage faculty and students to engage in research, advance knowledge in the subject matter areas with which the various departments and divisions are concerned.
3. To assume its role as a servant and leader of the citizens of the State by disseminating knowledge and providing a variety of educational services to the community.
4. To identify and develop the talents of students whose prior educational, socio-economic and cultural disadvantages have prevented their being prepared fully to pursue college work successfully without special assistance.
5. To provide an atmosphere permeated by a spirit of community and a desire to apply knowledge and skills toward the betterment of humanity and the society.

Tennessee State University, in attempting to achieve its objectives, projects itself to the students, faculty, alumni, and community through the motto: "Think, Work, Serve." This motto, practically as old as the University itself, continues as a guide for promotion of the institution's efforts.

ACCREDITATIONS

The University is accredited by the following academic and professional agencies.

		YEAR
1.	Southern Association of Colleges and Schools	1946
2.	National Association of Schools of Music	1962
3.	National Council for Accreditation of Teacher Education (Undergraduate)	1968
4.	Council on Social Work Education (Undergraduate) (Reaccredited November, 1976)	1971
5.	Engineer's Council for Professional Development	1972
6.	American Home Economics Association	1973
7.	Tennessee Board of Nursing	1973
8.	Commission on Dental and Dental Health Auxiliary Education of the ADA	1973
9.	Reaccreditation by SACS	1969
10.	National Collegiate Athletic Association (See Vice President for Student Affairs)	
11.	National League of Nursing	1975
12.	National University Extension Association	1970

THE CAMPUS

The University is located in northwest Nashville, with central campus on Centennial Boulevard at 35th Avenue. Its campus, farm lands and pastures occupy approximately 475 acres of scenic rolling grounds and fertile fields extending to the southwest banks of the Cumberland River.

The central campus consists of more than thirty permanent modern buildings in a landscape design that rivals the most beautiful campuses in the South.

MAJOR BUILDINGS

The **Administration Building** is located on the south campus near Centennial Boulevard between 35th and 36th Avenues. It contains the chief administrative offices, the computer center, the general auditorium, which accommodates approximately one thousand persons, the Little Theatre for student productions in drama, and a swimming pool. In 1967 the building was renovated and enlarged. It is completely air conditioned.

The **Martha M. Brown Memorial Library**, erected in 1927 and enlarged and modernized in 1950, is located near the center of the main campus on the north side of Centennial Boulevard. The present structure has a total capacity of 120,000 volumes and provides special rooms and facilities for undergraduate and graduate students, conference and seminar rooms, lounges and other accommodations for the faculty and staff. A new library will open in January, 1977.

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

The **Jim Nance McCord Building**, erected in 1950, is located on 35th Avenue, North, near Centennial Boulevard. Its modern laboratories contain equipment for instruction and research in mechanics, combustion, electronics, hydraulics, building and construction, and civil engineering. Other accommodations include a lecture auditorium, classrooms, and offices.

The **Industrial Building** is located on the south side of the campus at Centennial Boulevard and 35th Avenue. It contains a variety of modernly equipped laboratories, shops, and classrooms for metal work, plumbing, welding, refrigeration, radio, electricity, business education and business administration. Several instructional staff offices are also located in this building.

The **Central Heating Plant,** erected in 1950, is situated on the northwest campus. It contains a modern heating plant, some mechanical engineering laboratories and offices.

The **Jane E. Elliott Building,** formerly the Women's Building, is located west of the University library on the north campus. The building contains laboratories, lecture rooms and work rooms for

sociology, social welfare, and Extension and Continuing Education.

The **W. W. Lawson Agriculture Building,** erected in 1956, is located on the north side of the campus adjacent to the university's agricultural laboratories. This building contains classrooms and laboratories equipped for teaching and research in scientific agriculture.

The agricultural laboratories and experimental units include the abbatoir, dairy barn, stock pavilions, farm shops, animal shelters, a modern walking horse barn, agronomy experimental plots, and a greenhouse.

The **Frank "Fay" Young Poultry Plant,** erected in 1951, is located on the southwest side of the main campus. The plant is equipped for teaching and experimental work in incubation, brooding, laying, nutrition, genetics, disease diagnosis and control, and poultry grading and marketing.

The **Henry Arthur Kean Hall,** erected in 1951 at a cost of $1,500,000, is located on the south side of the campus at Centennial Boulevard and 33rd Avenue. This structure contains a gymnasium with a seating capacity of 4,500; health, physical education, and recreation classroom and laboratories; staff offices; and facilities for indoor intramural sports, staff and student recreation, and physical therapy.

The **William J. Hale Field House and Stadium** are located on the northeast campus at Centennial Boulevard and 33rd Avenue. The Field House contains offices and classrooms of the Air Force ROTC unit. The Stadium is equipped for night games, has a seating capacity of 16,000, and includes provisions for football and major and minor track sports.

The **Queen Washington Health Service Building,** located on the northwest campus, has facilities for complete examination and limited treatment for students. It contains two wards for the accommodation of six women and six men students respectively.

Hale Hall, is located west of the University library.

Clement Hall, erected in 1957, is located on the southeast campus, and houses the Dental Hygiene Program and the UT School of Social Work.

Goodwill Manor is a colonial-type residence located north of Harned Hall. It houses the Offices of Alumni Affairs and Public Relations.

The **Alumni Building,** located on the southeast campus, formerly, the President's residence; houses facilities for the Offices of Department of Safety and Security, Department of Auxiliary Enterprises, Department of Purchasing and the Campus Radio Station, WTSU.

Faculty Women's Residence Hall, located on the north campus, is a three-story building for the accommodation of single faculty women.

The **Education Building,** erected in 1958, is located on 35th Avenue North, near Centennial Boulevard. It is a three-story air-conditioned

building equipped with classrooms and special laboratories for Teacher Education, Psychology, Business Administration, and Reading.

The **School of Business Building** will open in 1977.

The **Faculty Cottages** include three homes on the north side of the campus and nine homes adjacent to the central campus on 28th Avenue, North.

The **Student Union,** erected in 1959, is a three-story, air-conditioned brick and glass structure. The Union contains administrative offices of Student Personnel Services, offices of the Student Council and of other student organizations. Included in the facilities of the Union are lounges, meeting rooms, a game room, a grill and fountain, the University bookstore and Post Office.

An addition to the Union was completed in August 1968. This addition is a modern fireproof, air-conditioned structure and includes a caferteria-ballroom with a seating capacity of 1000, a coffee shop, a billiards room, a multi-purpose room, a game room and a faculty dining room.

The **Chemistry Building**, completed in Spring of 1961, is a two and one-half story air-conditioned building. The building contains undergraduate and research laboratories, classrooms, a lecture hall, offices, balance rooms, a departmental library, and a machine shop.

The **Physics and Mathematics Building**, completed in the Fall of 1965, is a modern, three-story, air-conditioned building. The building contains undergraduate and research laboratories, classrooms, a lecture hall, offices, and a computer center.

The **Graduate School Building,** erected in 1967, is a modern four-story, air-conditioned building. It is located directly west of the Administration Building. The building contains classrooms, laboratories and offices for: The Graduate School and the following Departments of the School of Arts and Sciences: English, Modern Foreign Languages, History and Geography, and Comminication.

The **Operations Building**, erected in 1967, is located on the north campus. This building replaces the old warehouse and houses the Maintenance Department and its shops. The Department of Printing is also located in the Operations Building.

The **Marie Brooks Strange Music Building**, erected in 1968, is a modern, sound-treated air-conditioned brick and glass structure designed to house the Department of Music. The building contains administrative areas, a modern music appreciation center, spacious band room with adjoining areas for instrumental instruction, repair and storage, practice rooms (31), choir room, and recital hall seating 226, several large classrooms, and closed circuit television facilities.

The **Walter S. Davis Home Economics and Nursing Education Complex**, erected in 1970, is a modern three-story building located on the north side of the campus adjacent to the W. W. Lawson Agriculture Building. This building contains classrooms and

laboratories for teaching and research in home economics and nursing.

NOTE: Residence Halls for students are described in the following section on Student Personnel Services.

STUDENT PERSONNEL SERVICES

The Student Personnel Services program aims to assist the student in developing the skills, attitudes, understandings, and insights which will assure full expression of his powers as a whole, dynamic person.

The major responsibility for administration of Student Personnel Services resides with the Vice President for Student Affairs and the Council on Student Affairs. The Council is composed of the Directors of Athletics, Financial Aid, Health Services, Counseling Center, Student Activities, Career Counseling, Cooperative Education, Placement, University Minister, and Personnel Deans.

FRESHMAN ORIENTATION

All entering freshmen are expected to report to the University several days preceding the beginning of instruction for the semester and to remain throughout the period. This period is devoted to lectures and discussions on subjects of importance to new students, conferences with advisers and counselors, interest inventories, tests of mental ability, aptitude and achievement, and registration and enrollment in classes.

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 Head Resident Counselor and Graduate Resident Assistant who are responsible for the operation of the hall under the supervision of the Student Personnel Deans. Telephone service is available in each of the student rooms.

All students whose homes are outside the Nashville community and who do not commute from home are expected to live on campus as approved by the Housing Committee. Students who live in the city are expected to maintain the same general standards required of students who live on campus.

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. This

charge will be made on the pro rata basis for the remaining days of the semester.

ROOM RESERVATION

A room reservation fee is required to reserve a room in one of the residence halls. This reservation fee is not refundable, but it will be credited toward the student's room rent at the time of registration. Students who reserve a room and fail to occupy it by the first day of registration for the semester or summer session will forfeit their reservation, unless the Dean of Men or Dean of Women (whichever is appropriate) is notified by the student that he or she will be late occupying the room. Room reservation contracts will be negotiated through the Dean of Men for men and the Dean of Women for women.

Only students who have been admitted to the University may reserve a room in one of the residence halls.

FOOD SERVICE

The University provides food service for students. Three well-balanced meals are served each day, Mondays through Fridays, and two meals are served on Saturdays and Sundays. The University Cafeteria, located in the College Union, seats 1000 students. There is a Coffee Shop on the ground floor of the Union and a smaller cafeteria in Wilson Hall used for special occasions.

RESIDENCE HALLS FOR MEN

Lena B. Watson Residence Center for freshman men -- a modern six-story, air-conditioned structure containing 178 student rooms, an apartment for the Head Resident Counselor, a lounge, a recreation study area, laundry and trunk-storage room.

Henry Allen Boyd Hall for sophomore and junior men -- a modern six-story air-conditioned structure containing 158 student rooms, an apartment for the Head Resident Counselor, 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 134 student rooms, an apartment for the Head Resident Counselor, lounge, recreation-study area, laundry and trunk-storage room.

RESIDENCE HALLS FOR WOMEN

Harriett Hodgkins Hale Hall is the newest of the residences 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 Head Resident Counselor.

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, trunk-storage room, laundry, and an apartment for the Head Resident Counselor.

Mary Wilson Hall is an air-conditioned, six-story building that houses 525 freshman women. This residence hall is equipped with a lounge on each floor and a public lounge on the first floor. There are laundry rooms on each floor, a cafeteria-kitchen, trunk-storage room on the ground floor, and an apartment for the Head Resident Counselor.

MAJOR ADVISER

Upon being admitted to the University, each student is assigned to a faculty member, who serves as a major adviser in the department in which the student plans to pursue a Program of Study. The major adviser will acquaint the student with requirements of the University, the school, and department, and will help the student to make long range plans toward a degree objective.

The responsibility for the selection of courses rests, in the final analysis, upon the student. Similarly, it is the primary duty of the student to pursue courses in their proper order to meet the requirement for graduation. During each semester, the student is urged to confer with the major adviser concerning choices of courses. The student must obtain written approval from the adviser on all courses to be pursued.

In solving specific problems, major advisers assist students by referral to services provided by other appropriate offices.

THE UNIVERSITY COUNSELING CENTER

The University Counseling Center offers a broad range of free services designed to help each student obtain the maximum benefit from educational experiences. These services consist of individual and group counseling, career counseling, tutorial services, services to vocational rehabilitation students, and services to students who are veterans.

Professional counselors are available to offer the student the opportunity to consider any questions, concerns, skill needs, hopes, fears, crises or choices that may occur during enrollment at the university.

The content of interviews or counseling sessions of a personal nature is kept strictly confidential.

The University Counseling Center also provides testing services on an individual basis for measurement of ability, achievement and interest. Tests are administered for university-wide programs and for national agencies; tests such as the American College Test (ACT),

The Graduate Record Examination, Law School Admission Test, Nursing Aptitude Test, and the Dental Hygiene Aptitude Test. The General Educational Development Test (GED) is also available to all adult citizens desiring to earn a high school diploma. Requests for information concerning test schedules and test dates should be directed to Testing Services, Tennessee State University.

PEER COUNSELORS

Peer Counselors are Sophomores, Juniors and Seniors who, because of their leadership ability and student-oriented interests, have been chosen to assist in the orientation of freshmen and in other phases of the University Guidance Program.

Peer Counselors will assist freshmen by providing information relative to student life on campus and directing students to appropriate on-campus offices for needed assistance.

All Peer Counselors are required to participate in a short-term workshop organized and implemented by the Personnel Dean and professional staff of the University Counseling Center. The workshop is held one week prior to orientation during the fall semester of each academic school year.

CAREER COUNSELING, PLACEMENT AND COOPERATIVE EDUCATION

This Center is a centralized service responsible to assist undergraduate students, graduating students, and alumni in realizing their career objectives. In an effort to achieve these objectives several options are available to students and cooperating employers who utilize the Center.

Each year students are interested in summer-seasonal type employment while they are not enrolled at the University. The various types of employment consist of: regular summer type employment; career-related summer employment; and internship-type employment.

Graduating students and alumni desiring to utilize the services are requested to establish placement credentials consisting of a resume and recommendations. These are available to the recruiter at the time of the on-campus interview. In addition, a referral service of interested and qualified candidates is available to employers desiring to list employment vacancies with the office of Career Counseling, Placement and Cooperative Education.

STUDENT ORGANIZATIONS

Students are encouraged to participate in co-curricular activities that may serve to develop their special talents, deepen their appreciation for fellowship and cooperation, or enlarge their individual

capacities for leadership.

Freshmen are cautioned to temper or limit their co-curricular or organizational activity during the first semester because of the demanding academic and social adjustments that have to be made during this period. However, two honor societies--Men's Scholastic and Women's Scholastic--are designed for freshmen who earn a 3.03 or above cumulative average during their first year.

There are 81 University co-curricular organizations, departmental clubs, guilds, fraternities, sororities, honor societies, drama and music groups that are open to all students or students who are majoring in a specific discipline. Of the total co-curricular opportunities available, 18 are national honor societies, 35 are departmental clubs, and 11 have general, cultural, civic, or political focus. Four of the five musical organizations--Chapel Choir, String Club, University Choir, and Marching Band--are open to all students. Each of the eight Greek letter fraternities and sororities has a pledge group for inculcating its members. One honor society, Alpha Kappa Mu, is open to all students of junior or senior class standing who have earned a cumulative average of 3.30 or above. (See Student Handbook).

INTERCOLLEGIATE AND INTRAMURAL 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, baseball, swimming, tennis and golf. It also provides a varsity program for women's track as well as basketball, volleyball and softball under the sponsorship of the Tennessee College Women's Sports Federation. An intramural program consisting of more than 18 activities is conducted for both men and women.

The University is a member of the National Collegiate Athletic Association.

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.

TRAFFIC AND PARKING REGULATIONS

Any student operating a motor vehicle on the campus is required to register this vehicle each school year with the Campus Security

Office. The University motor vehicle registration sticker which is issued must be displayed on the left side of the rear bumper.

OFFICE OF DEVELOPMENT

The development program consists of (1) alumni affairs, (2) public relations, (3) fund raising, (4) research and (5) planning. The purpose of the office is to assist the administration in interpreting the role and mission of the institution to the public and to assist the faculty in securing funds needed for special programs.

Alumni Affairs

The Office of Alumni Affairs is an organization designed to keep graduates and former students informed of the University's many programs, and operates to determine the impact that alumni are making upon the national and international communities. Toward the realization of these goals the Alumni Office coordinates much of its activities with other offices of the University whose functions bear on alumni contacts. Among these are the Placement Bureau and the Bureau of Public Relations. The Alumni Office manintains contact with more than fifteen thousand alumni through the program of the National Alumni Association and the established channels of the University.

Bureau of Public Relations

The general purpose of the program of Public Relations at Tennessee State University is to provide an organizational entity which will serve as the chief extension of the University into public contacts that are significant to the fulfillment of its mission in higher education.

Making use of all forms of communication media, including local and national press, radio, television, educational and scientific journals, the Bureau seeks to effect creative expression and accurate interpretation of the University, its policies and activities to its many publics.

EXPENSES, FINANCIAL AID, AND ADMISSIONS

GENERAL FEES INFORMATION—1976-77

All fees listed on this sheet are quoted on a semester basis. These fees for 1976-77 supersede all previous publication of fees schedule for 76-77. FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Application Fee

An application fee of $10.00 is charged for processing all applications for admission or readmission to the University, effective October 1, 1975. A money order or certified check for $10.00 (payable to Tennessee State University) must accompany the application.

CAMPUS UNDERGRADUATE STUDENTS PER SEMESTER

	TENNESSEE STUDENTS			OUT-OF-STATE STUDENTS		
	Watson (M) Boyd (M) Eppse (M) Wilson (W)	Hale (W)	Hankal (W)	Watson (M) Boyd (M) Eppse (M) Wilson (W)	Hale (W)	Hankal (W)
Maintenance Fees.....	$201.00	$201.00	$201.00	$ 201.00	$ 201.00	$ 201.00
Tuition.....	N/A	N/A	N/A	468.00	468.00	468.00
Debt. Service Fee.....	25.00	25.00	25.00	25.00	25.00	25.00
Room.....	249.00	267.00	229.00	249.00	267.00	229.00
Board.....	285.00	285.00	285.00	285.00	285.00	285.00
	$760.00	$778.00	$740.00	$1,228.00	$1,246.00	$1,208.00

SPECIAL NOTICE: Centrex Telephone Service charges are included in the room rate schedule above.

Room deposit fee is $30.00.

OFF-CAMPUS STUDENTS

	TENNESSEE STUDENTS		OUT-OF-STATE STUDENTS	
	Undergratuate	Graduate**	Undergraduate	Graduate**
Maintenance Fee.....	$201.00	$221.00	$201.00	$221.00
Tuition.....	N/A	N/A	468.00	468.00
Debt. Service Fee.....	25.00	25.00	25.00	25.00
	$226.00	$246.00	$694.00	$714.00

PART-TIME

	Undergraduate 1-11 hrs.	Graduate 1-11 hrs.	Undergraduate 1-11 hrs.	Graduate 1-11 hrs.
Maintenance Fee.....	$18.00 per hr.	$21.00 per hr.	$18.00 per hr.	$21.00 per hr.
Tuition.....	N/A	N/A	39.00 per hr.	39.00 per hr.
Debt. Service Fee.....	2.00 per hr.	2.00 per hr.	2.00 per hr.	2.00 per hr.

SPECIAL FEES

Application Fee (including readmission)	$10.00	Incomplete Project Writing (after 3 sem. hrs.)	$15.00
Auto Registration (academic yr.)	5.00	Incomplete Thesis Writing (after 4 sem. hrs.)	25.00
(summer)	1.00	Intern Fee (per semester)	25.00
Auto Restricted Parking Registration (academic year)	25.00	Late Examination or Removal of Incomplete, except thesis	5.00
(summer)	5.00	Late Registration (per day to $15 maximum)	5.00
Bad Check Charge	5.00	Meal Card Replacement	15.00
Class Audit (per course hr.)	15.00	Master's Thesis Binding	30.00
Conference-600 (per sem.)	25.00	Music Instrument Lessons (per course)	15.00
Cooperative Education (per sem.)	15.00	Organ Lessons (per course)	30.00
Credit by Examination (per course)	15.00	Property Damage Fee	Actual
Duplicate I.D. Card	10.00	Tests, ACT	8.00
Graduation Fee, Bachelors & Associate Arts	25.00	Tests, GED	6.00
Graduation Fee, Masters, EDS	30.00	Voice Lessons (per course)	15.00
Graduate Oral Exam	15.00		
Graduate Record Examination	15.00		

**Room and Board charges for graduate students who wish to live on campus are the same as undergraduate students.

NO CREDIT

FULL PAYMENT OF FEES IS DUE AT REGISTRATION. The Vice President for Business Affairs is not authorized to grant deferment for the payment of fees except when student financial aid is earned on a deferred basis and is sufficient to cover total charges per semester or if student is sponsored by a recognized agency or organization. A student is officially admitted to class only when the teacher is presented a schedule card which has been validated by the Office of Admissions and the Vice President for Business Affairs. All Money Orders, Cashier's Checks, or Certified Checks should be made payable to Tennessee State University and sent to the BUSINESS OFFICE, Tennessee State University, Nashville, Tennessee 37203.

SENDING OF MONEY

Students are advised against the sending of cash money through the mails. In case the money is lost through the mails the University assumes no responsibility for the loss. Letters containing payments to the University should be addressed to the Vice President for Business Affairs, Tennessee State University, Nashville, Tennessee.

FINANCIAL REGULATIONS

A student will not be permitted to register for the new semester or remain in dormitory residence in any semester if his financial

obligations are not satisfactorily met.

No student will be given a diploma until all financial obligations are paid in full.

Transcripts are sent out only after all financial obligations to the University have been satisified.

REFUND OF FEES

If a student withdraws from the University within two weeks after the beginning of classes for the semester, a refund will be made of 80% of the fees. Each week thereafter, the amount will be reduced 20%. For refund purposes the date of withdrawal shall be the date of the filing of a request for withdrawal with the University Counseling Center. The diploma fee is not refunded. No refund of rent, tuition or fees will be granted to students who are dismissed or suspended. Refunds for withdrawals from the Residence Halls will be pro-rated based upon the first date the Residence Halls open until the last date for refund.

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 can not 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, or religious beliefs, in keeping with program regulations.

We use College Scholarship Service as our major clearing house for need determination. All students who want to be considered for aid are requested to file an application for aid; they should also file a Parents' Confidential Statement (PCS) or SFS according to instructions with College Scholarship Services (CSS). (We also accept the Family Financial statement of ACT). Undergraduate students should also file a Basic Educational Opportunity Grant application (BEOG) according to instructions.

The Parents' Confidential Statement (PCS) and Basic Educational Opportunity Grant application may be obtained at the local high school's Guidance Counselor's office. Additionally, the application for aid may be available in the Guidance Counselor's Office at schools in the State of Tennessee. All of these forms are available at the Financial Aid Office here at the University.

It is imperative that BEOG students who apply for aid from other programs submit a processed BEOG Student Eligibility Report (SER) to the Financial Aid Office before they can be considered for aid from other sources.

The sources of aid are:

College Work Study Program—A part-time employment program that is a product of the Economic Opportunity Act of 1964. It is jointly funded by Federal Government and the University.

College Work Aid Program—Provides part-time employment on campus from University funds.

Supplemental Educational Opportunity Grant—A program that provides a gift grant which is federally funded and is a product of the Higher Education Act of 1965.

National Direct Student Loan—Provides low interest loans to eligible students and is a product of the National Defense Education Act of 1958.

Nursing Student Loan—Provides low interest loans to eligible students and is funded jointly by the Federal Government and University.

Nursing Student Scholarship—Provides gift grants to eligible nursing students and is federally funded.

Basic Educational Opportunity Grant—Provides gift grants to students and is federally funded.

Tennessee State University-Scholarship Grant—Provides gift grants to eligible students and is institutionally funded.

Academic Work Scholarship—Provides employment of an educational nature and is awarded to Tennessee High School graduates who graduated in the top quartile of their graduating class.

ELIGIBILITY

A student must meet program eligibility requirements, have financial need, be enrolled or accepted for enrollment. In case of the SEOG, the student must show academic and/or creative promise. The student who seeks aid, as well as all other students, is expected to estimate his expenses for the year. These expenses would include: tuition and/or fees, room and board, books and supplies, transportation, laundry and cleaning, recreation and personal expenses.

HONORS, SCHOLARSHIPS AND AWARDS

An increasing number of scholarships are granted each year to students at Tennessee State University. The scholarships differ greatly in their specifications -- some stress high academic achievement, while others place emphasis on such matters as financial need, potential in a certain field and urban or rural residence. The scholarship program is administered through the SCHOLARSHIP COMMITTEE. A student desiring additional information about scholarships should address his inquiries to VICE PRESIDENT FOR

STUDENT AFFAIRS, giving his scholastic average, his field of study interest, and an estimate of his financial needs.

In the immediate past years the following kinds of scholarships have been awarded:

School of Engineering in amounts from $250 to $2000 based on scholarship and financial need -- Western Electric; Standard Oil (Calif.); Humble Oil; Bethlehem Steel; Gulf Oil; American Society for Engineering Education; Union Carbide; General Electric; Bendix Corporation; Dupont; Celanese Corporation.

University wide: in amounts from $250 to $2000 based on scholarship and financial need -- General Motors; Alcoa; Greyhound Lines; Kroger; Allied Chemical.

School of Agriculture and Home Economics based on residence, scholarship and financial need: Sears Roebuck ($600); Rehabilitation Corp. ($900).

Air Force Awards are presented annually to distinguished cadets.

Almuni Scholarship Awards and Gifts are made annually by various chapters over the United States and by reunion classes.

Athletic Awards are presented annually to those active in intercollegiate sports and to those sponsoring athletic events.

Department Awards and Departmental Club Awards are presented annually by Business Education, Home Economics, Industrial Education, History Study Club, Literary Guild, Mathematics Club, Music Department, Student Affiliate Chapter of the American Chemical Society, and the Tennessee State Players' Guild.

Fraternity and Sorority Scholarship and Achievement Awards are made annually by Alpha Kappa Alpha Sorority, Alpha Phi Alpha Fraternity, Delta Sigma Theta Sorority, Omega Psi Phi Fraternity, Phi Beta Sigma Fraternity, Sigma Gamma Rho Sorority, and Zeta Phi Beta Sorority.

The W. J. Hale Scholarship Foundation, Incorporated, Award is presented to the outstanding graduate of the University who prepares for a teaching career at Tennessee State.

Dean's List. Students who earn a quality point average of 3.00 (B) or above in all subjects and who pursue a minimum of 12 credit hours in the regular curriculum shall be placed on the Dean's List for that semester.

Masonic Scholarships. The Most Worshipful Prince Hall Grand Lodge of Free and Accepted Masons of Tennessee and its jurisdiction gives five annual scholarships to the students of the University under the following categories: (1) the highest ranking freshman students, (2) students of unusual ability and promise, (3) sons and daughters of living Masons, (4) sons and daughters of deceased Masons, and (5) students of the University who are Tennessee Prince Hall Masons.

The National Honor Societies present awards annually to members elected during the year: Alpha Kappa Mu, Beta Kappa Chi, Gamma Theta Upsilon, Kappa Delta Pi, Pi Delta Phi, Sigma Delta Pi, Sigma

Rho Sigma, Pi Omega Pi, and Theta Alpha Phi.

Special Awards and Trophies presented annually include the G. S. Hamilton, the Hamilton High School Award and the United Business Education Association Smead Award.

Student Government Association members are presented awards annually.

University Counselors who are graduating seniors and who have served at least two years as University Counselors assisting with the Freshman Orientation Program and the general University Guidance Program receive awards.

Who's Who in America Universities and Colleges. Recognition in "Who's Who in American Universities and Colleges" is given students classified as juniors, seniors, and graduates who are outstanding in scholarship, leadership, educational and extra-curricular activities, general citizenship, and service to the University.

University Work Scholarships are awarded annually to graduates of Tennessee high schools having scholastic rank in the upper 25 percent of their classes.

AIR FORCE ROTC COLLEGE SCHOLARSHIP PROGRAM

Scholarships are available to qualified cadets in the four, three, and two year programs. These cover full tuition, laboratory expenses, incidental fees, and an allowance for books. Scholarship cadets also receive $100 each month in nontaxable pay. Initial selection for scholarships to sophomores, juniors and seniors is made on the campus by a board composed of institutional officials and Air Force ROTC officers. Final selection is made by a selection board at the Air Force ROTC Headquarters. Scholarships are awarded at the Air Force ROTC Headquarters. Men and women students are eligible for these scholarships. Interested high school seniors must submit their applications before December 15 of their senior year to Air Force ROTC (ARTO-O + TA), Maxwell AFB, Alabama 36112. Applications can be obtained from guidance counselors or from the Air Force ROTC Headquarters.

ADMISSION TO THE UNIVERSITY

Admission of Freshmen

Applicants for admission to the freshman class should submit their application material 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.

All freshmen are required to submit scores on the American College Test (ACT). High Schools should have application forms for this test. If applications are not available in high school, they may be obtained by writing to the Registration Department, American College Testing Program, P. O. Box 414, Iowa City, Iowa 52240. Applicants are advised to take the ACT as early as possible in the senior year of high school. Scores on this test constitute a valuable aid in gaining insight into a student's capacity for college work.

GENERAL REQUIREMENTS

1. The applicant must present a transcript of credits showing graduation from an approved high school (sixteen (16) units from a four-year high school or twelve (12) units from a three-year high school).
2. The applicant must furnish satisfactory evidence of good moral character.
3. The applicant must file an official application form with the Office of Admissions and Records.
4. The official transcript of all high school credits must be filed in the Office of Admissions and Records before the applicant is officially admitted to the Freshman class. All high school and college transcripts must be filed before the applicant is admitted with advanced standing.
5. The applicant must be at least 16 years of age.

Admission by High School Equivalency Examination

Applicants 18 years of age or older, who are not graduates of an approved high school, may be admitted to the University by earning an average score of 45 on the General Educational Development Tests of the American Council on Education.

Freshmen accepted for admission are invited to participate in a preregistration program. Announcements giving dates and complete information regarding this program are sent to applicants.

Admission of Undergraduate Transfer Students

An applicant who has been enrolled at another college or university should submit an application and transcripts as early as possible in the semester preceding the date that admission is desired. Eligibility for admission cannot be determined until the application and complete, official transcripts from each college and university

attended have been received. Applicants must list on their application form each college and university attended and have official transcripts sent from each institution attended, regardless of whether credit was earned or is desired. Students who fail to acknowledge attendance in any college or university in which they have been registered are subject to dismissal from the University.

Students enrolled in college at the time applications are submitted should have transcripts sent when they apply for admission, to be followed by supplementary records at the close of the semester. Provisional admission pending receipt of supplementary records may be given when it is impossible to secure this record prior to scheduled registration dates. This admission will be canceled if required records are not filed within 30 days from the first day of classes or if the records do not meet requirements for admission.

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.

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 they meet the minimum requirement of a 2.00 Grade Point Average.

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.

Admission of 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 an acceptable score on the Test of English as a Foreign Language (TOEFL), a test designed to determine proficiency in English and administered in testing centers overseas and throughout the U.S. 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 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 nonrefundable fee of $10.00.

International applicants must indicate the availablility of sufficient funds to meet all costs while studying at the University.

First consideration will be given to applicants who supplement their academic records with scores on the College Entrance Examination Board tests or other recognized tests and who submit early applications.

PROGRAMS WITH SPECIAL ADMISSION REQUIREMENTS

Some instructional programs at the University are subject to special admission requirements which are in addition to the general admission requirements. Students wishing to enter one of these programs of study should check the appropriate school and/or department section of the catalogue. The present programs of this type are shown below:

Nursing Education
Dental Hygiene
Health Care Administration and Planning
Engineering
Teacher Education

READMISSION TO THE UNIVERSITY

A student in good standing with the University whose attendance has been interrupted for one year or more must apply for readmission and submit a transcript of all credits earned during absence from this

University, or a notarized statement to the effect that he has attended no other college during his absence from Tennessee State University.

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, Trevecca Nazarene College, and Aquinas Junior College have such agreements with the university.






NURSING

ACADEMIC INFORMATION



ACADEMIC INFORMATION

Registration

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

Normally, all students register for courses during the days on which registration is scheduled. Detailed instructions are made available by the Director 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 assessed at the rate of $5.00 per day, beginning the first day after the close of regular registration.

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 grade point average of less than 2.25 may not enroll for more than 13 credit hours for the first semester of enrollment.

Probationary Student Class Loads. A student who incurs scholarship probation in any semester (see scholarship standards) will be allowed to carry a maximum of 13 semester hours.

Maximum Class Loads. Freshmen 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 less than 3.00 and more than 2.00 may register for as many as three credit hours in excess of their full curricular load, but not in excess of 21 credit hours.

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

Adjusting Class Loads. A student may drop, add, or change courses or sections of a course with the permission of the school in which he is registered and the instructors. This must be done within the time period allowed for dropping and adding courses.

Adding Courses: A student may add courses within one week after the first scheduled meeting of the class.

Dropping Courses: If a course is dropped after the first three weeks of the semester, the grade of "F" shall automatically be assigned, except upon the written certification by the adviser that further attendance in the class would be detrimental to the student's health or has been made impossible by circumstances beyond the student's control. In the event of such certification, the student shall receive the grade of "WP" (signifying passing at the time of withdrawal) or the grade of "WF" (signifying failing at the time of withdrawal) as indicated by the instructor. If the adviser desires confirmation of illness of the student, this confirmation may be obtained through the Office of the Vice-President for Student Affairs.

The proper forms for dropping, adding, or changing courses or sections of a course should be secured from the office of the student's Department Head and filled out according to the printed directions. Then they must be signed by the adviser, the instructors, and the Department Head and submitted to the Admissions Office.

Change of Major Field: In order to change from one major to another, the student must obtain the official "Change of Major Form" from the office of his School Dean or the Office of Admissions and Records and complete it with the following signatures: Department Head and Dean of the program being discontinued, Department Head and Dean of new program, Dean of Admissions and Records.

SUBSTITUTION OF COURSES

Requests to substitute courses required in the curriculum are presented to the Head of the Department in which the student is registered. If the Department Head approves the request, he forwards it to the Dean of the School for approval. Requests for substitution must be made not later than the semester preceding the one in which the student expects to graduate. Substitutions must not violate the minimum University requirements for a Bachelor's Degree.

Physical Education Activity Course Substitutions

1. Students may substitute aerospace studies courses (100 and 200 levels) or marching band for required physical education activity courses.

2. Veterans may meet some or all of the physical education activity course requirements by credit for military service. Two semester hours may be credited as "individually adapted physical education" for each of the first two years of military service.
3. Students who have physical disabilities that may be aggrieved by physical activity will be permitted to substitute adaptive P. E. courses (P. E. 91-94 series) if recommended in writing by a physician. All other students will be required to take four semesters of P. E. courses (P. E. 11-22 series) during the freshman and sophomore years.

Withdrawal from The University

A student may withdraw from the University no later than 10 calendar days prior to the beginning of final examinations in any semester. A student withdrawing from the University will be awarded a grade of "WP" or "WF" by the instructors of the courses in which he is enrolled.

A student desiring to withdraw from TSU must confer with his Adviser, Department Head, and Dean of the School in which he is enrolled. He must secure signatures on withdrawal forms from his Dean, the Admissions Office, the Loan Office, the Business Office, the Librarian, and the Dean of Men or Women and deposit these along with his "I. D." card in the Office of Admissions and Records.

A student who is suspended for any reason must have the written permission of his School Dean and the Vice-President for Student Affairs before he is allowed to re-enroll.

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.

Freshmen are permitted no more unexcused absences from a course than the number of credit hours assigned to that course. (Thus, in a three-credit hour course, three unexcused absences are permitted.) Freshmen who violate this regulation may be dismissed from Tennessee State University.

All excuses for absences must be secured through the Office of the Vice-President for Student Affairs. In addition, the student should inform each of his teachers as to the cause for 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 classes only with the approval of the teacher of the course. Such persons shall follow the regular registration procedure and pay $15.00 per credit hour for each course to be audited.

Auditors are not under obligations of regular attendance, class preparation, recitation, or examination; nor do they receive credit. At the end of the semester the "audit" course card will be marked "No Credit Audit" by the teacher and returned to the Office of Admissions and Records.

GRADING SYSTEM

Course grades for undergraduate and graduate students are awarded as follows:

"A" or "H" (Excellent)	4 quality points per semester hour
"B" or "P" (Good)	3 quality points per semester hour
"C" (Average)	2 quality points per semester hour
"D" (Poor)	1 quality point per semester hour
"F" (Failure)	0 quality points per semester hour
"I" (Incomplete)	0 quality points per semester hour
"WP" (Withdrew Passing)	0 quality points per semester hour
"WF" (Withdrew Failing)	0 quality points per semester hour
"S" (Satisfactory)	0 quality points per semester hour
"U" (Unsatisfactory)	0 quality points per semester hour

REGULATIONS REGARDING GRADES OF "I", "D" AND "F"

The Grade "I" (Incomplete): The grade "I" (Incomplete) is given when, for good reasons, the student has missed an examination or has failed to perform some small part of the required work. It will not be given unless the student has satisfactory class attendance, and is otherwise doing acceptable work in the course.

The "I" removal card must be in the Office of Admissions and Records no later than the last day of the semester in which the "I" grade expires (a 12 month period). However, "I" removal cards for prospective graduates must be submitted no later than three weeks prior to the date of graduation.

If all requirements of a course in which the "I" was awarded are not met within one calendar year, the grade of "I" will be changed to "N. C." (no credit). The student is responsible for initiating all necessary steps to remove the deficiency grade.

Repeat Grades: With the approval of the student's Major Department Head, the student may repeat courses in which he has earned "D's", or "F's" a maximum of two times. The **last** grade awarded in a course repeated will be counted in calculating the over-all scholastic (grade-point) average.

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 examinations 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 obtained, he gives the student 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 granted only in cases where there is reason to believe the student already has covered the content of the course. This may have been acquired through a similar course taken at another school for which credit has not been allowed at Tennessee State University, employment in a situation that used the information and skills covered in the course, or through other experiences.

The student makes application to his School Dean to take examinations for credit, conferring with him on the reasons and presenting substantiating evidence. The student's School Dean confers with the Dean of the area that offers the course for concurrence in the decision to be made. If granted, the student's School Dean notifies the student.

A student who is permitted to take an examination for credit shall pay a fee of $15.00 for the privilege of taking such examination, and enroll for the course in the usual manner in addition to the normal course load for the semester.

A copy of each examination given to the student must be filed with the Dean of the School in which the course is offered, and the examination results are to be filed in the office of the Dean of the School in which the student is registered.

The teacher administering the examination must officially report the grade to the Admissions Office. A grade of "S" is awarded to students who satisfy course requirements by examination.

College-Level Examination Program: Students may receive college credit for selected courses in which they have demonstrated satisfactory performance on tests in the College Level Examination Program.

English Proficiency Examination: During the second semester of the freshman 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 201, Advanced Composition, and to earn a minimum grade of "C" in this course.

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 at least 30 semester hours but less than 60 semester hours.

Juniors: Those who have completed 60 or more semester hours but less than 90 semester hours and have earned an average of "C" (2.00) in all work taken.

Seniors: Those who have completed 90 semester hours or more and have earned an average of "C" in all work taken.

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.

SCHOLARSHIP STANDARDS AND PROBATION

Students are expected to maintain twice the number of quality points as the number of credit hours received. Students will be placed on probation if their grade-point averages fall below 2.00 (C). The maximum class load of a student on probation is 13 semester hours.

Students will be promptly suspended from the University if their averages fall below the following:

Freshmen	1.60 at the end of the year *
Sophomores	1.80 at the end of the year *
Juniors	2.00 at the end of the year *

A student who fails to achieve the above minimum grade point average for his classification will be suspended from school for one semester. After this period of time, upon reapplying, he may be readmitted on probation, provided he has a satisfactory campus citizenship record. However, a student whose grade point average is 37½% or more below the minimum for his classification is not eligible for readmission.

A student who returns to the University from a suspension for low scholarship removes his probation by achieving the minimum cumulative average for his classificaion. Upon returning to the university when suspended for low scholarship, the student must maintain a minumum semester average of 2.00 until he is removed from probation. He must also follow the instructions for probationary students as regards class load and course selection. He will be suspended indefinitely at the end of the Spring Semester when he fails to do either of the above.

A student who is suspended for low scholarship at the end of the Spring Semester will not be permitted to re-enter the University until the Spring Semester of the next academic year.

* A student will usually receive a warning each semester during the year that his grade-point average falls below this minimum.

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) he 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 or with high distinction. 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.

Students who have participated in the Honors Program will, upon achieving 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 four semesters, and he 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 candidate 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 in the 300 and 400 level 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.
5. Four semesters of required activity courses in Physical Education (P.E. 11 - 23, or P.E. 91 - 94, or AFROTC 100-200 level) or marching band.
   NOTE: These courses must be completed satisfactorily during freshman and sophomore years.

   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.
6. Twelve semester hours in English (must include Eng. 101-102).
7. Three semester hours in Mathematics.
8. 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.
9. Four semester hours in humanities (Art, Drama, Music, Philosophy) - courses from two fields.
10. Eight semester hours in natural sciences (biological sciences or physical sciences).
11. English Proficiency demonstrated by test score or performance in English 201 (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 requirement must do so by enrolling in and successfully passing English 201. Transfer students who have not met a comparable proficiency requirement elsewhere must take the proficiency during the first semester of residence at this institution.
12. A Senior Project.
13. Candidates for the bachelor's degree must earn in residence a minimum of 24 of the last 30 semester hours offered for the degree.

14. 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).

GENERAL EDUCATION CORE FOR THE BACHELOR OF ARTS DEGREE

English 101, 102	6 semester hours
Literature 211, 212	6 semester hours
Foreign Language (1-6 semesters)	8-20 semester hours
Social Sciences (must include 6 sem. hrs. of American Hist.)	9 semester hours
Natural Science	8 semester hours
Mathematics	6 semester hours
Philosophy, Music, Art, Drama (combination of any two fields)	4 semester hours
Physical Education Activity courses or AFROTC	4 semester hours

Modern Foreign Language Requirement 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 by 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 101, 102	6 semester hours
Literature 211, 212	6 semester hours

GENERAL EDUCATION CORE FOR THE BACHELOR OF SCIENCE DEGREE

Social Sciences (must include 6 sem. hrs. of American History)	9 semester hours
Natural Sciences	8 semester hours
Mathematics	6 semester hours
Philosophy, Music, Art, Drama (combination of any two fields)	4 semester hours
Physical Education Activity Courses or AFROTC	4 semester hours

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 institutional 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 the program in teacher education, and recommends the policies and ways for implementing them to the Vice Pesident for Academic Affairs and the President of the University.

The Council is composed of nine members as follows: Graduate School--one, School of Agriculture and Home Economics--one, School of Arts and Sciences--three, School of Education--two, School of Engineering--one, and the Dean of the School of Education who is Chairman of the Council and Director of Teacher Education. The Chairman of the Council serves as the University's chief agent for teacher education. He has the total responsibility for administering the teacher education policies approved by the Vice President for Academic Affairs and President of the University.

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 of Teacher Education 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 not maintaining the teacher education program's retention standards. He will notify the students who are not meeting the retention requirements 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 education 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, after he has completed 53 semester hours of course work, including the courses, Education 201, Foundation of Education, and Psychology 242, Human Growth and Learning.
2. With his application, there should be attached reports showing that the student has:
   a. Made a score of 16 on the ACT Test when he enrolled as a freshman or passed the STEP and English Test or after failing one or both of these tests has passed the designated course or courses with the accepted percentile.
      NOTE: Students have to fail the test(s) two times before being permitted to take the designated course or courses.
   b. Passed departmental tests in oral and written expression.
   c. Has a good character and personality rating.
   d. Has an absence of uncorrectable physical and emotional handicaps deemed by the Teacher Education Council as being of major importance.

Candidates who are not approved for admission to Teacher Education 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: Education 301, 387, 491, Psychology 312, and all methods courses.

RETENTION

To remain in the teacher education program the student must:

1. Maintain the University scholarship standards.

2. During the second semester of the junior year (minumum of 85 semester hours) the candidate shall take the Teacher Education Examination. The student must show acceptable performances on the test before being admitted to do student teaching.

A student who fails the examination two times may meet this requirement by taking and passing the designated course with a grade of B.

A student who has a continuous cumulative average of 3.00 or better in the second semester or his-her freshman year and the first semester of his-her junior year will be exempted from taking the Teacher Education Examination.

3. Make application for student teaching through the teacher education curricula heads to the Coordinator of Student Teaching in the first semester of the senior year (minimum of 85 semester hours). With the application reports should be attached documentation to show that the student has:

Met all Teacher Education requirements to date.

Completed the prescribed prerequisite professional education courses and ¾ of the prescribed courses in his major area of specialization and obtained not less than a grade of C in all methods courses.

Obtained a minimum grade point average of 2.25 in the designated courses in his major area of specialization and obtained not less than a grade of C in all methods courses.

Participated in the Public School Field Experience.

Passed a physical examination showing that he is free of any communicable diseases.

4. All students are required to carry a maximum of 15 semester hours, 6 in method courses, and 9 in student teaching during the semester in which they do student teaching. The student must obtain a grade point average of 2.00 or better. Students are not permitted to do student teaching in the community in which they live. Students who are awarded a grade of D in student teaching may graduate from the University but will not be recommended for certification.

Students have to pass the Teacher Education Examination or the designated course the semester before they apply for student teaching. Example: Students who pass the test or course the second semester of the junior year may make application the first semester of the senior year to do student teaching the second semester of their senior year. This is necessary because the student is placed to do student teaching in the middle of the semester preceding the semester he-she actually does his-her student teaching.

ALTERNATIVES TO THE EXAMINATION REQUIREMENTS FOR THE TEACHER EDUCATION PROGRAM

Students who fail the required tests, after taking the tests two times, may enroll in the following courses to meet the examination

requirements for the Teacher Education Program.

Education 203. **Basic Elements in Education.** (3 hrs.) An in-depth study of the relationship of mathematics, the natural sciences, social sciences and English to education. (For students in Teacher Education who failed the STEP test.)

English 201. **Problems in Communication.** (3 hrs.) A course concerned with the application of the skills of communication. Available to students who desire training beyond the 6 required hours in Freshmen English. (For students in Teacher Education who failed the English Examination.)

Education 470. **Educational Seminar.** (3 hrs.) A study of the foundation and history of education, curriculum development in education, methods of teaching and present trends in education. (For students in Teacher Education who failed the Teacher Education Examination.)

Students Must Make A Passing Grade Of B Or More.

THE PUBLIC SCHOOL FIELD EXPERIENCE

The prospective student teacher is expected to participate in the Public School Field Experience. The Public School Field Experience provides opportunities for the student to serve as an assistant staff member in a school of his choice near his home after the University closes its academic year. This experience, which lasts for two or three weeks, helps the prospective teacher to find out what teaching is like. It often helps him to answer some personal questions about his career choice. In addition to providing beginning preparations for later participation experiences and for student teaching, it also helps students acquire background for their professional courses. In fact, it is the strand of experience which often gives real meaning to other components of the program. Each student will be given guide sheets and assigned to a school. He is to return the guide sheet and his log book to the Director of Preservice Field Experiences after having had the Public School Field Experience.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN TEACHER EDUCATION PROGRAM

	Maximum Sem. Hrs.
GENERAL EDUCATION CORE	35
COMMUNICATION	6 Sem. Hrs.
-English 101-102	
HUMANITIES	10 Sem. Hrs.
-Literature (6 Sem. Hrs.)	
-Art, Music (4 Sem. Hrs.)	
SOCIAL STUDIES	9 Sem. Hrs.
-History 201-202 (6 Sem. Hrs.)	
-Geography, economics, sociology, political science, or anthropology (3 Sem. Hrs.)	

NATURAL SCIENCES AND MATHEMATICS..... 10 Sem. Hrs.
- Biological Science, Physical Science, or a combination of these. (6 Sem. Hrs.)
- Mathematics (4 Sem. Hrs.)

HEALTH, PHYSICAL EDUCATION, PERSONAL EDUCATION, AND HOME AND FAMILY LIVING.. 6-7 Sem. Hrs.
- 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 Hrs.
Education	201	History and Foundations of Education	3
"	301	School Organization, Management and Community Relations	3
"	321	Methods and Materials in Mathematics	3
"	387	Curriculum Development	3
"	465	Introduction to Special Education	3
Psychology	242	Human Growth and Learning	3
"	312	Measurement, Evaluation and Guidance Classroom Teachers	3

Semester Block

First Half

Education	322	Methods and Materials in Language Arts and Social Studies	3
"	324	Teaching of Reading in the Elementary School	3

Second Half

Education	472	Directed Teaching	9
		Total	36

B. Secondary Majors

Education	201	History and Foundations of Education	3
"	301	School Organization, Management and Community Relations	3
"	387	Curriculum Development	3
"	465	Introduction to Special Education	3
Psychology	242	Human Growth and Learning	3
"	312	Measurement, Evaluation and Guidance for Classroom Teachers	3

ACADEMIC SCHOOLS

ACADEMIC PROFILE

SCHOOLS	MAJORS OFFERED	DEGREES OFFERED
AGRICULTURE AND HOME ECONOMICS	Animal Science	BS
	Home Economics	BS
	Home Economics Education	BS
	Plant Science	BS
	Rural Development	BS
ALLIED HEALTH PROFESSIONS	Dental Hygiene	AS, BS
	Health Care Administration and Planning	AS, BS
	Medical Technology	BS
	Nursing	AS
ARTS AND SCIENCES	Biochemistry	BS
	Biology	BA, BS
	Chemistry	BS
	English	BA, BS
	French	BA
	History	BA, BS
	Mathematics	BA, BS
	Political Science	BA, BS
	Social Welfare	BS
	Sociology	BA, BS
	Spanish	BA
	Speech and Drama	BA, BS
	Speech Pathology and Audiology	BS
BUSINESS	Business Administration	BS
	Business Education	BS
	Clerical Occupations	2-Yr. Certificate
	Office Administration	BS
	Stenographic Occupations	2-Yr. Certificate
EDUCATION	Art Education	BS
	Criminal Justice	BS
	Early Childhood Education	AS, BS
	Elementary Education	BS
	Health Education	BS
	Health and Physical Education	BS

	Music	BA
	Music Education	BS
	Psychology	BA, BS
	Recreation	BS
ENGINEERING AND TECHNOLOGY	Architectural Engineering	BS
	Civil Engineering	BS
	Electrical Engineering	BS
	General Engineering	BS
	Industrial Arts Education	BS
	Industrial Technology	BS
	Mechanical Engineering	BS
	Technical Aeronautics	BS
	Transportation Services and Technology	BS
GRADUATE SCHOOL	Administration and Supervision	MED, MAED, ED.S.
	Adult Education	MED, MAED
	Agricultural Science	MS
	Biology	MA, MS
	Business Education	MED,
	Chemistry	MS
	Curriculum and Instruction	EDS
	Elementary Education	MED, MAED
	English	MA
	French	MA
	Guidance and Counseling	MS, MED
	Health and Physical Education	MAED, MED
	History	MA, MS
	Home Economics Education	MED, MAED
	Industrial Education	MED, MAED
	Music	MA
	Music Education	MED, MAED, MS
	Psychology	MS
	Recreation	MS
	Secondary School Instruction	MED, MAED
	Spanish	MA
	Special Education	MED, MAED
	Speech and Drama	MA, MS

THE SCHOOL OF AGRICULTURE AND HOME ECONOMICS

THE SCHOOL OF AGRICULTURE & HOME ECONOMICS
DAVID A. HAMILTON, D.Ed., Dean

The school recognizes the value of well organized educational and research programs in agriculture and home economics and to meet the challenges of the 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 resources as well as 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 prepare them for various career opportunities or for further studies leading to advanced degrees.

The curricula in the school provide for four general areas of specialization. Whenever it is considered advantageous, students may select courses from disciplines other than their major fields of specialization. This can be accomplished by selecting appropriate courses in consultation with the faculty adviser assigned to the student.

CURRICULA

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

ANIMAL SCIENCE
- Pre-Veterinary Medicine Option

PLANT SCIENCE
- Agronomy Option
- Horticulture Option

HOME ECONOMICS EDUCATION

HOME ECONOMICS
- Child Development & Family Relationships Option
- Clothing & Textiles Option
- Foods & Nutrition Option

DEPARTMENT OF ANIMAL SCIENCE
DR. NORMAN (Head), DR. FENDERSON, DR. KARI

The Department of Animal Science offers a Curriculum of courses designed to (1) give instruction in the principles of (a) livestock production, management, sanitation, health, and (b) processing and caring for animal products, and (2) to prepare students to enter schools of Veterinary Medicine.

A major in Animal Science is offered leading to the degree of Bachelor of Science. 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 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 Animal Science must complete a minimum of 18 semester hours in the department. Work leading to the degree of Master of Science is offered.

Employment opportunities are available in the following areas: Meat Inspection, Livestock and Poultry Inspection, Dairy Plant Management, Research, Marketing, Extension Services and Livestock Management.

Student financial aid is available through the following sources: College Work Aid, Supplemental Educational Opportunity Grant, Basic Educational Opportunity Grant, National Direct Student Loan and College Work-Study.

CURRICULUM FOR MAJOR IN ANIMAL SCIENCE

FRESHMAN YEAR	Credit Hours Fall	Spring
AG 111	1	
AEG 102		3
ART 133; MUS 131	2	2
AH 101; PLS 102	3	3
ENG 101, 102	3	3
MATH 111	4	
PE or AFROTC	1	1
POS 221	3	
Elective (100 level)		3
	17	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
HIST 201, 202	3	3
ENG 211, 212	3	3
CHM 121, 122	3	3
PH 201, 202	3	3
MCRB 250; HORT 202	3	3
PE or AFROTC	1	1
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
CHM 360, PH 302	5	3
AH 321, AH 302	3	3
AH 313, AH 322	3	3
RD 301, 302	3	3
PLS 300-400	3	3
Elective		3
	17	18

SENIOR YEAR	Credit Hours Fall	Spring
AH 311, 323	3	3
ENG 301, 302	2	2
AH 401, 402	3	3
AH 421, 422	1	1
BCHM 341, 342	5	5
AH 450	3	
Elective (300-400 level)		3
	17	17

Pre-Veterinary Medicine

Students interested in Veterinary Medicine should, in addition to the courses listed in Animal Science curriculum, elect the following courses:

Physics - 8 semester hours
Zoology - 10 semester hours
Embryology - 3 semester hours
Physiology of Reproduction - 3 semester hours
Poultry Husbandry 303 - 3 semester hours
Poultry Husbandry 403 - 3 semester hours
Poultry Husbandry 422 - 3 semester hours

ANIMAL HUSBANDRY (AH)

AH 101. Introductory Animal Husbandry. (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.

AH 211. Introduction to the Care and Riding of 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.

AH 302. Livestock Management. (3) Nutrient requirements for farm animals, livestock feeds, nutrient contents, and factors affecting value, management, marketing procedures and practices.

AH 311. Feeds and Feeding. (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.

AH 313. Diseases and Parasites. (3) A study of the causes, symptoms, and treatment of general diseases and parasites of livestock and poultry with special emphasis on sanitation. Prerequisite: Biology 241. Two lectures and one laboratory period.

AH 321. Swine Production. (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.

AH 322. Beef Cattle Production. (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. Performance testing and S-10 Beef Cattle Programs. Two lectures and one laboratory period.

AH 323. Evaluation and Judging Dairy Products. (3) Composition, use, market grades, methods of storage and factors affecting keeping quality of dairy products, judging, scoring, and placing dairy product in accordance with their values.

AH 401. Market Milk. (3) A study of the procurement, processing and sale of milk and the bacteriological, chemical and physical aspects of market milk processing. Prerequisite: AH 301. Two lectures and one laboratory period.

AH 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.

AH 403. Dairy Farm Operations. (3) A study of general farm operation, adaption 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. Prerequisites: Animal Husbandry 311. Two lectures and one laboratory period.

AH 421-22. Seminar. (2) 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.

AH 450. Senior Project. (3) Required of all Animal Husbandry majors.

AH 451. Physiology of 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; ovulation, gestation, parturition, lactation, fertility, sterility and artificial insemination.

POULTRY HUSBANDRY (PH)

PH 201. Principles of Poultry Production. (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.

PH 202. Principles and Practices of Incubation and Brooding. (3) Designed to give the environmental factors affecting incubation, embryo development, operation of incubators, and methods of brooding. Required of majors in Agriculture. Two lectures and one laboratory period.

PH 302. 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.

PH 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.

PH 403. Poultry Hygiene and Sanitation (3) Designed to give the major principles underlying sanitation and disease prevention as applied to the poultry farm. Two lectures and one laboratory period.

PH 422. Poultry Nutrition and Feeding. (3) Designed to give the students the major principles of poultry nutrition, including required nutrition by poultry and means of supplying these nutrients under practical feeding conditions. Poultry feedstuffs, ration formulation, and feeding practices considered. Two lectures and one laboratory period.

DEPARTMENT OF PLANT SCIENCE

DR. McALPIN (Head), DR. DUSEJA (Part Time), MR. HOLMES, MR. LITTLE.

The Department is designed primarily to acquaint students with the principles of Plant Science. The curriculums are arranged to give students a broad knowledge of Agronomic and Horticultural Sciences and the conservation of the renewable natural resources.

Two undergraduate curriculums are offered with majors in Plant Science and Horticulture Education. A student seeking a major in either of these disciplines will structure his program in accordance with that curriculum.

A major may be pursued in either area of concentration leading to the degree of Bachelor of Science. Not less than 24 semester hours must be completed in the curriculum of the student's choice with a minimum of 10 semester hours in 300 and 400 level courses.

Graduate students may pursue studies in Plant Science leading to the Master of Science degree in Agricultural Science. A description of these requirements is found under the Graduate School bulletin.

CURRICULUM FOR A MAJOR IN PLANT SCIENCE

FRESHMAN YEAR	Credit Hours Fall	Spring
AG 111, AEG 102	1	3
MUS 131, ART 133	2	2
ENG 101, 102	3	3
MATH 111, 112	4	3
HIST 201, 202	3	3
PE or AFROTC	1	1
AGR 102, AH 101	3	3
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
AGR 210, AGR 202	3	4
HRT 200, 201	3	3
CHM 121, 122	4	4
RD 201, HRT 202	3	3
ENG 211, 213	3	3
PE or AFROTC	1	1
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
ENG 321, POS 211	3	3
AGR 301, HRT 340	3	3
RD 301, 302	3	3
SCI 121, 122	4	4
AGR 321, 322	3	3
AGR 302, 411	2	1
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
AGR 311, AH 311	3	3
AGR 401, 402	4	4
HRT 401, 402	3	3
BCHM 301, ENG 323	5	3
AGR 450, AH 403	3	3
AGR 412		1
	18	17

CURRICULUM FOR TEACHER EDUCATION IN HORTICULTURE

All freshman and sophomore students take courses outlined in the General Agricultural Curriculum for freshmen and sophomores. Students may concentrate on either Ornamental Horticulture and Floriculture or Olericulture and Pomology.

ORNAMENTAL HORTICULTURE AND FLORICULTURE

JUNIOR	Semester Hours Credit	
Name of Course	I	II
Horticulture 200		3
Education 201	3	
Psychology 242	3	
Horticulture 201	3	
Political Science 221	3	
Horticulture 202	3	
Horticulture 340		3
Education 371		3
Horticulture 352		3
Horticulture 360		3
Psychology 312		3
Total	15	18

SENIOR	Semester Hours Credit	
Name of Course	I	II
Horticulture 400	3	
Education 463		3
Horticulture 451	3	
Education 472 (AGED)	3	
Psychology 463		3
Horticulture 450		3
Agri. Education 450	3	
Horticulture 452		3
Education 371	3	
Education 387		3
Total	15	15

Students interested in Horticulture should elect: Horticulture 372, 450 and 451 for Agronomy 320, 321, and 322.

Students interested in Agronomy should elect Physics 211, 213 and Geology 351 for Agronomy 320, 321, and 322.

Students interested in Cooperative Education should elect Special Problem courses 480—PLS 480.

Students interested in Soil Conservation must take a minimum of 15 semester hours in soils. They may elect Agronomy 302.

Students interested in Bee Keeping may elect to take API 400.

DEPARTMENT OF PLANT SCIENCE

AGRONOMY

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 nature resources. Two lectures and one laboratory period per week.

AGR 202. Soil Science. (4) A study of the origin, structure, general nature of soils and the factors related to soil fertility, maintenance, and fertilizer practices. Three lectures and on laboratory period.

AGR 210. General Agricultural Botany. (4) Designed to provide a broad understanding of the fundamental facts and principles of botanical sciences. 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 adsorption, transpiration and nutrition. Two lectures and one laboratory period.

AGR 301. Crop Science. (3) A general study of the distribution, culture, use and climatic adaptation of the major agronomic crop plants. Three 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 Soil Classification. (3) 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 Entomolgy. (3) Provides a brief review of the structure, morphology, controls and the recognition of economic insects as related to agriculture. One lecture and two laboratory periods.

AGR 321. Farm Weed 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 lectures 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 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 dealing with the determination of nutrient deficiencies in soils and plants by rapid methods, and recommendations of corrective measures. Prerequisites: AGR 202, CHM 361, BCHM 312. Two lectures and two laboratory periods.

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 and orchard plants. Two lectures and one laboratory period.

HRT 202. 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 seedage, 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, streamflow 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 and practices involved in the production of flowers and ornamental plants. Two lectures and one laboratory period.

HRT 401. Growth, Development and Processing of Fruits. (3) A study of breeding procedures in establishing new strains and varieties of fruits, and the processing and grading of fruits for the market. Two lectures and one laboratory period.

HRT 402. Growth, Development and Processing of Vegetables. (3) a study of breeding procedures in establishing new strains and varieties of vegetables and the processing and grading of vegetables for the market.

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 the essentials of flower arrangement. One lecture and two laboratory periods.

HRT 452. Urban and Off-Farm Agriculture. (3) A study involving nursery establishment and management, flower and shrub production and marketing. Two lectures and one laboratory period.

API 400. Bee Keeping. (3) A course involved in Bee establishment and management.

PLS 480. Special Problems. (3-8) A course designed to give students experiences in the various endeavors of Plant Science, including working in Industry.

DEPARTMENT OF RURAL DEVELOPMENT

DR. TELWAR (Head), DR. BAGI, MR. BUTLER, MR. COMER, MR. DERDEN, DR. EDWARDS (Part-Time), DR. FISCUS, DR. HAMILTON, DR. SINGH.

The Department of Rural Development offers major programs leading to the degree of Bachelor of Science in Rural Development with two options: (1) Rural Economics and Community Resource Development, and (2) Agricultural Education.

The major objective of the Department is to provide broad applied training for people who wish employment working with rural people. The curriculum in Rural Development provides for a liberal, interdisciplinary education about rural affairs coupled with training of a problem-solving nature or in teacher education for secondary school vocational agriculture teachers. Students in the department are expected to select course work in applied economics, sociology, communications and selected technical areas in addition to the standard University requirements for graduation. However, because of the training goals of the department, individual students plan their curriculum in advisory session 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 Stablization and Conservation Service, and the Statistical Reporting 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

FRESHMEN	Credit Hours Fall	Spring	SOPHOMORE	Credit Hours Fall	Spring
RD 111, AEG 102	1	3	Sci 121, 122	3	3
RD 201, 202	3	3	Eng 211, 212	3	3
Math 111	4	4	Hist 201, 202	3	3
Eng 101, 102	3	3	RD 301, 302	3	3
Art 133, Mus 131	2	2	PE or AFROTC	1	1
PE or AFROTC	1	1	Electives	3	3
Electives	6	—		16	16
	16	16			
	Total 32 hours			Total 32 hours	

JUNIOR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
AEG 301, 302	3	3	RD 402		3
RD 303, 304	3	3	RD 403, AEG 400	3	3
Electives (300-400)	12	12	RD 450		3
	18	18	Electives (300-400)	15	6
				18	15
	Total 36 hours			Total 33 hours	

Additional elective courses required for a major in Rural Development according to optional areas of concentration.

Option I—Rural Economic and Community Resource Development

RD 200, 311, 312, 401, 404
Eco 211, 212, 302

Option II—Agricultural Education

ED 201, 301, 387, 472-0
Psy 242, 312, 462
AED 301, 302, 472

Option I, II—Technical Areas

AH 101, 211, 302
PH 201, 202
PLS 102, 301, 320
HRT 200, 201

COURSE OFFERINGS

RURAL DEVELOPMENT (RD)

RD 111. Orientation. (1) Careers in rural Development.

RD 200. Mathematical Foundations for Statistics. A survey of elementary methods of handling data used in Economics and Statistics. The course will include some basic Algebra and simple measures of dispersion and of central tendency. Methods of presenting data in tabular form will be discussed.

RD 201-202. Introduction to Rural Economics. (6) Application of principles and methods of Economics to the rural economy with an emphasis on Agriculture including the organizations, management, marketing, and finance of rural enterprises, an evaluation of politics, programs and institutions.

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) Organization planning and operating farm business to make 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 numbers, and summarization techniques. Prerequisite: Nine hours of college math.

RD 312. Sample Survey Theory and Techniques. (3) A practical course in conducting, analyzing, and summarizing simple 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. 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 of forces of changes most pertinent to community organization and problems in development or 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 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 (Ag Ed)

Ag Ed 301. Organizing Agricultural Programs for Rural Groups. (3) The primary objective of the course is to thoroughly acquaint the student with the nature of adult learning and with proven methods of organizing and implementing educational programs for adult groups and individuals. The dynamic group action will be considered and application made to determine the most effective methods and techinques for assisting adults in solving problems in agriculture and community living.

Ag Ed 302. Methods of Teaching and Management in Vocational Agriculture. (3) This course acquaints the student with the work of the teacher of vocational agriculture and prepares him for his observation and student teaching. It deals with the selection of teaching methods, preparation of lesson plans, planning, supervised practice programs. Activities, making records and reports, securing and organizing teaching aids, and selecting and procuring library, laboratory, office and class room equipment and the promotion of the vocational agriculture and F.F.A. programs.

Ag Ed 472. Student Teaching in Agricultural Education. (10) A course designed to familiarize and give experience to prospective teachers of Vocational Agriculture in all phases of the program.

AGRICULTURAL ENGINEERING (Ag Eng)

Ag Eng 102. Agricultural Engineering. (3) The fundamental principles of agricultural engineering dealing with skill, judgment and resourcefulness in the areas of farmshop

work, farm power machinery, farm buildings, rural electrification, and soil and water management. One lecture and two laboratory periods.

Ag Eng 301. Farm Mechanics. (3) The repair, operation and construction of tillage, seeding, and harvesting machinery, and such service implements as wagons, manure spreaders, and fertilizer distributors. A part of this course includes a study of the construction, operation, and servicing of gas engines and tractors in the laboratory. One lecture—two laboratory periods.

Ag Eng 302. Planning Low Cost Housing. (3) Determining the functional requirements of farm houses for given situations, size and arrangements of rooms, location and size of doors, windows, electrical outlets and water supply. Planning principles, materials and finishes. Emphasis on low cost housing as provided for in the Federal Housing Act, especially for home economics, business administration and agriculture students who expect to teach or become affiliated with the Agriculture Extension Service or the Farmers Home Administration. One lecture—two laboratory periods.

Ag Eng 400. Special Problems. (3) A student chooses a problem requiring laboratory or field work with special research. Offered during any semester. Prerequisite: Approval of department heads. One lecture—two laboratory periods.

Ag Eng 401. Farm Buildings, Equipment and Conveniences. (3) Elementary scale drawing and plan reading, farmstead layout, operation and maintenance of electric equipment; functional requirements of farm houses, shelters, and storages; water systems; septic tanks and sewage disposal; heating, cooling, etc. One lecture—two laboratory periods.

DEPARTMENT OF HOME ECONOMICS

DR. GREER (Head), MRS. FRANKLIN, MRS. HARRIS, DR. HEARNE, DR. JOHNSON, DR. KENNEDY, MISS McDOWELL, MRS. McKINNEY, DR. OZGENER, MISS REDMOND, MRS. TOWNS.

The Department of Home Economics directs its instructional program toward the understanding of man and his relationship to and responsibility for his physical, social, and psychological environment. Specifically, home economics emphasizes the following: (1) the development of sound and internally consistent professional beliefs about life in the context of contemporary society; (2) the intelligent use of resources in solving personal and family problems; (3) the preparation of students for a professional role in home economics; (4) the development of human, affective, and wholesome social relationships; and (5) the enrichment of general and cultural education. Knowledge from the natural and social sciences, the humanities, and the arts are incorporated in the exploration and solution of contemporary problems facing individuals as consumers, family members, and citizens.

Home economics is housed in a new modern structure, the Walter S. Davis Complex, completed in 1970 with four levels of well-equipped classrooms and laboratories for both graduate and under-

graduate work. The Home Management Residence, a separate one-family type structure, is designed to provide opportunities for practical experiences in the analyses of consumer and family living decisions.

The department is fully accredited by the American Home Economics Association, Council for Professional Development.

STUDENT ORGANIZATIONS

Student Member Section of the American Home Economics Association is a professional organization open to all students majoring in home economics regardless of major concentration interest. Membership is expected of all students. Other professional organizations within the department include the Dietetic Club, open and expected of Foods and Nutrition majors, and the Beta Sigma Chapter of Kappa Omicron Phi, National Home Economics Honor Society, open to all home economics majors who have attained the scholastic and other requirements necessary for membership.

CURRICULA

The department offers two major fields incorporating four programs leading to a Bachelor of Science degree. The major fields of study are (1) Home Economics Education, designed for those who wish to teach, and (2) Home Economics, which provides three options for concentration: (1) Child Development and Family Relationships; (2) Clothing and Textiles, or (3) Foods and Nutrition.

A variety of program possibilities can be explored by students within the department and with other programs. Election of a minor field is encouraged.

MINOR ECONOMICS EDUCATION

A major in Home Economics Education prepares for the achievement of competencies important to teaching in programs of Consumer and Homemaking Education and Occupational Home Economics as well as to positions in Extension Service, Adult Education, and related areas. The curriculum in Home Economics Education meets the requirements set up by the Tennessee Board of Vocational Education for teaching home economics, and it qualifies graduates to teach vocational home economics under the requirements of the National Vocational Education Acts. Home economics education majors under departmental supervision follow the admission and retention program in Teacher Education.

CURRICULUM FOR A MAJOR IN HOME ECONOMICS EDUCATION

FRESHMAN YEAR	Credit Hours Fall	Spring
Eng 101-102	3	3
Hist 201-202	3	3
Math 111, Chm 121	4	4
PE or AFROTC	1	1
HEC 101, RA 201	1	2
Clo 111, Fds 111	3	3
	15	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 211-212	3	3
Zoo 201, HEED 312	4	3
Clo 211, Psy 242	3	3
Fds 223, Ntr 211	3	3
Ed 201, *Soc Sci Elective	3	
PE or AFROTC	1	1
	17	16

JUNIOR YEAR	Credit Hours Fall	Spring
Chm 360, Clo 321	5	3
HEED 387, *HEED Elective	3	3
Ed 301		3
CDFR 351, *CDFR Elective	3	3
HMgt 321, Psy 312	3	3
Ntr 311 or *Ntr Elective	2	
RA 323, Phil 323	2	2
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
Home Mgt 433	3	
Ed 465	3	
CDFR 463	3	
HEED 371		3
HEED 450	3	
HEED 472		9
*Electives	6	3
	18	15

*Electives should be chosen with approval of major adviser.

Home Economics Education majors who also desire certification with occupational endorsement may elect from three endorsements: (1) Option I—Food Management, Production, and Service; (2) Option II—Clothing Management, Production, and Service; or (3) Option III—Care and Guidance of Children.

Occupational Endorsement (select one) 12-15

Option I—Food Management, Production, and Service 13-14

- HEED 443 (2) or 543 3
- HEED 460 2
- FDS 313-412 6
- FDS 452 3

Option II—Clothing Management, Production, and Service 12-15

- HEED 443 (2) or 543 3
- HEED 459 2
- Clo 401 and/or 403 2-5
- Clo Elective 3
- Clo 322 2

Option III—Care and Guidance of Children ... 12-13

- HEED 443 (2) or 543 3
- HEED 458 2
- Child Dev. 332 2
- Child Dev. 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 leaders of Girl Scouts programs. An additional focus offers academic and practical experiences centered around the developmental tasks of young children and is designed in cooperation with Elementary Education. Students desiring teacher certification in public school kindergartens and elementary schools will take additional education courses to meet certification requirements.

HOME ECONOMICS (Child Development and Family Relationships Concentration)

FRESHMAN YEAR	Credit Hours Fall	Spring
Eng 101-102	3	3
Art 133 or Mus 131		2
PE or AFROTC	1	1
Math 111		4
Sci 121-122	3	3
CDFR 101	3	
Clo 111, RA 201	3	2
HEC 101	1	
	14	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 211-212	3	3
Hist 201-202	3	3
PE or AFROTC	1	1
Zoo 201, Ntr 211	4	3
Ed 201, Psy 242	3	3
CDFR 201-332	3	2
Clo 211		3
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
HMgt 321-322 (or 433)*	3	3
CDFR 351-353	3	2
CDFR 352-452	3	3
Ntr 433, CDFR 460	2	3
Ed 301	3	
Psy 311 or 312*		3
Soc 211		3
Electives	3	
	17	17

SENIOR YEAR	Credit Hours Fall	Spring
CDFR 461-462	3	3
CDFR 463-450	3	3
CDFR 464-466**	3	9
Electives	8	
	17	15

Students with a concentration in Child Development and Family Relationships who desire to teach in the public schools should elect a minor in Home Economics Education. (Follow Teacher Education Program.)

*Child Development with Home Economics Education Minor

Courses Required		Credit Hrs.
HEED	312	3
HEED	387	3
HEED	371	3
HEED	472	9
ED	465	3
ED	491	3
FDS	111	3
CLO	Elective	3

*Elect Psy 312 rather than 311 and HMgt 433 rather than 322.
**Elect HEED 472—9 credit hours.

HOME ECONOMICS (Clothing and Textile Concentration)

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.

FRESHMAN YEAR	Credit Hours Fall	Spring
Eng 101-102	3	3
Clo 111-112	3	2
Math 111-112	4	3
HEC 101		1
FDS 111, RA 201	3	2
Art 133		2
PE or AFROTC	1	1
Hist 201-202	3	3
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 211-212	3	3
Clo 203-211	2	3
Psy 201-202	3	3
PE or AFROTC	1	1
*FR 101-102 or 201-202	4	4
Chm 121-122 or other Sci.	4	4
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
Clo 300-302	3	3
CDFR 351	3	
HMgt 321	3	
Phil 323 or Humanities		2
Ntr 211		3
Eng 301		3
RA 301		2
POS 221 or Soc. Sci.	3	
SPCH 210 or 220	3	
**Electives (300-400)	2	3
	17	16

SENIOR YEAR	Credit Hours Fall	Spring
Clo 321-403	3	3
Clo 450	3	
RA 323-421	2	3
CDFR 463	3	
BA 326-328	3	3
HMgt 322	3	
**Electives		9
	17	18

*If high school record does not show 2 years of foreign language.
**Electives should be chosen with approval of the advisor. Students interested in retailing and merchandise should, in addition to the courses listed in the clothing and textiles curriculum, elect from the following courses: Clothing 312, 320, 401, 413; Business Adm. 329, 330, 331, 335, 431; English 302.

HOME ECONOMICS (Foods and Nutrition Concentration)

A Major in Home Economics with concentration in Foods and Nutrition is designed to develop (1) a sound, basic up-to-date knowledge in the fields of foods and nutrition, (2) the ability to interpret basic facts and apply sound judgment in the translation of these to actual situations, and (3) to develop the skills 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.

FRESHMAN YEAR	Credit Hours Fall	Spring
Eng 101-102	3	3
Hist 201-202	3	3
Math 111-112	4	3
Foods 111-223	3	3
HEC 101, RA 201	1	2
PE or AFROTC	1	1
	15	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 211-212	3	3
Chem 121-122	4	4
Psy 242, Soc 211	3	3
Zoo 201, Ntr 211	4	3
Econ 211, Clo 111	3	3
PE or AFROTC	1	1
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
Ntr 311, Fds 311	3	3
BA 301	3	
Chem 360, BChm 320	5	5
CDFR 351, Eng 301 or Elec	3	3
MCRB 250, Phil 323	4	2
Elective (300 level)		4
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
FDS 412	3	
FDS 313* or 321	3	
FDS 452* or 352	3	
Ntr 450	3	
Ntr 411	3	
HMgt 433		3
Ntr 453		3
BA 423		3
HEED 371		3
Electives (300-400 level)		5
	15	17

*Required of students for dietetic programs.

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 from the following: (1) Option I—Related Art Minor; (2) Option II—Interior Design Emphasis; or (3) Option III—Costume Design Emphasis.

Option I—Related Art Minor

Courses Required	CREDIT HRS.
Art 121	3
Clo 203	2
RA 301	2
Art 241	3
RA 323	2
RA 350	2
RA 411	2
RA 421	3

Option II—Related Art Minor ..... Costume Design Emphasis

Courses Required	CREDIT HRS.
PE 313	2
Art 121	3
Art 122	3
Clo 312	2
Clo 320	2
Clo 413	2
RA 350	2
RA 411	2
*Electives	6

Option III—Related Art Minor ..... Interior Design Emphasis

Courses Required	CREDIT HRS.
RA 323	2
AE 201	2
Clo 203	2
RA 301	2
IA 353	2
RA 421	3
RA 411	2
HMgt 320	3
*RA Electives	5

*See Related Art Advisor.

HOME ECONOMICS EDUCATION (HEED)

HEED 101. Home Economics as a Profession. (1) An orientation course required of all home economics majors. Designed to acquaint student with home economics professions and to the life of the University. Special emphasis is placed on the philosophy and legislation 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 to the Vocational Education Acts. Three lectures.

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. (1) A critical analysis of personal and academic problems related to teacher preparation will be undertaken. Course is designed for individual and group projects focused on recent research findings and general depth in subject matter.

HEED 373. Home-School-Community Programs in Vocational Home Economics. (2) Course is based on interpretations and requirements of federal, state, and local regulations in relation to vocational home economics. Topics include the home experience program, extension service, home visitation, family counseling, leadership in Future Homemakers of America and American Home Economics organizations. Opportunities are provided for participation in field trips, demonstrations, individual and community projects. Two lectures.

HEED 387. Problems of the Curriculum and Teaching. (3) A study of the reorganization, construction, and administration of the home economics curriculum 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. Three lectures.

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 preoccupational home economics education; (2) the identification and application of research in problem solving; and (3) decision-making concepts applied to program design and implementation. Three lectures.

HEED 450. Senior Project Writing. (3) Designed to give students opportunity to select and develop problems of their choice in the area of home economics. A requirement for graduation.

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 Experience 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 Experience and Internship in Food Management, Production, and Service. (2) Supervised experiences are provided for internship in actual work experiences in industry. Course includes class seminars.

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 will be studied in relation to methods and materials effective in group work. Finding of latest research and educational media such as radio and television will be emphasized. Three lectures.

HEED 472. Observation and Student Teaching Economics. (9) Experiences of supervised observation and teaching in the public schools of Tennessee are 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 historic 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 474. Honors Home Economics Education. (3) Individual directed study and investigation based on Theoretical Principles, Philosophy, and Research in Home Economics Education.

CHILD DEVELOPMENT AND FAMILY RELATIONSHIPS (CDFR)

CDFR 101. Freshman Practicum. (3) A study of staff roles in a varity 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 an aide functioning in a variety of roles.

CDFR 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.

CDFR 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 materials for the young child. Related activities and experiences with various old and new materials, and correlation of contemporary trends in Art Education. Observation and participation in the nursery school or kindergarten.

CDFR 351. The Young Child and His Family. (3) A contemporary based modularized course of instruction designed to familiarize students with the basics 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 student. 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.

CDFR 352. Nursery School Observation. (3) Observation in nursery school along with course 351. Required only of students concentrating in CD and FR.

CDFR 353. Infant Clinic. (3) Observation and participation at Meharry Medical College and the infant laboratory.

CDFR 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.

CDFR 450. Senior Project Writing. (3) A requirement of the University to be taken by every major in the department.

CDFR 452. Child Practicum. (3) A practicum in programs for young children in the Nashville community and the campus Early Learning Centers where students as externs apply theories covered in courses 351-352.

CDFR 460. Nursery School and Kindergartens Methods. (3) Includes methods, materials and modern trends in teaching in the nursery school and kindergarten. Organization, equipment and housing are studied in relation to the development of children at these levels.

CDFR 461. Early Childhood Education Curriculum I. (3) A study of individual differences among children and theories of child development. Students will learn to write behavioral objectives for early education programs.

CDFR 462. Early Childhood Education Curriculum II. Students will study a variety of early childhood education programs, and will be involved in constructing and evaluating curricula in a workshop situation.

CDFR 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.

CDFR 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: CDFR 351.

CDFR 466. Internship or Fieldwork in Child Development. (5) 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 CD and FR.

CDFR 467. Honors Child Development and Family Relationships. (3) An intensive investigation of a special area in Child Development or Family Relationships. Opened to advanced juniors and seniors showing special ability in CDFR and to students enrolled in the University Honors Program.

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 textile and apparel industry in relation to end-use.

CLT 112. Cultural and Functional Concepts of Clothing and Textiles. (2) An interdisciplinary study of clothing including cultural patterns, behavioral interactions, changing needs, technological developments and acquisition of clothing.

CLT 203. History of Costume. (2) The history of costume from ancient times to the present and the influnce 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: Clothing 112.

CLT 302. Clothing of the Family. (3) A study of the physiological, psychological and aesthetic aspects 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. (2) Features the application of decorative design in clothing construction, pattern adaptation, and originality. Prerequisite: Related Art 203. One lecture and one laboratory.

CLT 320. Needlepoint. (2) 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. (2) 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. (2) Special problems in the details of clothing construction, selection and textiles selected and solved by the students. Also problems met in student teaching reviewed. Newer trends in clothing construction emphasized. Prerequisites: Clothing 211, 212. Two lectures.

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. (2) 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. Prerequisite: Clo. 321. One lecture and two laboratory periods.

CLT 450. Senior Project Writing. (3) Directed research in a relevant problem in clothing and textiles. Special attention is given to related publications. (With or without credit.)

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

FOODS (FDS)

FDS 111. Basic Foods. (3) A study of the composition of foods and the physical and chemical changes affecting quality, acceptability, and aesthetics. This includes study of the selection, preparation, and preservation of foods, and the application of the principles of food sanitation to laboratory procedures. One lecture and two laboratory periods.

FDS 223. Meal Management. (3) The planning, preparation and service of nutritious, attractive meals at various cost levels for various occasions with emphasis on the conservation of time, energy and money.

FDS 311. Experimental Foods. (3) Designed to offer opportunity for independent

laboratory work in the solving of practical problems in food preparation, and experience in scoring and standardizing experimental work.

FDS 312. Experimental Foods. (3) Opportunity is provided for advanced individual study in experimental foods. Prerequisite: Foods 311.

FDS 313. Institution Equipment. (3) Includes study of the kinds, selection, care, cost, and maintenance of individual pieces of equipment and their use, and labor saving devices in food service oranizations.

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 foods and the use of related equipment as applied to the needs of extension, business, classroom and community teaching. One lecture and two laboratory periods.

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. It also includes menu analyses, the development of standardized recipes, schedules and standardized recipes, schedules and standardized work procedures.

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 311. Applied Dietetics. (2) The fundamental principles of human nutrition as related to the construction of practical dietaries and the application of these principles to the feeding of individuals, families and groups.

NTR 312. Nutrition for Elementary and Secondary Teachers. (3) A general course in nutrition and its relation to health. Includes a study of the essential nutrients, their sources, and how the body uses them; nutritional needs of different age levels throughout the life cycle; need for nutrition education and some of the methods of teaching nutrition at the elementary and secondary school level. Open to other students.

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

NTR 433. Child Nutrition. (2) The study of nutrition as it relates to children from prenatal life through adolescence. Prerequisite: Nutrition 211.

NTR 450. Project Writing in Foods and Nutrition. (3) Instructs the student in techniques of professional writing, literature searching, and abstracting scientific material. Designed to assist each senior project. To be taken in the first semester of the senior year.

NTR 453. Diet Therapy. (3) Designed to study the modifications of the normal diet in

the treatment of disease. Prerequisites: Nutrition 211, 311. Two lectures and one laboratory.

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

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 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. Prerequisites: Home Management 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.

RELATED ART (RA)

RA 201. Environmental Design. (2) 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. (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. General Prerequisites: Related Art 201 and Clothing 211. Prerequisites for Clothing majors: Related Art 201, Clothing 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) Designed 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 contemporaty techniques.

RA 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: Related Art 201 and 323. Lab-Lecture.

THE SCHOOL OF ALLIED HEALTH PROFESSIONS

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 overall goal of the school is to bring together the resources of the two institutions for the purpose of providing undergraduate education and specialized training for students who plan to pursue careers in health care delivery systems. The school presently offers programs in the following areas:

Dental Hygiene
Health Care Administration and Planning
Medical Technology
Nursing Education

These programs are designed to assist students to become prepared for employment in their respective fields of the Allied Health Professions.

Upon completion of either the Associate of Science 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 awarded 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 Associate of Arts Degree upon graduates from the Nursing Program.

DIVISION OF DENTAL HYGIENE
MRS. CHANDLER (Head), MRS. ALBRIDGE, MISS HENRY
MRS. JACKSON, MISS MEYER, MRS. MORRIS

The Dental Hygiene Program prepares graduates to perform as an integral part of the dental health team. Graduates are prepared to provide preventive and therapeutic services under the supervision of a dentist.

Graduates of the Associate of Science degree program are educated to function primarily within the dental office, hospital, and clinic. Specifically, a graduate with the Associate of Science degree will be able to function as an assistant in four-handed dentistry; polish restorations and scale, plane and polish teeth; apply topical agents; provide guidance to patients on diet and personal and plaque

control; manage patients with early signs of periodontal disease and function as a supervisor of other dental auxiliaries in dental offices and clinics.

It is anticipated that a Bachelor of Science Degree Program in Dental Hygiene will be implemented during the 1977-78 academic school year.

The dental hygienist graduating from the bachelor of science degree program will be qualified to perform the same duties as the associate of science degree dental hygienist. In addition, this graduate will be able to supervise other dental hygienists, perform extended duties in periodontics, use techniques of behavior management, manage patients with oral inflammation, teach in public schools, teach in dental hygiene programs, and function as part of the community health care delivery system.

The baccalaureate degree may serve as a foundation for further study or as a supplement to previous study.

The dental hygiene program is accredited by the Commission on Accreditation of Dental and Dental Auxiliary Education Programs. Graduates are eligible to take the National Board Dental Hygiene Examination and Board examinations in all states and regions in which the graduate may wish to practice.

APPLICATIONS: Application forms for admission may be obtained from the Office of Admissions and Records. All communications regarding admissions should be addressed to the Office of Admissions and Records.

All transcripts and other materials must be on file in the Office of Admissions and Records before applications are processed. Students wishing to apply for admission to the freshman class, which begins in the fall semester, should have all application materials on file by May 15.

Students are accepted for advanced standing and transfer credits are granted. Requests for transfer credits and/or advanced standing are evaluated by the Department.

ADMISSION REQUIREMENTS: Applicants must meet the general admission requirements for the University. Additional requirements to be considered are:

1. A high school average of 2.5 and above on a 4.0 scale
2. One year of high school biology
3. One semester of high school chemistry
4. A personal interview
5. Certification of good health status
6. Two letters of recommendation from science teachers assessing the applicant's potential for success in the dental hygiene curriculum and one character recommendation.

If the applicant has had a long period of absence from an academic program, reference from employers, counselors or other community

leaders, who know the applicant well, may substitute for references from science teachers.

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 materials will be evaluated by the Committee on Admissions of the Division of Dental Hygiene. Dental hygiene applicants will be informed of their acceptance or rejection by the Chairman of the Committee on Admissions. Each candidate who presents minimum requirements is evaluated competitively and is accepted, placed on the alternate list or rejected on the basis of relative qualifications.

Should an applicant fail to meet minimum requirements for entrance into the dental hygiene program but shows potential as a dental hygienist, the Dental Hygiene Admissions Committee will advise the applicant of mechanisms for meeting the requirements and the procedure for re-applying.

A non-refundable deposit of $25.00, which will apply toward the purchase of laboratory coats and caps, 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 admissions already in force.

ADMISSIONS 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 dental hygiene program from which the applicant is withdrawing.
5. If the interval since attendance at dental hygiene has exceeded two years, the applicant shall be required to take examinations as the Committee on Admissions or the Committee on Curriculum recommends.
6. If any deficiencies exist, disposition may require:
   a. validation of credits by certain department chairmen
   b. examination in any of the subjects presented for transfer
   c. completion of certain courses not common to all dental hygiene curricula

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 of the Division of Dental Hygiene may be directed by the Faculty Executive Committee of Meharry Medical College to audit one or more courses.

DEGREE REQUIREMENTS: Students seeking the associate of science degree must complete the curriculum outlined below for the Freshman Year, Summer Session, and the Sophomore Year.

Students seeking the bachelor of science degree must complete the full four-year curriculum and must also complete Mathematics 111 in addition to the courses of the baccalaureate program.

CURRICULUM IN DENTAL HYGIENE

FRESHMAN YEAR	Credit Hours	
COURSES	Fall	Spring
English 101, 102	3	3
Zoology 201, 202	4	4
DH 101	5	
DH 102		6
DH 103		2
DH 104		3
DH 110	4	
DH 115	1	
	17	18

SOPHOMORE YEAR	Credit Hours	
COURSES	Fall	Spring
Speech 220		3
Sociology 211		3
Bacteriology 240	4	
Psychology 201		3
DH 201	6	
DH 202		6
DH 204, 205	2	2
DH 210	3	
DH 211		2
DH 212	2	
DH 215	3	
	20	19

SUMMER SESSION

DH 105	3
Nutrition	2
	5

NOTE: Students opting for a baccalaureate degree are advised to elect Math. 111 before the third year of study.

Associates degree students without high school credits in American History are required to obtain credits prior to graduation—preferably before entering Dental Hygiene or before the second year of study.

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 Faculty Executive Committee and to the Board of Trustees.

RE-ADMISSION: Applications for re-admission must be made to the Office of Admissions and Records and must be 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.

ACADEMIC REGULATIONS: 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 with the exception that the "D" grade is not awarded for any dental hygiene nor prerequisite courses.

3. Recommendation for advancement is 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 to the Meharry Medical College Faculty Executive Committee concerning promotions and the disposition to be made of students who encounter difficulty in their studies. Recognition is also given for superior work.

4. Citations for outstanding performance originate with the Evaluation Committee. Generally, a qualifying student is one who has uniformly done outstanding work during the particular semester.

5. Appeal from the decision of the Faculty Executive Committee is a student's privilege. A letter of appeal is addressed to the Chairman of the Faculty Executive Committee at Meharry Medical College. Although faculty members may be sought for advice, an appeal to a faculty member to intervene makes the action of the Faculty Executive Committee irrevocable.

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.

PROGRAM FACILITIES: A completely, newly renovated dental hygiene clinic, laboratory and classroom areas are maintained in Clement Hall. Students are also assigned to various clinics within the School of Dentistry at Meharry Medical College as well as to health centers and other off-campus facilities.

Dental Hygiene students are entitled to participate in all extra curricular activities of both Meharry Medical College and Tennessee State University. Students have compiete assess to facilities on both campuses, e.g., libraries, inter-library loans from Vanderbilt University School of Medicine Library and other libraries within the Metropolitan Nashville Area made possibie through the Public Service Department of the Meharry Library.

PRIZES AND AWARDS: Regular students are given preference for prizes and awards. Consideration shall be on an individual basis and exceptions may be made in the cases of irregular and special students who have done outstanding work.

The Dental Hygiene Director's Award: Awarded to the graduating student who has exhibited the greatest proficiency and interest in dental health education during his/her senior year.

The Hu-Friedy Award: Awarded to the outstanding dental hygiene student in theoretical and clinical dental hygiene.

The Codesco Award: Awarded to the graduating student having the highest general average for the entire course in dental hygiene.

The Sigma Phi Alpha Dental Hygiene Honor Society Award: Awarded to the electee of Omicron Chapter with the highest scholastic average.

The Olympic Trophy Company Award: Awarded to the graduating dental hygiene student who has rendered the highest quality of direct patient care services, above and beyond stated minimum criteria.

The Tennessee Dental Hygienists' Association Award: Awarded to the graduating dental hygiene student who in the opinion of her peers best epitomizes the professional dental hygienist.

The Sigma Phi Alpha Award: Presented to the second year student, who, in the opinion of the members of Omicron Chapter, exhibits the greatest promise as a professional dental hygienist.

COURSE OFFERINGS

Courses which do not bear a "DH" prefix are described elsewhere in the catalogue. DH 101, 102, 201 and 202 are team taught courses with content representing several disciplines. Students are required to perform satisfactorily in each specified content area within the combined courses before progressing to subsequent courses, e.g., unit in Dental Radiography, in DH 102, must be completed satisfactorily in order for the student to progress to DH 201.

DH 101. Dental Hygiene. An introduction to basic concepts, methods, materials and techniques of dental hygiene care, including interpersonal and intraprofessional relationships, instrumentation, obtaining and recording medical and dental histories, learning and teaching preventive concepts, cariology and typical fluoride techniques, tissue response to injury, prevention of disease transmission, utilization of basic diagnostic aids, i.e., blood pressure clotting time, heart beat, pulse, dental auxiliary utilization and ethics. 3 class hours, 2 laboratory hours; 5 credit hours.

DH 102. Dental Hygiene. A topical approach to general dentistry and specialty practice with particular emphasis on the role of auxiliaries, dental roentgenology and fundamentals of radiation hygiene, dental materials and their manipulation, dental auxiliary utilization (DAU) continued application of theoretical knowledge and clinical procedures to patient care. Pre-requisites: DH 101, DH 110, and Zoology 201. Zoology 202 is taken concurrently. 3 class hours, 3 clinical hours; 6 credit hours.

DH 103. Dental Hygiene. An introduction to periodontics with emphasis on recognition of gingival and periodontal problems, their probable cause, treatment and prevention; basic first aid procedures, advanced techniques of patient education and continued application of theoretical principles to clincial dental hygiene. Pre-requisites: DH 101 and Zoology 201. DH 102 and Zoology 202 to be taken concurrently. 2 class hours; 2 credit hours.

DH 104. Myofunctional Therapy. Designed to teach the first year dental hygiene students and dental residents the basic knowledge and skills in myofunctional therapy in order to be able to recognize (or diagnose), examine, label, plan and carry out appropriate myofunctional therapy procedures under the supervision of the Myofunctional Team. The course also emphasizes basic knowledge of anatomy and physiology of the head and neck, basic aspects of speech and communication and behavior change strategies. Pre-requisites: DH 101 and Zoology 201. Zoology 202 and DH 102 are taken concurrently. 3 class hours; 3 credit hours.

DH 105. Expanded Periodontics for the Dental Hygienist. 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, to apply and remove dressings and to administer local anesthetics in a laboratory setting. Prerequisite: DH 103. 1 class hour; 2 laboratory hours; 3 credit hours.

DH 115. Learning and Communication Paradigms. The module is an introduction to the content and processes of how to establish an effective professional helping relationship in dentistry. Emphasis is directed toward understanding how one can help people to learn, how learning and motivation are affected by the characteristics of the learner and the hygienist, and how to develop an effective interpersonal relationship in order to enhance the delivery of comprehensive quality dental care. The course aims to wed the methodologies of humanistic-encounter-group approaches and behavioral technology. 1 class hour; 1 credit hour.

DH 110. Anatomy and Physiology. Designed to instruct the student in gross and microscopic anatomy of the teeth, tissues and organs of the oral cavity and related structures; musculature, innervation and blood supply and bone structure; growth and development; function of salivary glands, a study of normal function. DH 101, and Zoology 201 to be taken concurrently. 3 class hours, 1 laboratory; 4 credit hours.

NTR 112. Nutrition. The study of nutrients needed for health functioning of human beings and the biochemical functions of these nutrients in the body; nutrient content of foods and its application to meal planning; special nutritional needs of infants, adolescents, pregnant women, nursing mothers and the elderly; world food problems. (Applied nutrition is given major consideration as a module in DH 201, e.g., dietary counseling for dental caries and periodontal diseases.) 2 class hours; 2 credit hours.

DH 201. Dental Hygiene. Hospital dentistry, dental office emergencies, pain control, applied nutrition for control and prevention of caries and periodontal diseases and continued application of theoretical principles to clinical dental hygiene are considered. Prerequisite: DH 105. 2 class hours; 4 clinic hours; 6 credit hours.

DH 202. Dental Hygiene. Exposes the student to ethics and jurisprudence; application of theoretical principles to clinical dental hygiene is continued. Prerequisite: DH 201. 2 class hours, 4 clinic hours; 6 credit hours.

DH 204. Clinical Practicum. Prerequisite: DH 104. 1 seminar hour, 1 clinic hour; 2 credit hours.

DH 205. Clinical Practicum and Seminar in Myofunctional Therapy. A continuation of DH 104. The student, under supervision of the Myofunctional Team, provides direct patient care in the screening, examination, data collection and reporting, diagnosing, and the rendering of therapeutic services to patients who exhibit signs and symptoms of inappropriate pressure habits. Prerequisite: DH 104. 1 seminar hour, 1 clinic hour; 2 credit hours.

DH 210. General and Oral Pathology. A study of disease and disease process; the oral manifestations of systematic disease; oral pathology with particular attention to oral cancer; cancer detection methods. Pre-requisites: DH 105 and Zoology 202. DH 201 and 212 to be taken concurrently. 3 class hours; 3 credit hours.

DH 211. Community Dentistry. A survey of private and community dental health services including neighborhood health centers, health maintenance organizations, nursing homes, hospitals, clinics; the interaction of federal, state and local agencies; dental needs and demands, manpower; dental epidemiology; socio-economic factors relating to dental care; dental health education in the schools; special programs; dental insurance. 2 class hours; 2 credit hours.

DH 212. Pharmacology. 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. Pre-requisites: Zoology 102 and DH 202. DH 202 and DH 210 to be taken concurrently. 2 class hours; 2 credit hours.

DH 215. Dental Health Education Seminar. An analysis of dental health education methods and materials; evaluation of pamphlets and other printed materials; students will design and produce dental health education materials that can be used in dental offices and other settings; techniques of behavioral modification are offered as a module. Pre-requisites: DH 201; DH 202 to be taken concurrently. 3 class hours; 3 credit hours.

FEES AND SERVICES

Complete information on Tennessee State University tuition and fees may be obtained from that section of the catalogue or the Business Office.

Special fees charged to dental hygiene students are listed below:

FIRST YEAR		SECOND YEAR	
Instruments	$250	Supplies	$ 25.00
Supplies	$100	Textbooks	$123.00
Textbooks	$158	Library Use (MMC)	$ 10.00
	$508		$158.00
MMC Library Use	$ 10	Library (Refundable	
MMC (Refundable) Library	$ 10	MMC)	$ 10.00
	$528		$168.00

In addition, students wishing to obtain health care at Meharry, the Meharry Medical College yearbook, and participate in Meharry Medical College activities will pay the appropriate fees.

Voluntary Withdrawal: Students who opt to withdraw from the Program or from the University are expected to complete an exit interview, with the Director or her designee, before severing relationships.

DIVISION OF HEALTH CARE ADMIMISTRATION AND PLANNING

DR. D. WATSON, Director, DR. WILSON, MR. G. McKINNEY, MS. S. SWYNE, MR. E. CAMPBELL, DR. NESER

General Information

In affliation 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 System. The curricular programs provided by the Division 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 applications of candidates who present the following qualifications:

1. Acceptance into Tennessee State University.

2. A grade point average of at least 2.0 on a 4 point scale. Consideration will be given to relevant life or 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 letter of recommendation.
4. Interview on campus or by out-of-town agency named by the Admissions Committee prior to the acceptance by the Admissions Committee.

Curriculum and Degrees

The Bachelor of Science degree at Tennessee State University provides instruction in health management, decision making and the health planning area. Emphasis is placed on those management and decision guides which lead to efficiency in supervisory positions. The Bachelor of Science degree is awarded after a student satisfactorily completes a minimum of 134 semester hours including one summer field placement. Tennessee State University will award the Associate of Science degree after satisfactory completion of 73 semester hours of requisite course work including one summer field placement. The curriculum is designed primarily to prepare the student to work in a health care setting, having acquired fundamental managerial concepts and skills. For the student who seeks to minor in Health Administration, twenty-six semester hours must be completed. The required courses are: HCA 201, 202, 210; ECON 211-212; ACC 211-212, and MG 331. Courses in the Division lead to certification by Meharry Medical College and are governed by the academic policies of the institution. Majors and minors in the division of Health Care Administration and Planning must meet the general academic requirements of the University (TSU) and the certifying requirements of Meharry Medical College.

CURRICULUM FOR MAJOR IN HEALTH CARE ADMINISTRATION AND PLANNING (BACHELOR OF SCIENCE DEGREE)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3	ENG 211-212	3	3
P.E. or AFROTC	1	1	P.E. or AFROTC	1	1
HIST 201-202	3	3	ECON 211-212	3	3
MATH 111-112	4	3	HCA 201-202	3	3
SCI 121-122	4	4	HCA 210		3
SPCH 230		3	SOC 211-GPA 221	3	3
	15	17	MG 300	3	
				16	16

JUNIOR YEAR	Credit Hours Fall	Spring
ACC 211-212	4	4
MG 331	3	
GPA 381		3
HCA 310-320	3	3
HCA 330	3	
HCA 390	3	
PHIL 323		2
SOC 320		3
HCA Elective		3
	16	18

SENIOR YEAR	Credit Hours Fall	Spring
MS 311	3	
HCA 420-HCA 460	3	3
SOC 460	3	
HCA 490		3
HCA 410	3	
Electives (HCA, MG, MS)	3	9
	15	15

Summer (after junior year)
HCA 400 6

Total Hours 134

ASSOCIATE OF SCIENCE DEGREE PROGRAM

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
PE or AFROTC	1	1
HIST 201-202	3	3
MATH 111-112	4	3
HCA 201-202	3	3
SPCH 230	3	
SOC		3
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
PE or AFROTC	1	1
HCA 210-230	3	3
ECON 211-12	3	3
ACCTG 211-12	4	4
MG 331		3
HCA 420	3	
	17	17

Summer (after Sophomore Year)
HCA 400 6

Total Hours 73

DEPARTMENT OF NURSING

MRS. GOODING (Head), MRS. CLARK, MRS. FLEMING, MRS. JAMES, MRS. JORDAN, MRS. MAYO, MRS. RAWLS, MRS. SHARPE, MRS. SMITH, MRS. URBANEK, MRS. VANEVEREN.

The nursing program at Tennessee State University leads to the associate of science degree (A.S.) and is designed for two years of study. The Nursing Education Department is an integral part of the School of Allied Health Professions, and nursing students are encouraged to take advantage of all the educational and cultural opportunities available in the university setting. The nursing program is fully accredited by the National League for Nursing, and approved by the Tennessee State Board of Nursing. Graduates of Tennessee State University's nursing program are now practicing as registered nurses

in the various health agencies throughout the world, as well as in various areas in the United States.

To be admitted to the nursing program, applicants must first be accepted by the University on or before May 1st of the admitting year. High School prerequisites include one unit of Chemistry and one unit of Biology. The Nursing Admission Committee utilizes the following data for screening applicants:

1. Achievement on the American College Test (ACT)
2. Rank in high school
3. Achievement on a pre-nursing examination
4. Achievement in college-level course work (if the applicant has been enrolled in a college or university).
5. Recommendation from faculty interviews
6. Health status

To progress in the nursing sequence, a nursing student must achieve a minimum of "C" in each nursing course, receive a satisfactory rating in the clinical evaluation (hospital practice), and maintain a cumulative grade point average of 2.0. Nursing courses may not be repeated without the recommendation of the Nursing Academic Standards Committee.

The nursing courses emphasize principles of health care in order to help the student adapt to a constantly changing field of practice. Each nursing course includes lectures and planned activities in a learning laboratory utilizing a variety of health agencies.

Upon successful completion of the required program, the university awards an Associate of Science degree, and the graduate is eligible to take the State Board Test Pool Examination for licensure (R.N.).

CURRICULUM IN NURSING

FRESHMAN YEAR	Credit Hours			
	Fall	Spring	Summer I	Summer II
ZOO 201, 202	4	4		
ENG 101, 102	3			3
SOC 211		3		
NTR 211	3			
PSY 351 or CDFR 351A		3		
NURS 111, 112, 121, 122	6	7	4	3
	16	17	4	6

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
MCRB 250	4	
NURS 211, 212	9	9
NURS 220		1
Electives	3	3
	16	13

Total Program Requirements
Nursing—38 hours
Others —31 hours

Department of Nursing Education
Course Offerings
Nursing (NURS)

Level I—Fall Term, First Year

NURS 111. Fundamentals of Nursing (6). The course is designed to introduce, through selected learning experiences, the concepts that form the basis for nursing assessment and intervention. The concepts include the nurse and health care system; the normal physiological functioning of body system, the psychological needs of the adult and child and interpersonal components of nursing care. Prerequisite or Co-requisite: Zool 201 and Eng. 101.

Level II—Spring Term, First Year

NURS 112. Basic Medical-Surgical Nursing I (7). Nursing care of patients with short-term commonly occurring major health problems. The course focuses on the physiological and psychological responses of the adult and child with specific problems related to the digestive, hormonal, reproductive, and musculoskeletal systems. Prerequisite: NURS 111, Zool 201. Prerequisite or Corequisite: Zool 202, Psy 351, or CDFR 351.

Level II—Summer I Term, First Year

NURS 121. Basic Medical-Surgical Nursing II (4). Nursing care of patients with short-term commonly occurring major health problems. The course focuses on the physiological and psychological responses of the adult and child with specific problems related to the circulatory, respiratory, and genitourinary systems. Prerequisite: NURS 112. Prerequisite or Corequisite: Sociology 211.

Level II—Summer II Term, First Year

NURS 122. Family-centered Nursing (3). Nursing care of the mother and infant during the maternity cycle utilizing the family health concept. Besides the normal aspects of paternal and infant care, the course includes those complicating situations that require application of the principles of basic medical-surgical nursing. Prerequisite: NURS 121.

Level III—Fall Term, Second Year

NURS 211. Advanced Nursing I (9). Nursing care of the adult and child with long-term illnesses, (Psychiatric and Aged); critical conditions, (complex cardio-pulmonary and renal); and complex locomotive disturbances (muskuloskeletal and neuromuscular). Prerequisite: NURS 121.

NURS 212. Advanced Nursing II (9). Nursing care of the adult and child in situations requiring the multidisciplinary approach and continuity of care. The course includes the care of the ambulatory patient, emergency and disaster nursing, communicable diseases, and the care of the patient with cancer. Prerequisites: MCRB 250 and NURS 211.

NURS 220. 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. Corequisite with NURS 212.

CURRICULUM IN MEDICAL TECHNOLOGY

Leading to a Bachelor of Science Degree in Medical Technology and a Certificate in Medical Technology

Tennessee State University has affiliations with the Vanderbilt-Veterans Administration School of Medical Technology and the School of Medical Technology of Hubbard Hospital, Meharry Medical

College for the purpose of participation in their medical technology programs. This curriculum consists of a three-year designated program at Tennessee State University and the fourth year consists of the 12-month medical technology program at either the Vanderbilt-V.A. School of Medical Technology or the School of Medical Technology of Hubbard Hospital, Meharry Medical College. Successful completion of the joint four year program results in a Bachelor of Science Degree in Medical Technology, to be granted by Tennessee State University, and a Certificate of Medical Technology to be granted by Vanderbilt-V.A. School of Medical Technology or the School of Medical Technology of Meharry Medical College contingent to acceptance in either one of these institutions.

PROGRAM FOR MEDICAL TECHNOLOGY
(First Three Years at Tennessee State University)

FRESHMAN YEAR	Semester Hours Fall	Spring
BIO 111-12	4	4
CHM 121-22	3	3
CHM 121L-22L	1	1
ENG 101-2	3	3
MATH 111-12	3	3
PHIL, MUS, ART, DRAMA (Combination of any two courses)	2	2
PE or AFROTC	1	1
	17	17

SOPHOMORE YEAR	Semester Hours Fall	Spring
ENG 201-2	3	3
CHM 311-12	3	3
CHM 311L-12L	2	2
PHYS 211-12	4	4
HIST 201-2	3	3
PE or AFROTC	1	1
	16	16

JUNIOR YEAR	Semester Hours Fall	Spring
CHM 310	3	
CHM 310L	2	
MCRB 240		5
BCHM 341-42	3	3
BCHM 341L-342L	2	2
Social Sciences 300-400	3	
MCRB 410	4	
MCRB 420		4
	17	14

SUMMARY OF FIRST THREE YEARS

Total Semester Hours	97
Basic Science	62
General Education	35

Students who plan to pursue graduate study should take one year of German or French.

MEDICAL TECHNOLOGY COURSES AT THE SCHOOL OF MEDICAL TECHNOLOGY, MEHARRY MEDICAL COLLEGE

Clinical Biochemistry
Hematology
Clinical Microscopy
Instrumentation Lab
Bacteriology
Serology
Blood Bank
Parasitology
Media, non print management
Pulmonary Function
Orientation
Basic Techniques Lab
Radio-immuno Assay

MEDICAL TECHNOLOGY COURSES AT VANDERBILT-VETERANS ADMINISTRATION SCHOOL OF MEDICAL TECHNOLOGY

Bacteriology
Biochemistry
Blood Bank
Coagulation
EKG
Hematology
Histology
Parasitology
Radioisotopes
Red Cross
Serology
Urinalysis

DEPARTMENT OF HEALTH CARE ADMINISTRATION

COURSE OFFERINGS

Health Care Administration (HCA)

HCA 201. (3) Introduction to Health Care Organization. Provides an overview of the American Health Care System, with emphasis on acquaintance with the many varied aspects of the entire field, including terminology, facilities, placements, and people. The subject areas include a history of the development of American Health Care System, a descriptive analysis of the various levels of health care delivery and the patient care system, exposure of financing of health, and an introduction to governmental involvement in the health care system.

HCA 202. (3) Introduction to Health Care Organization. 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 programs. Prerequisite: HCA 201.

HCA 210. (3) Approaches to Planning in Health Care. The principal theories and methodologies of the planning discipline will be studied via lectures, readings, case studies, and guest lecturers. 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 or post graduate study in planning. Prerequisites: HCA 201, 202.

HCA 310. (3) Health Economics. 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 benefits-cost analysis, national health insurance plans, and governmental intrusions. The economics of the present health care system will also be analyzed in its relation to the poor and minorities. Prerequisites: HCA 201, HCA 202, Econ. 211, Econ. 212.

HCA 320. (3) Consumer Health and Facilities Law. Introduction to the specifics of health related legislation and programs, and the implications for providers and consumers of health care. The legal principles and issues for medical caseworkers, along with liability and health care facilities and staff for injuries to patients, and abuses of 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, GPA 221.

HCA 330. (3) Sociology of Health. 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. Prerequisites: HCA 201, 202, Soc. 211/121.

HCA 350. (3) Cultural-Social Aspects of Health Care. 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, HCA 202.

HCA 390. (3) Communication and Technical Writing. The special requirements and techniques for the professional report will be examined along with 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. (6) Field Placement. The internship is designed to give the student direct experience in various health care settings. The experiential 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, long-term care facility, intermediate care facility, group practice, medical program, volunteer agency mental health facility, or community agency. During the ten-week placement, the summer between the junior and senior year, students will be required to submit midterm and final reports to the Division. The field placement assignments are on a nation-wide basis. Prerequisite: Senior Standing.

HCA 410. (3) Seminar: Critical Health Issues. The objective 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 the gamut of issues, with particular attention being given to the issues facing minority health care delivery. Issues that will be investigated and discussed include: health care for the poor; rising cost of health care; medical specialization; legislative impact on health care for minorities; and voluntary and governmental health insurance.

HCA 420. (3) Health Care Management I. 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 to decision making; the establishment of management objectives and techniques; and the management of complex and normative organizations—will be discussed. Also, the different levels of administrative management will be discussed. Prerequisites: HCA 201, 202, 210 and 310.

HCA 430. (3) Epidemiology. The objective of this course is to acquaint students with epidemiology as a scientific discipline, and to facilitate students' understanding of the role of epidemiology in health services planning and administration. Emphasis will be placed on methods employed in current epidemiology, 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. (3) Environmental and Sanitary Health. 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 450. (3) Long-Term Care Administration. The administrative issue 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 relates to accessibility and availability of health services, and the aspects of administration in long-term care facilities. Prerequisites: HCA 201, 202, 420. Econ. 101-102/211-212 and Acctg. 211-212, Mgmt. 300-331.

HCA 490. (3) Health Administration and Research. 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 manageable research problem. Prerequisites: HCA 201, 202, MS 311/Mgmt. 202.

THE SCHOOL OF ARTS AND SCIENCES

SCHOOL OF ARTS AND SCIENCES
ROBERT J. HUDSON, PH. D., Dean

Purpose

The general purpose of the School of Arts and Sciences is twofold: liberal and technical. The courses which make up its curriculum are offered in the areas of Humanities, Natural Sciences and Social Sciences.

Because of the breadth and fundamental nature of its curriculum and the necessity to acquire a reasonable mastery of a single field of concentration, the School of Arts and Sciences provides a basic undergraduate education for those students planning (1) to enter the professions, (2) to continue in graduate study, or (3) to engage, upon graduation, in the gainful occupations of American life.

Through the School of Arts and Sciences, the University grants the Bachelor of Arts and Bachelor of Science degrees. The requirements for these degrees are satisfied normally in four years.

Types of Undergraduate Programs

Two types of undergraduate programs are offered, each leading to the Bachelor's degree. One program prepares the student for the teaching profession; the second program, for professions other than teaching.

The departments offering teacher certification curriculums are: Biology, Chemistry, Mathematics and Physics, Modern Foreign Languages, History and Geography, Government and Public Affairs, English, and Communication.

Several departments offer training for professions other than teaching. The purpose of these departments is to train students for successful performance as specialists in somewhat restricted fields of specialization.

DEPARTMENT OF BIOLOGICAL SCIENCES

DR. FREDERICK D. SMITH (Acting Head), DR. ADAMS, DR. CAMPBELL, MR. COLEMAN, MR. CUMMING, MRS. EXUM, DR. JOHNSON, DR. KAHLON, MR. KEAN, DR. KOMIVES, MRS. LANDERS, MRS. LANE, DR. MARTIN, DR. NARULA, MRS. SMITH, MRS. STRATTON, MR. WELLS (on leave), DR. WHITE, DR. WOOD, MRS. ADAMS; DR. RICHARD HOGG (Head).*

*On leave

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) premedicine or predentistry.

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 the Teacher Education emphasis with a major in Biology. Those desiring the professional emphasis should select the curriculum for professional emphasis in Zoology or the curriculum for a professional emphasis in Botany-Microbiology. The student must maintain a minimum grade point average of 2.25 in his major during his first two years, and must pass a departmental sophomore comprehensive examination over biological principles to be taken during the second semester of the sophomore year. (Students who do not meet these minimal requirements will be asked to repeat courses where they failed or received low grades in order to bring their GPA up to the minimum 2.25.) Upon successful completion of the first and second year, viz. a minimum grade point average of 2.25 and passing the departmental sophomore comprehensive test, the student is to proceed in his specific major emphasis area under the guidance of his major adviser at the beginning of the first semester of the junior year. Thereafter, the student is expected to maintain a minimum grade point average of 2.25 in his major.

No grade less than "C" in any major course will be accepted as credit toward meeting departmental requirements. The minimum number of hours required for graduation in each of the three curricula is as follows:

Teacher Education: 132 Semester Hours - (Minimum of 60 semester hours must be on the 300-400 level.) 33 semester hours are required in the major of which a minimum of 16 must be on the 300-400 level.

Professional Emphasis in Zoology: 138 semester hours. (Minimum of 60 semester hours must be on the 300-400 level.) 33 semester hours are required in the major of which a minimum of 16 must be on the 300-400 level. One year of German or French or equivalent. This requirement may also be met by passing a foreign language proficiency test for French or German.

Professional Emphasis in Botany-Microbiology: 138 semester hours. (Minimum of 60 semester hours must be on the 300-400 level.) 33 semester hours are required in the major of which a minimum of 16

must be on the 300-400 level. One year of German or French or equivalent. This requirement may also be met by passing a foreign language proficiency test for French or German.

A student may 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 major 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. All second semester seniors must register for and pass satisfactorily Biology 450 to be taken in lieu of Senior Project.

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. Any student desiring to be endorsed to teach biology must have the biology minor equivalent of 24 hours plus one year of general chemistry. No grade less than "C" in the minor will count toward meeting minor requirements of the Department of Biological Sciences.

CURRICULUM FOR A MAJOR IN BIOLOGY (Professional Emphasis in Zoology)

FRESHMAN YEAR	Credit Hours Fall	Spring
BIO 111-12	4	4
MATH 161-62	5	5
ENG 101-02	3	3
PE or AFROTC	1	1
HIST 201-02	3	3
MUS 131 or ART 121		2
BIO 101	1	
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
MCRB 240	4	
BOT 220		4
ENG 211-12	3	3
GER or FR 101-02	4	4
CHEM 121-22	4	4
BIO 250		0
PE or AFROTC	1	1
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
BIO 370	4	
ZOO 330		4
PHY 211-12	4	4
PSY 201	3	
SOC or HIST (300 Lev.)	3	3
Electives (300-400)		3
BIO Electives- ZOO 340, MCRB 310 BOT 420	4	4
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
ZOO 430	4	
ZOO 450	0	0
BIO 491 or 92	1	
CHEM 311-12	5	5
BIO 480		4
BIO Electives (300-400)	4	4
Electives (300-400) (include 2 credits in Humanities)	4	4
	18	17

CURRICULUM FOR A MAJOR IN BIOLOGY (Professional Emphasis in Botany and Microbiology)

FRESHMAN YEAR	Credit Hours Fall	Spring
BIO 111-12	4	4
MATH 161-62	5	5
ENG 101-02	3	3
PE or AFROTC	1	1
HIST 201-02	3	3
MUS 131 or ART 133		2
BIO 101	1	
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
MCRB 240	4	
BOT 220		4
ENG 211-12	3	3
GER or FR 101-102	4	4
CHEM 121-22	4	4
BIO 250	0	0
PE or AFROTC	1	1
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
BIO 370	4	4
MCRB 310		4
BOT 320		4
PHY 211-212	4	3
PSY 201		
SOC 360 or HIST (300 lev.)	3	
PHIL 301 or 323	2	3
Electives (300-400)	4	
		18
	17	

SENIOR YEAR	Credit Hours Fall	Spring
BOT 420	4	
MCRB 410		4
Electives (MCRB or BOT 300-400)	4	4
BIO 450	0	0
BIO 491-492	1	
CHEM 311-12	5	5
Electives (300-400)	4	4
	18	17

CURRICULUM FOR A MAJOR IN BIOLOGY (With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
BIOL 111-112	4	4
MTH 161-162	5	5
BIO 101	1	
PE or AFROTC	1	1
HIST 201-202	3	2
ENG 101-102	3	3
	17	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
MICRO 240	4	
BOT 220		4
CHEM 121-122	4	4
ENG 211-212	3	3
MUS 131	2	
ART 133		2
PE or AFROTC	1	1
BIO 250	0	0
ED 201		3
PSY 242	3	
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
BIO 370	4	
ZOO 340, MICRO 310 or BOT 420	4	4
PHYS 211-212	4	4
ED 301-387	3	3
PHIL 301 or 323		2
Elective (300 or 400) (Social Science)	3	
BIO Elective (300-400 Level)		4
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
BIO 450	0	0
ED 491		3
SCI ED 371		3
ED 472s		9
BIO 480	4	
PSY 312	3	
CHEM 360	5	
BIO 491 or 492	1	
HLTH (Elective) 300-400 Level	2	
	15	15

COMBINATION CURRICULA 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.

BIOLOGY-MEDICAL COMBINATION CORE

Leading to the Bachelor's Degree with a Major in Biology

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 Biologicial 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 the Curriculum for Professional Emphasis in Botany and Microbiology of the Upper Division of Biological Sciences.

The first three years at Tennessee State University include courses designed (1) to offer adequate training in the basic sciences and (2) to promote broad cultural development. The student is expected to meet the standards of the University and the Department of Biological Sciences.

The fourth year of the joint curriculum is offered to those students who are admitted to the Meharry Medical College. At the successful completion of the freshman year curriculum in the School of Medicine at the Meharry Medical College, the student makes application to Tennessee State University for the Bachelor of Arts or Science degree. Upon joint recommendation of the Meharry School of Medicine 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.

BIOLOGY-DENTAL COMBINATION CURRICULUM

Leading to the Bachelor's Degree with a Major in Biology

The first part of this joint curriculum is offered regularly enrolled students at Tennessee State University who are pursuing a Bachelor of Arts or Science curriculum with a major in the Biological Sciences.

The description of the first three years of this joint curriculum is the same as for the Biology-Medical combination curriculum (see above).

The fourth year of the joint curriculum is offered those students who are admitted to the Meharry School of Dentistry. At the successful completion of the freshman year curriculum in the School of Dentistry at the Meharry Medical College, the student makes application to the Tennessee State University for the Bachelor of Arts or Science degree. Upon joint recommendation of the Meharry School of Dentistry and the Tennessee State University, the student becomes a candidate for the Bachelor of Arts or Science degree. The degree is awarded by the Tennessee State University.

SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF BIOLOGICAL SCIENCES

COURSE OFFERINGS

BIOLOGY (BIO)

College Orientation 101. (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 111-12. 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 250. Sophomore Biology Review. (0) Required of all second semester sophomores. This course is a comprehensive review of basic biologic principles covers the first two (2) years in the major field. The course terminates in a comprehensive examination which must be passed prior to selecting the specific major.

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, 112 and Botany 220. Lecture: 2 credits; Laboratory: 2 credits.

BIO 440. Histology and Microtechnique. (4) Microscopic anatomy of the organ system and selected tissues of vertebrates and plants. Theory and methods of preparing tissues for microscopical examination. Lecture: 2 credits; Laboratory: 2 credits. Prerequisites: Biology 111-112 and Botany 220.

BIO 450. Senior Biology Review. (4) Required of all second semester seniors. This course involves a comprehensive review of biological principles, with emphasis in the major subject, culminating in a comprehensive examination. Required in lieu of the senior project.

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 reserach under the direction of a member of the Department Faculty.

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. Prerequistes: Biology 111, 112 and Botany 220. Lecture: 2 credits; Laboratory: 2 credits.

BIO 491-92. Biology Seminar. (2) 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. Prerequisite: 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 occuring in a typical green plant. Prerequisites: Botany 220 and General Chemistry 121, 122 or equivalents. Lecture: 2 credits; Laboratory: 2 credits.

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: 3 credits.

MICROBIOLOGY (MCRB)

MCRB 240. Principles of General Bacteriology. (4) This course is concerned with the isolation, identification, culture, nutrition, sterlization and chematherapeautic procedures employed in studying bacteria. Prerequisites: 1 year Animal Biology (111, 112) and 1 year General Chemistry (121, 122) or equivalents. Lecture: 2 credits; Laboratory: 2 credits.

MCRB 250. General Bacteriology. (3) 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 111 or Chemistry 121, 122. Lecture: 2 credits; Laboratory: 1 credit.

MCRB 310. Introduction to Microbial Physiology. (4) This course outlines some of the salient features in the physiology of microorganisms. Selected examples of the metabolism of carbohydrates, liquids 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.

MCRB 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 a contributing factor towards this interaction. Modern preventive methods will be emphasized. Prerequisite: Microbiology 240. Lecture: 2 credits; Laboratory: 2 credits.

MCRB 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.

ZOOLOGY (ZOO)

***ZOO 201-02. Human Anatomy and Physiology.** (4-4) The fundamentals of the structure, function and organization of the organ-systems of man. These courses should be taken in sequence. Lecture: 2 credits per semester. Laboratory: 2 credits per semester.

ZOO 330. Comparative Anatomy. (4) The comparative anatomy and evolution of the organ systems of chordate animals. Prerequisites: Biology 111, 112 or equivalents. 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 and Chemistry 121, 122 or equivalent. Lecture: 2 credits; Laboratory: 2 credits per semester.

*Zoo 201 prerequisite to Zoo 202..

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 or its equivalents. Lecture: 2 credits; Laboratory: 2 credits.

ZOO 430. Embryology. (4) A general consideration of gametogensis, fertilization and cleavage in animals and the early development of Echinoderms, Protochordates and selected vertebrates 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. Immugenic 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.

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.

ZOO 481-82. Contemporary Problems in Ecology. (3-3) An interdisciplinary course which presents some of the contemporary problems constituting our environmental crisis; the hazards comprising such problems and the complexity affecting their resolutions serve as the crux of the course. Three periods per week involving both classroom discussion and field work. Prerequisites: Biology 480 or consent of instructor.

SCIENCE (SCI) INTERDISCIPLINARY COURSES

SCI 121-22. Introduction to Bio-Physical Sciences. (4-4) 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 the living organisms. Lecture: 3 credits; Laboratory: 1 credit per semester.

SCI 481-482. Contemporary Problems in Ecology. (3-3) A study of some of the contemporary problems constituting our environmental crisis; the hazards comprising such problems; and the complexity affecting their resolutions.

DEPARTMENT OF CHEMISTRY

DR. HAYNES (Head), DR. BOND, DR. CHEN, DR. MANI, DR. PARIMI, MRS. PRATHER, MR. SENTER, DR. TORREY, MR. TYLER, MR. WOODBERRY.

The Department of Chemistry offers a Bachelor of Science degree in two major curriculums--chemistry and biochemistry. The chemistry curriculum is designed to provide for (1) a collegiate major in chemistry which qualitatively and quantitatively satisfies the criteria generally adopted by leading colleges and universities, (2) meanful and satisfactory service chemistry courses needed by other departments, and (3) preparation of prospective science teachers for secondary schools. A description of the biochemistry curriculum follows the outline of the chemistry curriculum.

Students who take the professional major in chemistry must begin their work during the freshman year, and should take the program stated below.

Program for the Professional Chemistry Major

A professional chemistry major consists of a minimum of 53 semester hours of chemistry, 32 of which must be in 300 and 400 level courses. These credits may be accumulated through pursuing the following courses.

Chemistry 181-182H	General	8 sem. hrs.
Chemistry 221-222	Organic	10 sem. hrs.
Chemistry 321-322	Physical	10 sem. hrs.
Chemistry 431-432	Analytical	10 sem. hrs.
Chemistry 450	Senior Project	2 sem. hrs.
Chemistry 410	Chemical Bibliography	2 sem. hrs.
Chemistry 491-492	Seminar	2 sem. hrs.
Chemistry 420	Inorganic	3 sem. hrs.
Chemistry	Electives	6 sem. hrs.
Total Hours Chemistry		53 sem. hrs.

For a minor in Chemistry

Chemistry 121-122	General	8 sem. hrs.
Chemistry 221-222	Organic	10 sem. hrs.
Chemistry 431-432	Analytical	10 sem. hrs.
Total Hours of Chemistry		28 sem. hrs.

CURRICULUM FOR A MAJOR IN CHEMISTRY (Professional Emphasis)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
Chem. 181-182	3	3	Chem. 221-222	3	3
Chem. 181L-182L	1	1	Chem. 221L-222L	2	2
Eng. 101-102	3	3	Math 261-262	5	5
Hist. 201-202	3	3	Ger. or Fr. 101-102	4	4
Math 161-162	5	5	Phys. 211-212	4	4
PE or AFROTC	1	1		18	18
	16	16			

JUNIOR YEAR	Credit Hours Fall	Spring
Chem. 321-322	3	3
Chem. 321L-322L	2	2
Ger. or Fr. 201-202	3	3
Soc. Sci. (300-400)	3	3
Humanities (Art 133 or Music 131)	2	
Eng. (300-400)	3	3
Chem. 410	2	
Elective (300-400)		3
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
Humanities (300-400)		2
Chem. 420	3	
Chem. 431-432	3	3
Chem. 431L-432L	2	2
Chem. 450	2	
Chem. Electives (300-400)	3	3
Chem. 491-492	1	1
Electives Math or Phys. (300-400)	3	6
	17	17

CURRICULUM FOR MAJOR IN CHEMISTRY (With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
HIST 201-202	3	3
CHM 181H-182H	3	3
CHM 181-182HL	1	1
MATH 161-162	5	5
PE or AFROTC	1	1
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
CHM 311-312	3	3
CHM 311-312L	2	2
GER or FR 101-102	4	4
ED 201, PSY 242	3	3
PE or AFROTC	1	1
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
ED 301, 463	3	2
GER or FR 201-202	3	3
CHM 321-322	3	3
CHM 321-322L	2	2
PHY 211-212	4	4
Humanities Electives (from two fields) 300-400 level	2	2
	17	17

SENIOR YEAR	Credit Hours Fall	Spring
CHM 491-492	1	1
CHM 450, 371	2	3
PSY 312, ED 491	3	3
ED 387, 472	3	9
SOC 300	3	
ED 465	3	
HLTH (300-400 level)	2	
	17	16

SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF CHEMISTRY

COURSE OFFERINGS

CHEMISTRY (CHM)

CHM 121-122. Introduction to Chemical Principles. (4-4) Lectures deal with the basic theories of Chemistry; atomic structure, kinetic theory, chemical stoichiometry, the chemical bond, oxidation-reduction solutions, chemical equilibrium. Examples may be drawn from all fields of Chemistry. Laboratory during the second semester is devoted to qualitative analysis including cation and anion analysis. A good mathematical background is necessary.

CHM 181H-182H. Introduction to Chemical Principles. (4-4) For chemistry majors and honor students only.

CHM 221-222. Organic Chemistry. (5-5) Chemistry 121-122 are prerequisites, with a minimum grade of "C" in each course. A systematic study of the source, physical properties, and chemical behavior of aliphatic, aromatic, and heterocyclic compounds of carbon. Three lectures and two three-hour laboratory periods.

CHM 311-312. Organic Chemistry - For Biology Majors. (5-5) Prerequistie: CHM 121-122.

CHM 321-322. Introduction to Physical Chemistry. (5-5) Prerequisites: MATH 261-262. PHYS 211-212, or permission of instructor. Properties of ideal and real gases, kinetic molecular theory of gases, chemical thermodynamics, statistical thermodynamics, chemical equilibrium, solutions of electrolytes and non-electrolytes, electrochemistry, liquid and solid states. For the second semester: Rate and mechanism of chemical reaction, introductory quantum mechanics, atomic and molecular structure, theory and nature of chemical bonding, molecular spectroscopy and phatochemistry. Three one-hour lecture and one four-hour laboratory period and one two-hour problem session a week.

CHM 360. Organic Chemistry Survey. (5) Chemistry 121-122 are prerequisites. 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 Health. Three lecture and one two-hour laboratory periods.

CHM 410. Chemical Bibliography. (2) Prerequisites: CHM 221-22, and a reading knowledge of German. 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. Two conferences a week.

CHM 420. Inorganic Chemistry. (3) Deals with the principles and modern theories of inorganic chemistry including atomic and molecular structure. Must have had or be taking CHM 321-322. Offered in 1972-73 and in alternative years during the Fall Semester. Three lectures per week. Required of all Chemistry majors. Open to other interested students with the consent of the Professor in charge of the course.

CHM 431-432. Analytical Chemistry. (5-5) A sequential course in Analytical Chemistry, principles and application of analytical instrumentation, quantitative electrical and optical methods of analysis. Prerequisites CHM 121-122, 221-222, 321-322, one year of college physics and must have had or be taking calculus. Students whose curriculum calls for analytical chemistry but who are not majoring in chemistry, should consult with the Professor in charge of the course.

CHM 450. Senior Project. (2)

CHM 460. Organic Qualitative Analysis. (5) Chemistry 221-222, and 410 are prerequsities. 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. Two lectures and two three-hour laboratory periods.

CHM 491-492. Chemistry Seminar. (1-1) Required of all seniors.

BIOCHEMISTRY (BCHM)

BCHM 310. Introductory Analytical Chemistry. (3) Deals with certain aspects of quantitative chemistry as applied to agricultural and food analysis. Prerequisites: CHM 121-22. Required of majors in plant science. Three lecture periods per week.

BCHM 310L. Introductory Analytical Chemistry Laboratory. (2) Prerequisites: CHM 121-22. Four hours per week.

BCHM 320. Physiological Chemistry. (3) Presents the fundamentals of human physiological chemistry. Required of majors in foods and nutrition. Prerequisites: CHM 360. Three lecture and recitation periods per week.

BCHM 320L. Physiological Chemistry Laboratory. (2) Prerequisities: CHM 360. Four hours per week.

BCHM 341-342. General Biochemistry. (3-3) A comprehensive study of the chemistry and biochemistry of carbohydrates, lipids, proteins, enzymes, vitamins and minerals important in the metabolism and nutrition of animals and plants. Required of biochemistry majors. Prerequisites: CHM 121-122, 221-222. Three lecture periods per week.

BCHM 341L-342L. General Biochemistry Laboratory. (2-2) Prerequisites: CHM 121-122, 221-222. Four hours per week.

BCHM 470. Biochemical Analysis. (3) Designed to familiarize the student with the principles and practices involved in the analysis of biological materials. Prerequisites: CHM 121-122 and 221-222; and BCHM 341-342. Three lecture periods per week.

BCHM 470L. Biochemical Analysis Laboratory. (2) Prerequistes: CHM 121-122, 221-222 and BCHM 341-342. Four hours per week.

BCHM 491-492. Seminar. (1-1) A discussion by the students of biochemical literature understandable on the senior level. One meeting per week.

BCHM 400. Senior Project in Biochemistry. (3) A special laboratory investigation is carried out under the direction of the instructor and the results are written up scientifically. Required of candidates for the bachelor's degree with a major in biochemistry. Hours arranged.

BIOCHEMISTRY CURRICULUM
ANDREW BOND, Ph. D., Coordinator

The curriculum in biochemistry has the following threefold objective: (1) to implement a program of training for students who wish to lay a foundation for graduate study in the field of biochemistry, medicine, veterinary medicine, molecular biology, agricultural chemistry of nutrition; (2) to prepare students for employment in laboratories in State and Federal Departments of Agriculture, hospitals, pharmaceutical and food processing companies and other industries that employ technically trained staffs for control research work; and (3) to offer courses for students in the several departments of the University, whose programs of study require such training.

A minimum of 36 hours must be completed in chemistry and biochemistry with a minimum of 12 hours in the 300 and 400 level courses.

CURRICULUM FOR A MAJOR IN BIOCHEMISTRY

FRESHMAN YEAR	Semester Hours Fall	Spring	SOPHOMORE YEAR	Semester Hours Fall	Spring
BIO 111-112	5	5	CHEM 221-222	3	3
CHEM 121-122	3	3	CHEM 221L-222L	2	2
CHEM 121L-122L	1	1	PHYS 221-222	4	4
ENG 101-102	3	3	ENG 201-202	3	3
MATH 111-112	3	3	HIST 201-202	3	3
PE or AFROTC	1	1	PE or AFROTC	1	1
	16	16		16	16

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Semester Hours Fall	Spring
ED 301, 463	3	2	CHEM 431-432	3	3
GER or FR 201-202	3	3	CHEM 431L-432L	2	2
CHM 321-322	3	3	BCHM 470	5	
CHM 321L-322L	2	2	BCHM 491-492	1	1
PHY 211-212	4	4	BCHM 400		3
Humanities Electives (from two fields) 300-400 level	2	2	Electives (300-400 level)	7	8
	17	17		17	17

DEPARTMENT OF COMMUNICATION

DR. WILLIAMS (Head), DR. ADAMS, MRS. BARACH, MR. BRADY, MRS. BROWN, MRS. CLARK, DR. COLLINS, MR. COX, MR. DeNEAL, MRS. GORDON, MRS. HOLT, DR. H. MITCHELL, DR. J. MITCHELL, MRS. MOSELY, DR. STICE, DR. STEWART.

The Department of Communication offers programs leading to the degrees of Bachelor of Arts and Bachelor of Science. There are two areas of concentration: (1) Speech Communication and Theatre and (2) Speech Pathology and Audiology. The program for a major in Speech Communication and Theatre offers the options of a concentration in speech communication, in theatre, or in a combination of the two. A minor in Speech Communication and Theatre is also offered.

The program for 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 20 semester hours in the professional core. For the Bachelor of Arts degree the additional requirement is 8 to 20 semester hours in a modern foreign language.

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 requirements for the Bachelor of Arts are an additional 20 semester hours in a modern foreign language.

A minor in Speech Communication and Theatre consists of 18 semester hours distributed as follows within each optional area:

Option I: Speech Communication

210 - Fundamentals of Speech Communication	3
220 - Public Speaking	
or	
230 - Business and Professional Speech Communication	3
320 - Argumentation and Debate	
or	
420 - Small Group Communication	3
354 - Oral Interpretation	3
360 - Radio and Television Production	3
322 - Advanced Public Speaking	
or	
301-302 - Elementary Journalism	3
Total	18

Option II: Theatre	
240 - Elementary Acting	3
301 - History of Drama I	3
341 - Children's Theatre	3
400 - Stage Design and Stagecraft	3
431 - Shakespeare	3
Elective	3
Total	18
Option III: Speech Communication and Theatre	
210 - Fundamentals of Speech Communication	3
354 - Oral Interpretation	3
360 - Radio and Television Production	3
240 - Elementary Acting	3
303 - Directing	3
341 - Children's Theatre	3
Total	18

CURRICULUM FOR A BACHELOR OF SCIENCE DEGREE IN SPEECH COMMUNICATION AND THEATRE

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
Thea 111, 112	2	2	Eng 211, 212 or 221, 222	3	3
Eng 101, 102	3	3	Spch 210, Spch 220	3	3
Sci 121, 122	3	3	Thea 240, GPA 221	3	3
Spch 200, Math 111	2	4	Art 133 or Mus 131	2	
Hist 201, 202	3	3	Jour 301, Eng 201	3	3
Com 100	1		PE or AFROTC	1	1
PE or AFROTC	1	1	Electives	2	3
	15	16		17	16

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
SPCH 320	3		SPCH 420, 434	3	
SPCH 322	3		THEA 400, 402	3	2
SPCH 354, 362	3		THEA 431, 442	3	3
THEA 301, 303	3	3	COM 450	3	2
THEA 341, 342 or 343	3	3	Electives (300-400 level)	6	9
THEA 351, 352	3	3		18	16
Electives (300-400 level)		3 6			
	18	18			

Note: For the Junior and Senior years, courses listed here may be replaced by courses for one of the optional areas of emphasis listed below.

COURSES FOR OPTIONAL EMPHASIS

	Option I Theatre Emphasis	Option II Speech Communication Emphasis
Junior Year	THEA 301, 302, 303, 341, 342, or 343 351, 352 SPCH 354, 356 Electives (300-400 level) -9 sem. hrs.	SPC 320, 322, 324, 354 356, 360, 362, 364 JOUR 301, 302 Electives (300-400 level) -6 sem. hrs.
Senior Year	THEA 400, 402, 431, 442 COM 450 Electives (300-400 level) -18 sem. hrs.	SPCH 410, 420, 430, COM 450 Electives (300-400 level) -21 sem. hrs.
Suggested Electives for Minor in English	ENG 221, 222, 361, or 362, 364 410, 411 or 412	
Suggested Electives for Students Interested in Broadcasting		BA 101, 102 GPA 222,373 SOC 211, 212 JOUR 304, 305, 310

CURRICULUM FOR A BACHELOR OF SCIENCE DEGREE WITH TEACHER CERTIFICATION IN SPEECH COMMUNICATION AND THEATRE

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
THEA 111, 112	2	2	ENG 211, 212, or 221, 222.	3	3
ENG 101, 102	3	3	ED 201, PSY 242	3	3
SCI 121, 122	3	3	HITH 151, ART 133 or MUS 131	2	2
SPCH 200, MATH 111	2	4	THEA 240, GPA 221	3	3
HIST 201, 202	3	3	SPCH 210, 220	3	3
PE or AFROTC	1	1	PE or AFROTC	1	1
COM 100	1	—			
	15	16		15	15

CURRICULUM FOR A BACHELOR OF SCIENCE DEGREE WITH TEACHER CERTIFICATION IN SPEECH AND DRAMA

JUNIOR YEAR	Credit Hours Fall	Spring
ED 301, 387	3	
PSY 312		3
* SPCH 354, 360	3	3
* THEA 301, 303	3	3
* THEA 341, * SPCH 434	3	3 2
* THEA 351 or 352		3
Electives (300-400 level)	6	
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
COM 371		3
ED 491		3
ED 472		9
COM 450	3	
* SPCH 420	3	
* THEA 400	3	
Electives (300-400 level)	9	
	18	15

* **Note:** For the Junior and Senior years, courses marked with an asterisk may be replaced by courses listed for one of the optional areas of emphasis listed below.

COURSES FOR OPTIONAL EMPHASIS

(Teacher Certification Program)

	Option I Theatre Emphasis	Option II Speech Communication Emphasis
Junior Year	THEA 301, 302, 303, 341 or 342 351 or 352, 442 Electives (300-400 level) -9 sem. hrs.	SPCH 322, 354, 360, 362 or 364, 434 JOUR 301, 302 Electives (300-400 level) -6 sem. hrs.
Senior Year	THEA 400, 402, 431 Electives (300-400 level) -6 sem. hrs.	SPCH 420, 430 Electives (300-400 level) -9 sem. hrs.

CURRICULUM FOR A MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY (WITH TEACHER CERTIFICATION)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3
SCI 121, 122	3	3
MATH 111, SPCH 210	4	3
ART 133 or MUS 131 or THEA 120		2
HIST 201, 202	3	3
COMM 100	1	
PE or AFROTC	1	1
	15	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212	3	3
ED 201, GPA 221	3	3
PSY 201		3
SPTH 250	3	
SPTH 260	3	
SPTH 280, SPTH 290	2	3
PE or AFROTC	1	1
Electives	2	3
	17	16

JUNIOR YEAR	Credit Hours Fall	Spring
PSY 351	3	
SPTH 372		4
SPTH 373		2
SPTH 471	3	
SPTH 300a-b	1	1
SPTH 476		4
PSY 321	3	
PSY 323	3	
ED 465		3
ED 467		3
Electives (300 or 400 level)	3	
	16	17

SENIOR YEAR	Credit Hours Fall	Spring
CD 332		2
ED 466		3
SW 470		3
SPTH 450	3	
SPTH 470	3	
SPTH 460	3	
SPTH 400a-b	1	1
SPTH 473		3
Electives (300 or 400 level)	7	6
	17	18

Students who are not in the Teacher Education Program must accumulate 125 clock hours Supervised Clinical Practicum (SPCH 200, 300, 400) in the University Clinic.
• Majors who make C or poorer in SPTH 260 will be required to take SPTH 270 in the Spring Semester.

CURRICULUM FOR A MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY (WITH TEACHER CERTIFICATION)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3
SCI 121, 122	3	3
HIST 201, 202	3	3
MATH 111, HLTH 151	4	2
ART 133, MUS 131, or THEA 120		2
COM 100, SPCH 210	1	3
PE or AFROTC	1	1
	15	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212	3	3
ED 201, GPA 221	3	3
PSY 242, SPTH 290	3	3
SPTH 250	3	
SPTH 260	3	
SPTH 280	2	
PE or AFROTC	1	1
Electives		6
	18	16

JUNIOR YEAR	Credit Hours Fall	Spring
ED 301	3	
SPTH 372		4
SPTH 373		2
SPTH 471	3	
SPTH 300a-b	1	1
SPTH 476		4
ED 387	3	
PSY 312	3	
Electives (300 or 400 level)	5	6
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
SPCH 371		3
ED 324		3
ED 472		9
SPCH 450	3	
SPCH 460	3	
SPCH 470	3	
SPCH 400a	1	
Electives (300 or 400 level)	7	
	17	15

Students seeking certification in Teacher Education are required to accumulate 75 clock hours of Supervised Clinical Practicum (SPCH 200, 300, 400) in the University Clinic.
• Majors who make C or poorer in SPTH 260 will be required to take SPTH 270 in the Spring Semester.

COURSE OFFERINGS

SPEECH (SPCH)

SPCH 200. Introduction to Communication Arts. (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 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 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. (Formerly SPCH 420) **Advanced Public Speaking.** (3) A study of the standards of criticism and techniques involved in effective public address. Prerequisite: SPCH 220.

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 re-creation 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 expression 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 360. Radio and Television Production. (3) An introductory course dealing with the basic principles of formulating and producing the radio and television program. Practical application in a laboratory situation.

SPCH 362. Radio and Television Communication. (3) A course devoted to the study of basic principles underlying the various types of radio and television speaking. Practical application in a laboratory situation.

SPCH 364. Radio and Television Writing. (3) A study of the techniques and methods used in writing the radio and television script. The student will be required to write a number of scripts for various types of programs.

SPCH 371. (3) **Methods of Teaching Speech Communication Theatre.** A methods course dealing with the observation, diagnosis, management, organization and therapy for various disorders.

SPCH 420. Small Group Communication. (3) A course which focuses on communication in small groups, emphasizing the principles, practices, and patterns and utilizing them in practical situations. (Formerly SPCH 322)

SPCH 375. Communicative Skills. (3) A course to improve the students' communicative skills, verbal and written, preparing them for the professional world.

SPCH 430. Psychology of Speech Communication. (3) A study of basic psychological factors and their relation to the various types of communicative processes. 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 will be analyzed according to the principles of rhetoric, based on Aristotelian standards. Prerequisite: SPCH 210 or SPCH 220.

SPCH 446. Radio and Television Advertising. (3) A study of the basic advertising techniques with emphasis on salesmanship in relation to the media.

SPCH 448. Principles of Public Relations. (3) A study of the development, scope, and role of public relations in society.

SPCH 450. Senior Project. (3) Individual research or project.

SPCH 410. History of English Language. (3) Same as English 410.

SPCH 472. Observation and Student Teaching in Public School. (9)

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 240. Elementary Acting. (3) Study and practice in the fundamentals of acting technique based on play and character analyses. 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 301. 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.

THEA 302. 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.

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.

THEA 304. Playwriting. (3) A study of the theory and practice of writing one-act plays for the stage.

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 or 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 Greeks to 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 402. Stage Lighting and Stage Make-up. (3) Advanced make-up and lighting. Practicum in major productions and laboratory productions.

THEA 431. Shakespeare. (3) Study of the principal plays of Shakespeare. (Same as English 431)

THEA 422. Contemporary Black Drama. (2) A course based on the study of dramas by representative contemporary black playwrights.

JOURNALISM (JOUR)

JOUR 301-02. Elementary Journalism. (6) A practical course in journalism with emphasis upon the construction and function of daily and weekly newspapers, community publicity, school publications, and news stories.

JOUR 304. Advanced Reporting. (3) Practice in handling advanced news writing. Investigative and interpretative reporting of complex or specialized subjects. Prerequisite: JOUR 301.

JOUR 405. News Editing. (3) Editing copy, writing headlines, making up newspapers. Advanced work in copyreading and rewriting. Prerequisite: JOUR 301.

JOUR 410. Editorial Writing. (3) Critical analysis of structure and content of newspaper editorials; practice in writing editorials, columns, and special features. Prerequisite: JOUR 405.

SPEECH PATHOLOGY AND AUDIOLOGY (SPTH)

SPTH 200a-200b. Supervised Clinical Practicum. (1-1)

SPTH 250. Speech and Hearing Science. (3) Introduction to the physiologic and physical bases of speech and hearing processes.

SPTH 260. Phonetics. (3) An introduction to the study of phonetics, the symbolization of speech sounds, kinesiologic phonetics, American speech style, and applied phonetics.

SPTH 270. Phonetics Lab. (1) Practice in discrimination and identification of speech sounds.

SPTH 280. Speech Correction for the Classroom Teacher. (2) An introduction to the nature of speech and hearing problems in school children and methods of handling.

SPTH 290. Clinical Methods in Articulation Disorders. (3) The nature of articulation problems and clinical management procedures. Prerequisite: SPTH 260.

SPTH 300a-300b. Supervised Clinical Practicum. (1-1)

SPTH 371. Methods in Public School and Clinical Speech and Hearing Problems. (3) of one-act plays, with attention to casting, blocking, and rehearsal styles through observation, diagnosis, management, organization and therapy for various disorders. Approval of the academic adviser.

SPTH 372. Identification and Appraisal of Speech and Hearing Problems. (4) Participation in screening programs in community health or welfare agencies. Theoretical bases and clinical procedures used in the evaluation of speech, language and hearing problems.

SPTH 373. Aural Rehabilitation. (2) Principles of training in speech reading and improving the listening skills of the hearing impaired.

SPTH 400a-400b. Supervised Clinical Practicum. (1-1)

SPTH 450. Senior Project. (3) An advanced composition from research activities or practical experience in clinical settings.

SPTH 460. Organic Speech Disorders. (3) The nature of speech disorders resulting from structural anomalies.

SPTH 470. Stuttering and Allied Disorders. (3) Theories, etiologies, and therapies as applied to stuttering rehabilitation.

SPTH 471. Language and Speech Development of Children. (3) The normal development of speech and language in young children.

SPTH 476. Language Disorders in Children. (4) The nature of language disturbances resulting from central nervous-system damage and hearing impairments. Prerequisite: SPTH 471.

SPTH 473. Special Problems in Speech Pathology. (2) Seminar study of some selected problems in speech pathology. Prerequisite: 21 hours in major field.

DEPARTMENT OF ENGLISH

DR. HUDSON (Head), DR. BARRETT, DR. BOND, MR. BYRDSONG, MRS. CARTER, MISS COTHRAN, MRS. COTTON, MRS. DANIELS, MR. DONESON, DR. HEAD, MISS HOFFMAN, MISS HORNER, DR. HOUSTON, MISS JOHNSON, DR. MENCHISE, DR. MILLER, MR. MOODY, DR. MULRAINE, DR. RAILSBACK, MRS. RAY, MISS REAVES, DR. REEVE, MRS SAMUEL, MRS. SIMPSON, DR. SPRINGFIELD, MRS. WATKINS, MRS. WHEATON, DR. WILLIAMS.

The program of the Department of English is so arranged as to serve the needs of all the students of the University, as well as to give a thorough foundation to those who desire to become teachers or specialists in the field.

Work leading to the Bachelor of Science degree as well as to the Bachelor of Arts degree may be pursued in the Department of English. Students working toward either degree must complete at least two semesters of either natural science, biology, or chemistry and at least two semesters of mathematics (Mathematics 111-112 or 161-162) in addition to other requirements of the University in foreign languages which are stated elsewhere. Candidates for the Bachelor of Science degree may satisfy the requirements in foreign languages by completing 8 semester hours in one language, regardless of whether or not they have had foreign language in high school. All other

requirements for the Bachelor of Arts degree and the Bachelor of Science degree in English are the same.

Each undergraduate major must complete a minimum of 132 semester hours of work for a bachelor's degree. At least 60 of the semester hours in all subjects must be in courses on the 300 and 400 level. Students in the Teacher Education Program must complete at least 33 semester hours of work in English, 18 hours of which must be on the 300 and 400 level. The 33 semester hour minimum does not include the six semester hours of freshman English nor the three hour methods course (English 371), which carries certification credit in secondary education although administered by the English Department. Majors not enrolled in teacher education must complete a minimum of 42 hours in English beyond the freshman level.

English majors are required to complete the following courses: Orientation 101; English 101-102 (Freshman English); English 300 (Expository Writing); English 211-212 (World Literature); English 221-222 (Survey of English Literature); English 410 (History of the English Language); English 411 (Current English) or 412 (Modern English Grammar); English 431 or 432 (Shakespeare). In addition majors must complete the following: Art 133; Music 131; Mathematics 111; Speech 210; Science 121-122.

CURRICULUM FOR A MAJOR IN ENGLISH (Bachelor of Arts Degree Program)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101-02	3	3	ENG 211-12	3	3
MFL Electives	4	4	ENG 221-22	3	3
HIST 201-02	3	3	MUS 131 or ART 133	2	
MATH 111	4		MFL Electives	3	3
MUS 131 or ART 133		2	ED 201	3	
Orientation	1		PE or AFROTC	1	1
PE or AFROTC	1	1	POS 101 or 221		3
SPEECH 210		3	SCI 121-22	3	3
HEALTH 151		2	PSY 242		3
	16	18		18	19

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
ENG 361-62	3	3	ENG 400	3	
ENG 300	2		ENG 410	3	
ENG 331,32 or 341-42	3	3	ENG 411 or 412 or 421-22 or 433-34	3	3
MFL Electives	3	3	ENG 431-32	3	3
PSY 242	3		Electives (300 or 400)	3	9
Electives (300 or 400)	3	9		15	15
	17	18			

BACHELOR OF ARTS DEGREE PROGRAM IN ENGLISH
(With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101-02	3	3	Eng 211-12	3	3
MFL Elective	4	4	ENG 221-22	3	3
HIST 201-02	3	3	ART 133	2	
MATH 111	4		MFL Elective	3	3
MUS 131		2	SCI 121-22	3	3
Orientation	1		ED 201	3	
PE or AFROTC	1	1	PE or AFROTC	1	1
HEALTH 151		2	POS 101 or 221		3
SPEECH 210		3	PSY 242		3
	16	18		18	19

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
ENG 361-62	3	3	ENG 400	3	
ED 301	3		ENG 431	3	
ENG 300	2		ENG 371		3
MFL Electives	3	3	ENG 411 or 412	3	
PSY 312		3	ED 491		3
ENG 410	3		ED 472		9
ED 387		3	Electives (300 or 400)	6	
Electives (300 or 400)	3	6	ED 465 (Special ED)	3	
	17	18		18	15

BACHELOR OF SCIENCE DEGREE PROGRAM IN ENGLISH

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101-02	3	3	ENG 211-12	3	3
MFL Electives	4	4	ENG 211-22	3	3
HIST 201-02	3	3	SPCH 210, 220	3	3
MATH 111	4		POS 101 or 221	3	
MUS 131 and ART 133		4	ED 201	3	
Orientation	1		PE or AFROTC	1	1
PE or AFROTC	1	1	PSY 242		3
HEALTH 151		2	SCI 121-22	3	3
	16	17		19	16

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
ENG 361-62	3	3	ENG 400	3	
ENG 300	3		ENG 410	3	
ENG 331-32 or 341-42	3	3	ENG 411-12	3	3
Electives (300 or 400)	9	12	ENG 431-32	3	3
	18	18	ENG 421-22, 433 or 434		3
			Electives	3	6
				15	15

BACHELOR OF SCIENCE DEGREE PROGRAM IN ENGLISH
(With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-02	3	3
MFL 101-02	4	4
HIST 201, 202	3	3
MATH 111-12	4	
MUS 131 or ART 133		2
Orientation	1	
PE or AFROTC	1	1
HEALTH 151		2
POS 101 or 221		3
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-12	3	3
ENG 221-22	3	3
MUS 131 or ART 133	2	
SPCH 210, 220	3	3
SCI 121-22	3	3
ED 201	3	
PE or AFROTC	1	1
PSY 242		3
	18	16

JUNIOR YEAR	Credit Hours Fall	Spring
ENG 361-62	3	3
ED 301	3	
ENG 300	2	
ENG 331-32 or 341-42	3	3
PSY 312		3
ENG 410	3	
ED 387		3
Electives (300 or 400)	3	6
	17	18

SENIOR YEAR	Credit Hours Fall	Spring
ENG 400	3	
ENG 431	3	
ENG 371		3
ENG 411 or 412	3	
ED 491		3
ED 472		9
Elective (300 or 400)	6	
ED 465 (Special ED)	3	
	18	15

SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF ENGLISH

COURSE OFFERINGS

ENGLISH (ENG)

ENG. 101. Freshman English. (3) An introduction to the fundamentals of written expression and communication through the study of illustrative essays. Although some attention may be given to grammar and mechanics, the emphasis is upon the principles of rhetoric as they are effectively employed in the development of both the individual paragraph and the complete essay.

ENG. 102. Freshman English. (3) While continuing to stress the importance of clear and effective composition, the second semester of Freshman English focuses upon literature. The analysis and explication of Afro-American fiction and drama serve as topics for discussion and study. Furthermore, the course emphasizes writing book reviews and developing skills necessary to prepare the primary source research paper.

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. (formerly English 181-182H)

ENG 201. Problems in Composition. (3) A course in which, together with the instructor, the student will study materials that will help him to develop mastery of the skills needed to overcome his specific problems in written expression.

ENG 202. Advanced Composition. (3) A course designed to further develop the skills of communication with emphasis on patterns of organization and style. Available to

students who need and desire training beyond the six required hours in Freshman English.

ENG 211-212. World Literature. (6) An analytical reading of selected poetry, man's literary achievements from the following perspectives: Surveys of world literature (211A-212A); of genres (211B-212B); and of Black arts (211C-212C).

ENG 211-212H. Honors World Literature. (6) An anayltical 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. (formerly English 281-282H).

ENG 221-222. Survey of English Literature. (6) A study of major English works from the Anglo Saxon Period to the present day.

ENG 300. Expository Writing. (2) A course which offers experience in the reading and examination of essays representing the major expository types, with particular attention to rhetorical principles, style and structure, training in the writing of essays illustrating these types; and preparation of the research report, with emphasis on the collection of material, analysis, organization, and arrangement. (formerly English 323).

ENG 301. Business English. (3) A course in business correspondence emphasizing the different roles of communication in operating management. (formerly English 321).

ENG 310. 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. 310S is the study and preparation of forms and reports required of social workers. Acquaintance with documents of various agencies is stressed. (formerly English 324).

ENG 311. Creative Writing. (2) A workshop in short story writing. The course examines the techniques and problems involved in writing the short story and places emphasis on the use of the senses and the writing about the experience of living. (formerly English 325.)

ENG 312. Creative Writing. (2) A workshop in writing poetry. This course examines the techniques involved in writing poetry, placing emphasis on the writing of varied poetic types and relating the poetry to other forms of art. (formerly English 326).

ENG 320. Children's Literature. (3) (Offered also as Education). A course offering prospective teachers of the primary grades an opportunity to become familiar with the field of literature suited to the needs and tastes of children. Principles that underlie selection of children's literature are considered. (formerly English 261)

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. Literature of the Restoration and Eighteenth Century. (3) A study of selective poetry, prose and drama from the ages of Dryden, Pope, and 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. (formerly English 311)

ENG 342. The Victorian Era. (3) A study of nonfictional prose writers such as Carlyle, Mill, and Arnold; and of the poets, with emphasis on Tennyson, Browning, and Arnold. Some assignments will be made in the major novelists such as Dickens, Thackeray, and Eliot. (formerly English 312-313)

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 writers are included. (formerly English 337-38)

ENG 361. 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, trancendentalism, realism and naturalism.

ENG 362. 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.

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. (formerry English 422)

ENG 364. Literature of Negro Life. (3) A study of Negro literature from its earliest inceptions in America to current times. Particular emphasis is placed on biography, poetry, the essay, and short fiction. (formerly English 393)

ENG 365. The Contemporary Black Novelist. (3) A study of novelists such as James Baldwin, Ralph Ellison, Margaret Walker, and John Killens, in terms of literary merit and social milieu. (formerly English 373)

ENG 366. Superstition, Science and Mysticism. (3) An analysis of information regarding man's attempt to explain experiences, events, expressions and phenomena in general from a casual and intentional point of view. The course embraces three means used by man in his attempt to explain ultimate reality.

ENG 370. Methods of Teaching High School English. (3) A methods course in teaching English in the secondary school. Required of majors in the Teacher Education Program. Prerequisite: Thirty-six hours of English taken during residence at the University. (formerly English 371)

ENG 400. Senior Seminar. (3) Course is designed to complete English major by inquiring into the purposes and methods of the liberal arts in general and literary study in particular. Attention will be paid to the resources for literary scholarship and criticism. Students will write a variety of reports and critical papers, including a lengthy final paper which incorporates the techniques and knowledge acquired during the semester. Required of all English majors. Prerequisite: senior standing.

ENG 410. History of the English Language. (3) A study of the development of the English language from the beginnings to modern times. Some attention is given to phonetics and to the elementary principles of linguistics. Required of all English majors. (formerly English 451)

ENG 411. Current English. (3) A course in which the students discuss 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. (formerly English 453)

ENG 412. Modern English Grammar. (3) An introduction to the "new" theories of grammar and an application of these theories of grammar as a tool for anaylzing literature and composition more intelligently. (formerly English 454)

ENG 420. Chaucer. (3) An introduction to the works of Chaucer, with an emphasis on the background of the Age and on the development of Chaucer, as a literary artist. (formerly English 452)

ENG 421. The English Novel. (3) A study of selected English novels from Defoe to modern times, with attention to the social background in which they were written.

ENG 422. The Continental Novel. (3) A study of selected Continental novels with attention to the social background in which they were written. (formerly English 423)

ENG 431-432. Shakespeare. (6) A study of the principal histories, comedies, and tragedies of Shakespeare, with emphasis upon the cultural background of the Elizabethan Period. (formerly English 411-412)

ENG 433. The Metaphysicals. (3) A study of the works 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 SAMPSON AGONISTES; and of Bunyan's PILGRIM'S PROGRESS. (formerly English 431)

COURSES IN PHILOSOPHY

PHIL 301-302. Biblical Literature. (4) A consideration of the primary document of our religious heritage. Both the Old Testament and the New Testament will be considered without imposing any sectarian or particular point of view upon the student.

PHIL 323-324. Introduction to Philosophy. (4) A consideration of the methods of philosophical problems arising from the physical, biological, and social sciences and from art, morality, and religion.

DEPARTMENT OF GOVERNMENT AND PUBLIC AFFAIRS
(Formerly, Political Science)

DR. CHARLES SAMPSON (Chairperson), DR. GRISBY, DR. MATHENY, DR. NGOU, PROFESSOR PARUCHURI, DR. JOHNSON (Adjunct), DR. WILLIAMS, PROFESSOR GRIER.

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 departments main concern is the academic preparation of undergraduate political science and public administration majors.

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 35 hours on the 300 and 400 level. Students may pursue one of two Baccalaureate degrees, the B.A. degree or the B.S. Students in the B.S. degree program may choose to qualify for teacher certification. A major in political science provides a student with the opportunity to acquire a broad education that will equip him 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 or professional study (law, etc.), and to stimulate student interest in graduate study.

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.

GPA provides one of the most frequently recommended curricula designed for students who wish to enter law school and ultimately the legal profession. Four courses, GPA 221- American Government, GPA 373- Legal Research and Writing, GPA 371-372—Constitutional law and the Judicial Process, should be taken during the four year period. Course emphasis relates to law school entrance examinations.

UNDERGRADUATE COURSE OFFERINGS

GPA 101. Introduction. (3) An introduction to the crucial ideas, questions and problems 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 adaption of values through the workings of political institutions and processes.

GPA 221-2. American National Government; State and Local Government. (3.3) An introductory course which deals with the foundation, organization, and principles of the national government. Attention focused on the relations of the citizens to the government and the rights, duties and obligations of citizens. GPA 222. State and Local Government: An analysis of the structure principles and operations of the state and local units of government. Illustrative material is drawn largely from Tennessee.

GPA 320. 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.

GPA 331. Comparative Government—Modernized Countries. (3) An analysis of the government of selected developed countries with special attention given to the development of their political systems both in theory and practice. Comparison with American institutions emphasized.

GPA 332. Comparative Government—Modernized Countries. An analysis of developing political societies, with concepts such as comparative decision-making processes, political cultures, political parties, consensus building, political, social, and economic development and modernization.

GPA 361. 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.

GPA 362. 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. Emphasis is given to development since World War II.

GPA 371. Constitutional Law. (3) Devoted to a study of the sources, principles and powers of government in the United States as embodied in the Constitution and judicial decisions in leading cases.

GPA 381. Public Opinion. (3) An analysis of the purposes and techniques of propaganda and the functions and expression of public opinion.

GPA 382. Legislative Process. (3) An examination of the structure and methods of transacting business in the American Congress and State Legislatures.

GPA 383. Parties and Interest Groups. (3) The first quarter deals with an analysis of the dynamics of American politics with emphasis upon the factors influencing the formation of public opinion and the role of pressure groups. The second quarter is designed to analyze the formation of political parties; nominations and elections; methods of representation and voting; and the importance of parties in American Government.

GPA 384. The Presidency. (3) This course is concerned with the office of the President of the United States in terms of both the institution of the men who have held that office. The origins, incumbents, responsibilities, and evaluation 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 391. Urban Politics. (3) This course on cultural minorities studies the effects of the process of modernization on ethnic, race, religious and language groups. It further attempts to define the nature of communal identity and involves the comparative study of Chicanos, American Blacks, French Canadians, Northern Irish Catholics, and various other ethnic groups in "developing" areas of the world.

GPA 441. 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 444. Public Policy Analysis. (3) This course surveys some principal urban problems, their causes and public policies to deal with them. It is designed to acquaint the student with the ideas of the major writers on such aspects as the history, role and development of cities; their government, administration and finance urban planning and design; poverty and slums; urban mass transit, ethnic, race and class relations; and the quality of urban life in the urban environment. The problems of making and implementing public policy decisions will be analyzed.

GPA 451. Secondary Teaching. (3) The theory, methods and materials for teaching the disciplines in the social science area will be dealt with. Attention will also be given to the inter-relatedness of the various disciplines or discipline-combinations as they are taught in secondary schools.

BACHELOR OF SCIENCE CURRICULA

Freshman Year

Fall		Spring	
GPA 101	3	GPA 221	3
Eng. 101	3	Eng. 102	3
Math 111	4	Math 112	3
Art, Music, Drama, Philosophy	2	Art, Music, Drama, or Philosophy (different field)	2
Elective	3	Elective	6
	15		17

Sophomore Year

Fall		Spring	
GPA 222	3	GPA 320	3
Eng. 211	3	Eng. 212	3
Science	4	Science	4
History 201	3	History 202	3
Elective	3	Elective	3
	16		16

Junior Year

Fall		Spring	
GPA 311	3	GPA 312	3
GPA 300 or 400 level (331-341, 361, 381, 383, 441, 443, 391)	6	GPA 300 or 400 level (332, 342, 362, 382, 284, 442, 444, 392, 314)	6
Electives	6-9	Electives	9-12
	15-18		15-18

Senior Year

Fall		Spring	
GPA 300 or 400 level (see Jr. Yr.)	6	GPA 300 or 400 level (see Jr. Yr.)	6
GPA 450	3	Electives	9-12
Electives	6-9		
	15-18		15-18

BACHELOR OF ARTS CURRICULA

Freshman Year

Fall		Spring	
GPA 101	3	GPA 221	3
Eng. 101	3	Eng. 102	3
Math 111	4	Math 112	3
Art, Music, Drama, Phil.	2-3	Art, Music, Drama, Phil. (different field)	2-3
Foreign Lang. 101	4	Foreign Lang. 102	4
	16-7		16

Sophomore Year

Fall		Spring	
GPA 222	3	GPA 320	3
Eng. 211	3	Eng. 212	3
Science	4	Science	4
History 201	3	History 202	3
Foreign Lang. 201	3	Foreign Lang. 202	3
	16		16

Junior Year

Fall		Spring	
GPA 311	3	GPA 312	3
GPA 300 or 400 level (331, 341, 361, 381, 383, 441, 443, 391)	6	GPA 300 or 400 level (332, 342, 362, 382, 384, 442, 444, 392, 314)	6
Foreign Lang. 301	3	Foreign Lang. 302	3
Electives	3-6	Electives	3-6
	15-18		15-18

Senior Year

Fall		Spring	
GPA 300 or 400 level (see Jr. Yr.)	6	GPA 300 or 400 level (see Jr. Yr.)	6
GPA 450	3		
Electives	6-9	Electives	9-12
	15-18		15-18

BACHELOR OF SCIENCE WITH TEACHER CERTIFICATION

FRESHMAN Year

Fall		Spring	
GPA 101	3	GPA 221	3
Eng. 101	3	Eng. 102	3
Math 111	4	Math 112	3
PE	1	PE	1
Art, Music, Phil.	2-3	Art, Music, Phil. (different field)	2-3
ED. 201	3	Psychology 242	3
	16-17		15-16

Sophomore Year

Fall		Spring	
GPA 222	3	GPA 300	3
Eng. 211	3	Eng.212	3
Science	4	Science	4
Health 151	2	Art, Music, Phil.	2-3
History 201	3	History 202	3
	15		15-16

Junior Year

Fall		Spring	
GPA 311	3	GPA 312	3
GPA 300 or 400 level	6	GPA 300 or 400 level	6
Education 301	3	Psychology 312	3
Education 387	3	Education 465	3
Elective	3	Elective	3
	18		18

Senior Year

Fall		Spring	
GPA 450	3	GPA 300 or 400 level	6
GPA 451	3	Education 472	9
GPA 300 or 400 level	3		
Education 491	3		
Education 471	3		
	15		15

All specified courses are required. All majors will be required to take 1 course from the following sub-fields; Comparative, International, Urban-Ethnic.

All majors will be required to take 2 courses from the following sub-fields: public administration, American institutions and processes.

Pre-law majors must take 371, 372, and 373 in place of other upper division GPA courses.

DEPARTMENT OF HISTORY AND GEOGRAPHY

DR. STEPHENS (Head); MR. BURCHETT, MR. COTTON, DR. DAVIS, MRS. FRANKLIN, MISS GASTON, DR. HANEY, MR. LOVETT, MRS. McCLAIN, MISS McDOUGALD, DR. McGUIRE, MRS. PEARSON, MRS. PETERSON DR. PHILLIPS, DR. PRATHER, DR. SHANNON, and DR. UDELSON.

The Department offers courses of study at the undergraduate level leading to the Bachelor of Arts and Bachelor of Science degrees. Instruction in history is designed to present the main aspects of the rise and development of civilization. The curriculum emphasizes the social, economic, and political phases of history, but it also deals with the institutional, cultural, diplomatic and religious phases. One aim of the curriculum is to enable students to read historical literature critically and to acquaint students with the facts in the development of man to the present stage.

The program is designed to give the students within the first two years knowledge of the important events, characters and development in the past of mankind. To achieve this aim, the curriculum requires that all majors have a general understanding of certain related fields. Instruction in history during the Junior and Senior years is designed to prepare students for service as junior and senior high school teachers.

Other purposes of the curriculum are to prepare students for graduate study and for careers in government service, social agencies—Local, State, National, and backgrounds for business and industry.

The history credit requirement for a major in this field is a minimum of 33 semester hours, including a minimum of 18 semester hours in 300 and 400 level courses. The program of study for each major must include the following courses: History 121, 122, 201, 202, 301, 302, 331, 341, 371, 450, and 491 or 492. Students majoring in history must also complete twelve (12) semester hours in a foreign language if they are not certifying to teach.

MINOR

A minor in history consists of eighteen (18) semester hours of course work. The following courses are recommended: History 201, 202, 301, 302, 341, and 491 or 492.

For courses taken in this Department as part of a major or minor, a grade of "C" or higher must be earned in order for the credit to be accepted.

AFRO-AMERICAN CULTURE MINOR

The Department offers a minor in Afro-American Culture. The program for this minor includes the following courses: Geography 372, 382, 412, History 385, 386, 491, 492. Students may select two

courses in Latin America for Far East History.

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 and 172 or 271 and 272 are prerequisites for all upper level geography courses.

CURRICULUM FOR A MAJOR IN HISTORY
(Bachelor of Arts Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3
HIST 121, 122	3	3
SCI (Bio, Chm, Nat Sci)	4	3 4
MATH 111	4	
PE or AFROTC	1	1
HIST 101	1	
Humanities Electives		3
GEOG		3
	16	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212	3	3
MFL	3	3
SOC SCI (Econ, POS, GEOG)	3	3
HIST 201, 202	3	3
PE or AFROTC	1	1
PSY 221, 242	3	3
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
POS (Electives)	3	3
HIST 341, 331	3	3
HIST 301, 302	3	3
Minor (300)		
SOC SCI GEOG 271, 272,	3	3
or GEOG 391, 412	3	3
MFL	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
HIST 491 or-and 492	3	3
HIST (300-400) (Electives)	3	3
Minor (300-400)	3	3
HIST 450	3	
Electives	3	3
HIST 491, 492	3	3
	15	15

Students should select—minor—18 hours in Geography, Social Sciences, Languages, or Humanities.

CURRICULUM FOR A MAJOR IN HISTORY (With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-02	3	3
MATH 111	4	
SCI 121, 122	4	4
ART 133		2
HIST 121-22	3	3
PE or AFROTC	1	1
GEOG 171 or SOC 211		3
HIST 101	1	
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
HIST 201-02	3	
ENG 211-12	3	3
ED 201	3	3
PSY 242		3
PHIL 323, MUS 131	2	3
PE or AFROTC	1	1
GEOG or SOC Electives	3	3
Health 151	2	3
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
HIST 341, 331	3	3	HIST 451	3	
HIST 301-02	3	3	ED 491	3	3
ED 301	3	3	HIST 492, 371	3	3
PSY 312			HIST 450	3	
ED 387		3	POS or SOC (300-400 level)	3	
HIST 491	3	3	ED 472 (ed. 491)		9
GEOG (300-400 level)	3	3		15	15
ED SP 465	3				
	18	18			

SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF HISTORY AND GEOGRAPHY

COURSE OFFERINGS

HISTORY (HIST)

HIST 101. Freshman Orientation. (1) This course covers the four broad areas of Freshman Orientation: Introduction to College; Academic Adjustment; Educational and Vocational Planning; and Personal Adjustment. The concluding part of the course encourages the undergraduate to examine the values he lives by and to recognize their importance to his success not only in college but also throughout life. Required of all history and social science and geography majors.

HIST 121-122. Growth of Civilization. (3-3) A survey of the contributions made by all races to world civilization and the relevancy of these contributions to the progress of mankind. History 121; survey of world literature from ancient times to the age of absolutism with emphasis upon the important institutions and ideas. History 122; survey from age of absolutism to present.

HIST 121H-122H. Honors Growth of Civilization (1500-present). (3-3) The major social, economic, political, religious, and intellectual developments in European history from the last medieval times to the Age of Metternich. History 122 is a continuation of 121 with some emphasis on Indian life and customs in the American and African life to the present.

HIST 201-202. American History. (3-3) This course is a study of the development of cultural economic and political institutions in America from the pre-columbian period to the present, incorporating the role of minorities in American history. History 201 covers the pre-columbian period to 1877. History 202 encompasses the emergence of industrial America to the present. Special emphasis is placed on political development in Tennessee and the nation from 1776-present. This service course is designed to provide instruction insight and understanding of the American political process and history. (Tennessee emphasis)

HIST 201H-202H. Honors American History. (3-3) An intensive and extensive study of American history from pre-European period to 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.

HIST 301-302. Foundations of Modern Europe. (3-3) The first course traces the major political social, economic, and intellectual development of Europe from 1500 to 1815. The second course 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 America from 1500 to 1789.

HIST. 341. History of Tennessee. (3) An investigation of the cultural, economic, political development of the State of Tennessee from territory to the present. Emphasis will be placed on the contributions of minorities—American Indian and Negro.

HIST 362. Constitutional History of the United States. (3) One year of college history and political science. Attention is focused on the factors which have influenced constitutional changes and the historic cases in which the provisions and principles of the Constitution have been interpreted and applied.

HIST 371. The Teaching of Social Sciences. (3) The theory and materials for the teaching of history and social sciences. Open to majors in the department who plan to teach in secondary schools and junior colleges.

HIST 372. Economic History of the United States 1500 to 1865. (3) Development from early colonial times to end of Civil War.

HIST 373. Economic History of United States From 1865 to Present. (3) Study of economic forces and legislation since 1865 to the present.

HIST 381. Civil War and Reconstruction (1850-1877). (3) A study of the sectional differences of the 1850's, the course of the Civil War, the constitutional problems, and the participation of the freedmen in Reconstruction and the Grant Era.

HIST 385. North Africa. (3) A history of North Africa and Middle East to 1800.

HIST 386. North Africa. (3) A history of North Africa from 1801 to present.

HIST 391-92. Russian History. (3-3) Russia from earliest times, Statehood, Alexander I, Catherine I. An investigation of the feudal state to present.

HIST 401-02. Twentieth Century European History, 1914 to Present. (3-3) The major intellectual, cultural politicial, social forces of the twentieth century. World War I and II, the Revolutions, Cold War, Welfare States and intellectual trends will be examined.

HIST 421-22. Diplomatic History of the United States. (3-3) A survey of the foreign relations of the United States from 1776 to present - History 421 (1776-1868), History 422 (The intensive survey of international relations of the U.S. from 1877 to present.)

Vital Topics 431, 32. (3-3) Selected topics and issues that are not covered specifically in other courses, that may be of significant importance to the nation, open to students of high scholastic standing.

Special Reading Assignment. 441.

HIST 450. Introduction to Historical Research. (3) Primarily for seniors majoring in history. The course provides instruction in historical methods and criticism. Students select special topics for independent investigation. The topics are to be reported in writing and defended orally before the class.

HIST 451-52. Latin American History. (3-3) An examination of the general history of the New World from Indian civilization through the Portuguese-Spanish Colonization to 1800 and from 1800 to present - revolution, independence, nationhood and world interdependence to present.

HIST 481-82. World Civilizations. (3-3) An investigation of the history of India, Pakistan, and Bangladesh from 1500's to present - (History 482 continues the investigation of China, Japan, Korea and Southeast Asia.)

HIST 491-92. Afro-American History. (3-3) A study of the African beginnings at end of period of exploration 1450 - the import of African slave trade, and role of Blacks in

America to 1865; Part II, 492 examines the contributions and history of American Blacks to present.

HIST 493. A Topical Approach to Afro-American History. (3) Special issues and problems, 1900 - present.

GEOGRAPHY (GEOG)

171-2. Elements of Geography. (3-3) A systematic approach to the study of the geographic regions of the world. Regional suveys include a special consideration of: physical character of the land, resources, economies, and cultures.

261. Elements of Weather. (3) A critical study of the atmosphere. This course will consider weather elements, weather observation, air masses, and their importance to weather.

271-2. Fundamentals of Economic Geography. (3-3) A survey of the elements of the human habitat with emphasis on major world resources. A consideration of the geographic facts which are important to the development of the major world industry areas.

361. Geology. (4) Deals with a study of the materials of the earth, the geologic processes and how they affect land forms and soil distribution. Three lectures and one laboratory or field period.

371. United States and Canada. (3) Recognition, analysis and interpretation of the basic physiographic features, resources and human adjustments within its several areas.

372. Caribbean America. (3) The northern countries of Latin America and the West Indies; their patterns of land occupancy; their commercial relation to the United States. The cultural pattern of the predominantly black area will be considered.

373. South America. (3) Regions and resources of South America beyond the Caribbean area with a special study of the distinctive role of each country according to its geographic significance.

381. Europe. (3) Regions and resources of Europe, and their relation to the development of the basic culture in different areas.

382. Urban Geography. (3) Deals with the spatial aspects of urban development. Primarily, the focus is upon the morphology, function, and evolution of cities. Special emphasis is placed on inner city (black) problems.

391. Political Geography. (3) A study of political relations, territorial aims and aspirations, boundaries and raw materials.

401. The Middle East and India. (3) Resources and economic activities in their regional setting; aggressive policies in territorial expansion.

402. Geography of the South. (3) A regional study of Southeastern United States. Surveys relating to the physical environment, human occupancy, resources, economic and urbanization are to be studied.

403. Geography of Tennessee. (3) A detailed study of Tennessee and its subdivision into natural and economic regions is to be emphasized.

411. Southeastern Asia and Australia. (3) Australia and the East Indies. A study of the physical, economic, and cultural elements visible as earth features.

412. Africa. (3) A study of the regions and resources of Africa with special consideration given to "Black" Africa, its development and potential.

421. China. (3) Regions and resources of China, with special emphasis on differences and similarities of each cultural and physical region. The placing of China as a whole in its proper continental and world framework is the final objective.

422. The U.S.S.R. (3) A geographical analysis of the terrain, resources and economic development of Russia and those areas in Europe and Asia largely under Russian influence.

450. Senior Porject. (3) Directed research in a relevant problem in Geography. Special attention is given to related publications and the construction of a research design.

462. World Climates. (3) Designed to effect a concept of the distribution of climates over the world and the reasons for this distribution. Of major importance in this course will be controls of climate, a climate classification by Koppen, and the relationship of man's activities and world climates.

DEPARTMENT OF HISTORY AND GEOGRAPHY
Bachelor of Science Degree Without Certification

FRESHMAN YEAR	I	II
History 121-122	3	3
Englisg 101-102	3	3
Science 121-122	4	4
Math 111	4	
Geography 171		3
Speech 210		2
PE or ROTC	1	1
Orientation 101	1	
	16	16

SOPHOMORE YEAR	I	II
History 201-202	3	3
English 211-212	3	3
Sociology 211-320	3	3
Pol. Science 211-222	3	3
Geography 172	3	
ROTC or PE	1	1
Psychology 201 or 243		3
	16	16

JUNIOR YEAR	I	II
History 301-302	3	3
History 381	3	
Electives		3
History 341		3
History 391	3	
Geography 300 or 400	3	3
*Elective 300 or 400	6	6
	18	18

SENIOR YEAR	I	II
History 450	3	
History 401	3	
Elec. Hist. 362, 422 or 451	3	3
History 491-492	3	3
*Elective 300 or 400	6	9
	18	15

AFRO-AMERICAN STUDIES

*Students interested in Afro-American Studies (Double Major) should elect 24 hours from the following courses;

History 385-452
Geography 412
Sociology 320-370
Social Welfare 460
Psychology 323
English 364-365
Speech 434-422
French 410
Music 434

Students electing to minor in Geography, Library Science, or Communications (Radio and Television) must complete 18 semester hours of courses on the 300 and 400 level.

DEPARTMENT OF PHYSICS AND MATHEMATICS

DR. KING (Head), MR. ADAMS, MISS BAILEY, MRS. DABNEY, MISS GASAWAY, DR. HULL, DR. KNOX, MRS. LEDET, MRS. LOVE, MR. MYINT, DR. PARAMORE, MR. SAVOY, DR. SCHEICK, DR. TERRILL, MR. WILLIAMS, MISS WILLIAMS.

The Department of Physics and Mathematics offers programs leading to Bachelor of Science and Bachelor of Arts degrees with a major in Mathematics.

The courses in physics and mathematics are designed to serve (1) those who wish to major or minor in mathematics, (2) those who require physics and-or mathematics as a part of their pre-professional training, (3) those majoring in areas other than physics or mathematics to whom the knowledge and techniques of physics and-or mathematics are desirable adjuncts. Courses in computer science and in astronomy are also offered in the department.

All courses offered for major or minor credit in mathematics must be approved by the Department of Physics and Mathematics.

Curriculum in Mathematics

Majors in mathematics are required to complete a minimum of 34 semester hours of course work in mathematics exclusive of Mathematics 161, 191-2, and 291-2. A minimum of 20 semester hours must be selected from courses numbered 300 and above. Students who minor in mathematics must complete a minimum of 10 semester hours selected from mathematics courses numbered 300 and above.

Required Courses

Mathematics 161-2, 261-2, 341, 361-2, 364 and 450 are required of all majors in the area of mathematics. Math 371 is required of all majors in the area of mathematics who are certifying. A minimum grade of "C" must be earned in each of the required courses.

Theoretical and Applied Groups

Juniors and Seniors are offered two types of programs—theoretical and applied.

The theoretical program is designed primarily for students planning to do graduate study in pure mathematics. In addition to the required courses, their program should include Mathematics 331-2, 451-2-3, 473 and selected topics from the Mathematics 480 series.

CURRICULUM FOR A MAJOR IN MATHEMATICS

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-02	3	3
MATH 261-62	5 *	5
HIST 201-02	3	3
FR 101-02 or		
GER 101-02	4	4
PE or AFROTC	1	1
MATH 191-92	1	1
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-12	3	3
MATH 341, 364	3	3
PHYS 221-22	4	4
CS 193, 291	3	3
Humanities Elective	2	
Social Science Elective (300 level)		3
PE or AFROTC	1	1
	16	17

JUNIOR YEAR	Credit Hours Fall	Spring
MATH 361-62	3	3
ENG 300		3
PHL 323	2	
MATH Electives (300 level)	3	4
BIOL 111-112 or CHEM 121-122	4	4
Approved Electives	4	3
Humanities Elective	2	
	18	16

SENIOR YEAR	Credit Hours Fall	Spring
MATH 450	3	
MATH Electives (300-400 level)	6	6
Approved Electives (300-400 level)	7	10
	16	16

* 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 101-02	3	3
MATH 261-62	5 *	5
HIST 201-02	3	3
FR 101-02 or		
GER 101-02	4	4
MATH 191-92	1	1
PE or AFROTC	1	1
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-12	3	3
MATH 341, 364	3	3
PHYS 221-22	4	4
Humanities Elective	4	
ED 201		3
CS 193, 291	3	3
PE or AFROTC	1	1
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
MATH 361-62	3	3
MATH Electives (300-400 level)	5	2
ED 387		3
ED 301		3
PSY 242	3	
ENG 300	3	
PSY 312		3
BIO 111-12 or CHM 121-22	4	4
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
PHIL 323	2	
MATH 450	3	
MATH Electives (300-400 level)	3	
ED 491		3
ED 465	3	
ED 472S		9
MATH 371		3
HEAL 301 or 305	2	
Social Sci. Elec.	4	
	17	15

• Mathematics 161 and-or Mathematics 162 are to be taken first if need is indicated.

SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF PHYSICS AND MATHEMATICS

COURSE OFFERINGS

MATHEMATICS (MATH)

MATH 110. Basic Math. (3) Fundamental operations on whole numbers, fractions, decimals, percentage, ratio and proportion, measurement, algebraic operations, factoring, algebraic manipulation of formulas, linear equations, exponents and radicals. This course is designed for students who score below a prescribed minimum on a Diagnostic test. May not be counted toward any degree requirements.

MATH 111. Introduction to College Mathematics I. (4) A review of fundamental operations in arithmetic and algebra; sets; linear and quadratic equations; systems of equations; exponents; functions; graphs. Four lectures and one laboratory period per week.

MATH 112. Introduction to College Mathematics II. (3) An extension of Math. 111 with emphasis on exponential functions, logarithms, numerical trigonometry, probability and elementary statistics. Prerequisite: Math. 111. Three lectures per week.

MATH 111H-112H. Introduction to College Mathematics I and II. (3-3) 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.

MATH 120. Mathematics for Teachers. (2) Designed to provide the prospective elementary school teacher with a thorough knowledge of the mathematical concepts taught in the elementary grades. Prerequisite: Math. 111 or its equivalent.

MATH 172. Mathematics of Finance. (3) Compound interest and discount, annuities, amortization and sinking funds, depreciation, bonds, life annuities, life insurance. Prerequisite Math 111.

MATH 161. Precalculus Mathematics I. (5) An integrated course in algebra and trigonometry designed for the mathematics, science and engineering majors whose records and-or tests performances indicate the need for the course. Five lectures per week.

MATH 162. Precalculus Mathematics II. (5) Analytic geometry of two and three dimensions. Prerequisite: Mathematics 161 or staisfactory high school and test performance records. Five lectuers per week.

MATH 191-2. 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 261-2. Calculus and Analytic Geometry I-II. (5-5) Differentiation and integration of algebraic and transcendental functions with applications; infinite series and approximate computation. Prerequisite: Math 162 or satisfactory high school and test performance records.

MATH 291-2. Introduction to Probability and Statistics I-II. (1-1) A brief survey of discrete probability, basic statistics concepts, applications. Prerequisite for 292: Math 291. One lecture per week.

MATH 311-12. Probability and Statistics I-II. (3-3) The mathematical foundations, methods, and applications of probability theory; an introduction to some principles of statistical anaylsis; sampling distributions, tests of significance, decision making. Prerequisite: Math. 262 or equivalent, or consent of the department.

MATH 313. Introduction to Numerical Analysis. (3) Errors, interpolation, approximations, numerical integration and differentiation, roots of polynomial equations, numerical quadrature, solution of ordinary differential equations. Prerequisite: Math 262.

MATH 331. Concepts of Modern Geometry I. (3) Advanced plane geometry, synthetic and analytic, and its relation to Euclidean and other geometries. The classical theorems of Ceva, Menelaus, and others are treated. Prerequisite: Math 262 or equivalent.

MATH 332. Concepts of Modern Geometry II. (3) Elementary geometry is re-examined from an advanced standpoint. Valid definitions are presented and proofs of theorems (intuitively known) are given. Prerequisite: Math 262 or equivalent.

MATH 341-2. Calculus IV-V. (3-3) Vectors and parametric equations, vector functions and their derivatives; vector analysis, including surface and line integrals, divergence theorem and Stokes theorem; further treatment of partial differentiation and multiple integration; other topics. Prerequisite: Math. 262 or equivalent.

MATH 361-2. Linear Algebra. (3-3) Theory of and operations on vector spaces; matrices, determinants, and solutions of systems of linear equations; matrix transformations, rank of systems of linear equations; selected topics from the theory of equations. Prerequisite: Math. 262.

MATH 364. Introduction to Modern Algebra. (3) The algebra of sets. Properties and theorems on groups, rings, integral domains, fields, ideals and other mathematical systems. Prerequisite: Math. 262.

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. Prerequisite: Math. 262; prerequisite or parallel:

MATH 450. Senior Project. (3) Individual study and written presentation of a special topic in mathematics or the teaching of mathematics. Required of all prospective graduating seniors in the department. Prerequisite: Senior standing.

MATH 451-2. Functions of a Real Variable. (3-3) Point-set topology of the real line, limits, functions, continuity, differentiation, sequences, series, convergence and integration theory. Prerequisite: Math. 341.

MATH 453. Functions of a Complex Variable. (3) Geometry of the complex plane, complex integrals, Cauchy's integral theorem and formula, Taylor's and Laurent's series. The calculus of residues and an introduction to conformal mapping. Prerequisite: Math. 341.

MATH 461. Special Topics in Calculus. (3) Infinite series, improper integrals, Fourier Series and Integrals, Gamma and Beta Functions, and elliptic integrals. Prerequisite: Math. 262 or equivalent.

MATH 462-3. Differential Equations I-II. (3-3) Solution of ordinary differential equations; applications; partial differential equations; methods of numerical analysis of nonlinear equations. Prerequisite: Math. 262 or equivalent.

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. 262 or consent of department.

MATH 473. Introduction to Mathematical Logic. (3) Introduction to the nature of consistency and valid inference. Isomorphisms among derivation systems, truth-value structures, and English. Predicate calculus: universal and existential quantification. The logic of identity. Informal proofs. Prerequisite: Math. 262 or consent of department.

MATH 474. The Logic of Sets and of Mathematics. (3) A formal treatment of set theory. The relation of logic and set theory to scientific method, mathematics and statistics. Inductive versus deductive processes. Theory of definition. Multivalued logics. Prerequisite: Math. 473.

MATH 480. (A through J). Special Topics in mathematics to be offered according to the preference and needs of the students.

A. **Boolean Algebra.** (3) Definition of a Boolen Algebra and related theorems with proofs; the application of Boolen Algebra to the algebras of sets, logic and switching circuits.

B. **Combinatorial Analysis.** (3) The calculus of enumeration including permutations, the principle of inclusion and exclusion, Polya's Theroem. Prerequisite: Math. 262.

C. **Introduction to the Theory of Numbers.** (3) Divisibility properties of integres; primes and their properties; linear congruences and congruences of higher degree; number theoretic functions; diophantine equations; quadratic reciprocity laws; unsolved classical problems in number theory.

D. **Operation Calculus.** (3) Basic operation rules of Laplace transforms through the complex-inversion theorem. Applications to solutions of initial and boundary value problems in differential equations. Prerequisite: Math. 262 and math. 462.

E. **Introduction to Functional Analysis.** (3) Banach space, Hilbert space, linear operators. Prerequisite: Math. 451.

F. **Vector Calculus.** (3) Derivative and integral of vector functions, gradient, divergence, curl, Green's Theorem, Stokes Theorem and introduction to Laplace's Equation and elementary boundary value problems. A thorough knowledge of matrices and determinants recommended. Prerequisite: Math. 262.

G. **Tensor Calculus.** (3) Theory and Application of Tensors. Linear vector spaces, Riemannjan geometry, analytical mechanics, calculus of variations and mechanics of continuous media. Prerequisite: Consent of department.

H. **Metric Differential Geometry.** (3) Curves and surfaces in Euclidean 3-space, developable surfaces, fundamental forms, systems of curves and surfaces, curvature, geodesics. Prerequisite: advanced standing in mathematics.

J. **Elementary Topology.** (3) Sets, functions and relations; metric spaces; general topological spaces; compactness; connectedness; quotient spaces; net and filter convergence; product spaces. Prerequisite: Math 262.

MATH 491. Linear Programming. (3) Matrix algebra, convexity and linear function, constraints and objective function, graphical methods, simplex method, degeneracy, decomposition theory, linear programming in FORTRAN, dual theorems, primal-dual methods, integer programming, parametric programming and applications in assignement, transportation and management problems. Prerequisite: Math. 362.

MATH 492. Finite Markov Chains. (1) A brief survey of the theory of Markov Chains and its applications. Prerequisite: Consent of department.

MATH 493. Difference Differential Equations. (3) Linear difference differential equations, some partial difference differential equations, numerical solution to differential equations, and applications in engineering and social sciences. Prerequisite: Math. 262 and 463.

COMPUTER SCIENCE (CS)

CS 193. Basic Computer Programming. (3) Introduction to some of the basic types of statements in the BASIC and FORTRAN languages. Some elementary problems from algebra, trigonometry and geometry, as well as, some business oriented problems. Prerequisite: Consent of instructor.

CS 291. Computer Programming. (3) An extension of CS193 using more advanced programming instructions with emphasis on problems making use of Function subprograms and subroutine subprograms. In addition to BASIC and FORTRAN, other languages such as assembler and COBOL will be studied. Applications of programming techniques to problems in mathematics, engineering, science and non-scientific areas will be discussed. Prerequisite: CS193 or permission of instructor.

CD 331-2. Logical Design of Digital Computers. (3-3) A first course in logical design and switching theory. Course includes basic concepts of Boolean Algebra; analysis, synthesis and minimization methods using the tools of algebraic manipulation; the Veitch diagram method; Karnaugh map, Quine-McCluskey theorem, factoring and multiple outputs, various switching circuits; Hauffman-Moore model of sequential circuits; design aspects and simplification techniques on logic design of I-O; arithmetic, control and memory units. Prerequisite: junior or senior standing.

CS 343. Numerical Methods I. (3) The course deals with the computational aspects of numerical methods. Mathematical models; solution of systems of linear and non-linear equations; error analysis, numerical differentiation and integration; inversion of matrices; statistical techniques including curve fitting. Prerequisites: Math 262 and Math 362.

CS 344. Numerical Methods II. (3) A more extensive treatment of topics in Numerical Methods I with emphasis on theoretical aspects of the subject matter. Additional topics include solution of ordinary differential equations using Runge-Kutta methods, solution of partial differential equations using finite difference methods; integral equations. Prerequisites: Math. 343.

CS 363. Programming Languages. (3) Computer environment, computing concepts, fundamentals of programming languages. Language structures, characteristics and facilities. Soft ware system analysis in BASIC, FORTRAN and COBOL languages. Prerequisite: CS291.

CS 441. Compiler Design. (3) The design aspect of compilers for higher order languages such as Fortran, Cobol and simulation languages which are to be used in the areas of scientific and business problems. Prerequisite: CS363 and consent of instructor.

CS 443-444. System Design. (3-3) System studies of hardware and software aspects of a digital computer. Study of the interrelationship of various computer related equipment and units; concepts of problem programming and system programming; systems-monitor, core storage, dump program, system editor, input-output executor, etc. Prerequisite: Consent of instructor.

CS 446. Compiler Construction. (3) Programming language structures, translation, loading execution, 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, errors diagnostics, object code optimization techniques, and overall design. Use of compiler writing languages and bootstrapping. Prerequisite: CS363.

ASTRONOMY (ASTR)

ASTR 301-302. Descriptive Astronomy. (3-3) An introduction to modern astronomy, including the solar system and its constituents, stars and stellar systems, their structure and motions, and cosmology. Astronomical instruments and their uses will be studied.

PHYSICS (PHY)

PHY 111. Foundations of Physics. (2) A study of the basic principles of physics. Designed for the student who has had no previous training in physics. (Credit in this course will not apply toward a major or minor in the physical sciences or mathematics.)

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 and vector algebra; and, (3) experiences with slide rule calculations and the theory governing them.

PHY 193. Computations. (2) Slide rule calculations; brief review of trigonometry and vector algebra: techniques for problem solving.

PHY 211-212. College Physics. (4-4) Mechanics; Heat, Sound and Light; Electricity and Magnetism; 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. Three lectures and one two-hour laboratory period per week.

PHY 221-222. General Physics. (4-4) Mechanics; Heat, Sound and Light; Electricity and Magnetism; and Modern Physics. The course is intended for students with majors in engineering or a physical science. Prerequisite: Mathematics 261 (or taken concurrently). Successful completion of Physics 221 is prerequisite for Physics 222. Three lectures and one two-hour laboratory period per week.

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 bonemineral content, hydrodynamic analysis of the cardiovascular system. Prerequisite: one year of college physics.

PHY 311-2. Electricity and Magnetism. (3-3) This course presents the fundamentals of theoretical electricity and magnetism. Considerable emphasis is placed upon the solution of problems. Prerequisites: Math 261-2, Physics 221-2 or Physics 211-2. Three lectures per week.

PHY 314. Optics. (3) A brief review of geometrical optics and a study of physical optics including spectroscopy. Prerequisites: Physics 211-212 or physics 221-222; Math. 262. 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. Prerequisites: Physics 211-12 or physics 221-22; mathematics 262. Two lectures per week.

PHY 321-2. 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 261-2. Three lectures per week.

PHY 331-2. Electrical Measurements. (2-2) The theory of electrical circuits is studied and discussed. The laboratory work is intended to give experience and facility in the handling of electrical measuring instruments. A comprehensive list of experiments is required, covering modern methods of mastering current, resistance electromotive force and power, and the calibration of instruments employed, together with measurements of capacity inductance, and ferro-magnetism. Prerequisites: Physics 221-2 or Physics 211-2; Mathematics 261-2. Two laboratory periods 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; applications, including the transistor. Primarily for electrical engineering 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 an 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; electrocardiogram, radiology and radiobiological instrumentation, x-rays as a diagnostic tool, ultrasonics, electronmicroscopy, optical and acoustical holography, laser surgery. Prerequisite: one year of college physics.

PHY 412-3. Modern Physics. (3-3) The Classical and modern concepts of the atom and radiation are devloped; introduction to molecular structure, the chemical bond, nuclear physics; fission, isotopic tracers; medical radiology; cosmic rays. Prerequisites: Physics 221-2 or Physics 211-2; Mathematics 261-2. Three lectures per week.

PHY 341-2. 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 the areas of Mechanics, Heat, Sound, Light, and Modern Physics. Prerequisites: Physics 221-2; Mathematics 261-2. Two laboratory periods 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.

DEPARTMENT OF MODERN FOREIGN LANGUAGES

DR. BELL (Head), MR. DESCHENES, DR. ELLIOTT, DR. NYABONGO, DR. WILLIAMS.

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 curriculums encompass courses leading to the Bachelor of Arts degree in French or Spanish with or without certification, a joint major in French or Spanish and Accounting, Business Administration or Office Administration, Latin American Area Studies, and the Master of Arts degree in French or Spanish. "C" is the lowest acceptable grade for departmental majors and minors in any required foreign language course: courses in which majors or minors received "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 or Spanish and three years of German.

ALL ELEMENTARY AND INTERMEDIATE COURSES MUST BE TAKEN IN SEQUENCE.

A. French or Spanish Major with Certification

A student who elects a major 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 minor in a second foreign language.

B. French or Spanish Major without Certification

A student who chooses a major 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 Areas

Required courses in a foreign language are 101-02, 201-02, 300, 301-02, 400, 420, 450, and 480. The business core includes BA 101, 323-24, 335; ACCTG 211-212, ECON 211-12, ENG 301. Other courses needed to satisfy degree requirements in Accounting, Business Administration, or Office Administration are as follows:

1. Accounting 311-12, 313-14, 320, 400, 411, 413 or 418.
2. Business Administration
   BA 301 or 302, 331, 423, 441; ECON 301, 315
3. Office Administration
   OA 121-122; 207-8, 310, 330, 430; BA 423

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 or Spanish Minor

For students who are in the Teacher Education Program, the courses required are 101-02, 201-02, 300, 301, and 311. In addition to the requirements just outlined, students, who are not in the certification program should also complete 302 and 312.

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 Pi Delta Phi, National French Honor Society for outstanding students in upper level French.
3. Gamma Eta Chapter of Sigma Delta Pi, National Spanish Honor Society for students who excel in upper level Spanish.

CURRICULUMS FOR CO-MAJORS IN FRENCH OR SPANISH AND ACCOUNTING, BUSINESS ADMINISTRATION OR OFFICE ADMINISTRATION

A. FRENCH OR SPANISH AND ACCOUNTING

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
For. Lang. 101-02	4	4	For. lang. 201-2	3	3
English 101-2	3	3	For. Lang. 300		2
Math. 111-112	4	3	Science	3	3
B.A. 101-2	3	3	English 211-12	3	3
Orientation	1		Acctg. 211-12	4	4
Art 133		2	History 201-2	3	3
P.E. or Air Science	1	1	Music 131	2	
	16	16		18	18

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
For. Lang. 301-2	3	3	For. Lang. 400	3	
Econ. 211-12	3	3	For. Lang. 450	3	
Acctg. 311-12	3	3	For. Lang. 480		3
Eng. 301; B.A. 335	2	3	For. Lang. 420		2
B.A. 323-24	3	3	Acctg. 313-14	3	3
Acctg. 320; 400	3	3	Acctg. 411, 413 or 418	3	3
			Philosophy	2	
			Electives	3	3-6
	17	18		17	14-17

B. FRENCH OR SPANISH AND BUSINESS ADMINISTRATION

FRESHMAN YEAR	Credit Hours Fall	Spring
For. Lang. 101-2	4	4
Eng. 101-2	3	3
Math 111-12	4	3
B.A. 101-2	3	3
Orientation	1	
Art 133		2
P.E. or Air Science	1	1
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
For. Lang. 201-2	3	3
For. Lang. 300		2
Science	3	3
Eng. 211-12	3	3
History 201-2	3	3
Econ. 211-12	3	3
Music 131	2	
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
For. Lang. 301-2	3	3
Acctg. 211-12	4	4
Eng. 301; B.A. 335	2	3
Econ. 301; 315	3	3
B.A. 301 or 2; 331	3	3
Philosophy		2
Elective (300-400)	3	
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
For. Lang. 400	3	
For. Lang. 450	3	
For. Lang. 480		3
For. Lang. 420		2
B.A. 323-24	3	3
B.A. 423; 441	3	3
Electives (300-400)	3	6
	15	17

C. FRENCH OR SPANISH AND OFFICE ADMINISTRATION

FRESHMAN YEAR	Credit Hours Fall	Spring
For. Lang. 101-2	4	4
Eng. 101-2	3	3
Math. 111; 173	4	3
B.A. 101	3	
Orientation	1	
Art 133		2
History 201		3
P.E. or Air Science	1	1
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
For. Lang. 201-2	3	3
For. Lang. 300		2
Eng. 211-212	3	3
Science 111-112	3	3
O.A. 121-122	3	3
Econ. 211-212	3	3
History 202	3	
Music 131		2
	18	19

JUNIOR YEAR	Credit Hours Fall	Spring
For. Lang. 301-2	3	3
Acctg. 211-212	4	4
O.A. 207-8	3	3
Eng. 301; B.A. 335	2	3
O.A. 310; 330	3	3
B.A. 323-24	3	3
	18	19

SENIOR YEAR	Credit Hours Fall	Spring
For. Lang. 400	3	
For. Lang. 420		2
For. Lang. 450	3	
For. Lang. 480		3
B.A. 423		3
O.A. 430	3	3
Electives (300-400) Humanities and OA or BA	9	6
	18	17

CURRICULUM IN FRENCH (With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
French 101-2	4	4
English 101-2	3	3
History 201-2	3	3
Math 111	4	
Education 201		3
Orientation 100	1	
Health or Nutrition		2
Art 133		2
P.E. or Air Science	1	1
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
French 201-2	3	3
French 300		2
English 211-2	3	3
Science	3	3
Second Lang. (Minor) 101-2	4	4
Psychology 242	3	
Music 131		2
P.E. or Air Science	1	1
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
French 301-2	3	3
French 311-12	3	3
French 400	3	
Education 301	3	
Psychology 312		3
Second Lang. (Minor) 201-2	3	3
Second Lang. (Minor) 300		2
Geography 172	3	
Education 465		3
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
French 401	3	
French 410	2	
French 450	3	
Education 387	3	
Second Lang. (Minor) 301	3	
Second Lang. (Minor) 311	3	
MFL 371		3
Education 491		3
Education 472s		9
	17	15

CURRICULUM IN SPANISH (With Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
Spanish 101-2	4	4
English 101-2	3	3
History 201-2	3	3
Math. 111	4	
Education 201		3
Orientation 100	1	
Health or Nutrition		2
Art 133		2
P.E. or Air Science	1	1
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
Spanish 201-2	3	3
Spanish 300		2
English 211-2	3	3
Science	3	3
Second Lang. (Minor) 101-2	4	4
Psychology 242	3	
Music 131		2
P.E. or Air Science	1	1
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
Spanish 301-2	3	3	Spanish 401	3	
Spanish 311-12	3	3	Spanish 410	2	
Spanish 400	3		Spanish 450	3	
Education 301	3		Education 387	3	
Psychology 312		3	Second Lang. (Minor) 301	3	
Second Lang. (Minor) 201-2	3	3	Second Lang. (Minor) 311	3	
Second Lang. (Minor) 300		2	MFL 371		3
Geography 172	3		Education 491		3
Education 465		3	Education 472s		9
	18	17		17	15

CURRICULUM IN FRENCH (Without Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
French 101-2	4	4	French 201-2	3	3
English 101-2	3	3	French 300		2
History 201-2	3	3	English 211-12	3	3
Math. 111	4		Science	3	3
Education 201		3	Psychology 242	3	
Orientation 100	1		Second Lang. (Minor) 101-2	4	4
Health or Nutrition		2	Music 131		2
Art 133		2	P.E. or Air Sci.	1	1
P.E. or Air Sci.	1	1		17	18
	16	18			

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
French 301-2	3	3	French 401-2	3	3
French 311-12	3	3	French 410-20	2	2
French 400	3		French 450	3	
Second Lang. (Minor) 201-2	3	3	Second Lang. (Minor) 301-2	3	3
Second Lang. (Minor) 300		2	Second Lang. (Minor) 311-12	3	3
Electives (300-400 Humanities and Social Sciences)	6	6	Electives (300-400)	3	4-6
	18	17		17	15-17

CURRICULUM IN SPANISH (Without Teacher Certification)

FRESHMAN YEAR	Credit Hours Fall	Spring
Spanish 101-2	4	4
English 101-2	3	3
History 201-2	3	3
Math. 111	4	
Education 201		3
Orientation	1	
Health or Nutrition		2
Art 133		2
P.E. or Air Sci.	1	1
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
Spanish 201-2	3	3
Spanish 300		2
English 211-12	3	3
Science	3	3
Psychology 242	3	
Second Lang. (Minor) 101-2	4	4
Music 131		2
P.E. or Air Sci. (optional)	1	1
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
Spanish 301-2	3	3
Spanish 311-12	3	3
Spanish 400	3	
Second Lang. (Minor) 201-2	3	3
Second Lang. (Minor) 300		2
Electives (300-400 Humanities and Social Sciences)	6	6
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
Spanish 401-2	3	3
Spanish 410-20	2	2
Spanish 450	3	
Second Lang. (Minor) 301-2	3	3
Second Lang. (Minor) 311-12	3	3
Electives (300-400)	3	4-6
	17	15-17

CURRICULUM IN LATIN AMERICAN AREA STUDIES

FRESHMAN YEAR	Credit Hours Fall	Spring
Spn. 101, 102	4	4
GPA 101, 221	3	3
Math 111, 112	4	3
PE or AFROTC	1	1
Eng. 101-102	3	3
Art, Music, Drama, Philosophy		2
Orientation 101	1	
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
Spn. 201, 202	3	3
Spn. 300		2
Sci., Bio., Chem.	4	4
PE or AFROTC	1	1
Eng. 211, 212	3	3
Hist. 201, 202	3	3
Soc. 320	3	
Art, Mus., Spch., Phil.		2
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
Spn. 301, 302	3	3
Spn. 400	3	
GPA 331, 332	3	3
Hist. 451, 452	3	3
Geog. 372, 373	3	3
Econ. 211, 212	3	3
Elective (300 or 400)		3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
Spn. 401, 402	3	3
GPA 341, 367	3	3
Spn. 410, 420	3	2
MFL 450	3	
Econ. 405	3	
Electives (300 or 400)	3	6
	18	14

COURSES IN FRENCH

101-2. Elementary French. (8) The development of the ability to understand, speak, write, and read French. Laboratory work is an integral part of this course. French 101 is the prerequisite to 102.

201-2. Intermediate French. (6) Grammar review and further development of the ability to understand, speak, write, and read French, reinforced with laboratory work. Prerequisites: French 101 and 102 or the equivalent for 201; 201 for 202.

300. Pronunciation and Diction. (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.

301-2. Advanced Oral and Written Composition. (6) Vocabulary building and intensive analysis of French grammar with practical application in oral and written compositions. The prerequisite for 301 is 202; for 302, it is 301.

311-12. Survey of French Literature. (6) Literary philosophies, types, major authors and their contributions from the earliest extant works to the present. Prerequisite: French 202.

311. Middle Ages through the Eighteenth Century.

312. The Nineteenth and Twentieth Centuries.

MFL 320. Foreign Language Pronunciation and Diction. (3) Basic rudiments of the sound systems in three to four languages. (Primarily for Music majors).

MFL 371. Methods of Teaching Foreign Languages. (3) This course acquaints the student with methods, materials, and texts. Bi-weekly classrooms observations in secondary schools of the community are required. (A requisite for those who wish to obtain teacher certification).

400. French Civilization. (3) The development of French civilization from its origin to the present: geography, historical, political, social, economic and cultural life.

401-2. French Conversation. (6) Intensive conversational practice with group discussion and laboratory drills on selected topics. Analysis and correction of individual problems. Prerequisite: French 202.

410. Black French Writers: Past and Present. (2) An introduction to the works of various Black authors of French expression, with emphasis on Alexandre Dumas, René Maran, Léon Damas, Aimé Césaire, Léopold Senghor and Frantz Fanon.

420. Introduction to Explication de textes. (2) Designed to acquaint the student with the French approach to analyzing poetry and prose.

MFL 450. Senior Project. (3) Individual research and project writing.

FR.480. Commercial French. (3) Designed to train students to write effective business letters in correct styles and language. Prerequisite: French 302.

COURSES IN GERMAN

101-2. Elementary German. (8) 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 also supplemented with graded reading. German 101 is the prerequisite to 102.

201-2. Intermediate German. (6) Consists of intensive and extensive reading of graded German works (literary and scientific). Fluency and accuracy of comprehension are the primary objectives. Prerequisite for 201 is 102 or the equivalent; for 202, it is 201.

311-12. Survey of German Literature. (6) Consists of selected readings to acquaint the student with outstanding writers, ideas, and movements in German Literature from its beginning through the contemporary period. Prerequisite: German 202.

311. Old High German through the Seventeenth Century.

312. Eighteenth Century to the Present.

MFL 320. Foreign Language Pronunciation and Diction. (3) Basic rudiments of the sound systems in three to four languages. (Primarily for Music majors).

COURSES IN SPANISH

101-2. Elementary Spanish. (8) The development of the ability to understand, speak, write, and read Spanish. Laboratory work is an integral part of this course. Spanish 101 is the prerequisite to 102.

201-2. Intermediate Spanish. (6) Grammar review and further development of the ability to understand, speak, write, and read Spanish, reinforced with laboratory work. Prerequisites: Spanish 101 and 102 or the equivalent for 201; 201 for 202.

301-2. Advanced Oral and Written Composition. (6) Vocabulary building and intensive analysis of Spanish with practical application in oral and written compositions. The prerequisite for 301 is 202; for 302, it is 301.

300. Pronunciation and Diction. (2) The development of good articulatory habits through perception, imitation, and intensive drill with secondary emphasis on theory and phonetic symbols. Prerequisite: Spanish 201.

311-312. Survey of Spanish Literature. (6) Literary philosophies, types, major authors and their contributions from the earliest extant works to the present. Prerequisite: Spanish 202.

311. Middle Ages through the Sixteenth Century.

312. Seventeenth Century through the Contemporary Period.

MFL 320. Foreign Language Pronunciation and Diction. (3) Basic rudiments of the sound systems in three to four languages. (Primarily for Music majors).

MFL 371. Methods of Teaching Foreign Languages. (3) This course acquaints the student with methods, materials, and texts. Bi-weekly classroom observations in secondary schools of the community are required. (A requisite for those who wish to obtain teacher certification).

400. Hispanic Civilization. (3) The history and development of Spanish and Spanish-American civilization, culture, and institutions.

401-2. Spanish Conversation. (6) Intensive conversational practice with group discussions and drills on selected topics. Analysis and correction of individual problems. Prerequisite: Spanish 203.

410. Readings in Spanish American Literature. (2) Involves selected readings to give the student a panoramic view of representative authors, works, and movements from the colonial period to the present.

420. Applied Stylistics. (2) An intensive course in composition to aid the student in developing an individual style of writing in the Spanish language. Prerequisite: Spanish 302.

MFL 450. Senior Project. (3) Individual research and project writing.

SPN. 480. Commercial Spanish. (3) Designed to train students to write effective business letters in correct styles and language. Prerequisite: Spanish 302.

DEPARTMENT OF SOCIOLOGY

DR. L. JONES (Head), MRS. ARCHER, MR. AGARWAL, MISS DURHAM, DR. HUSAINI, DR. JACKSON, DR. MASUOKA, MRS. POAG, MR. RHODES, MISS ROY, MRS. STEPHENS, MR. TEMPLE, DR. WEBSTER.

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 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.

Requirements for graduation: (1) A student must complete a minimum of 133 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) At least 30 semester hours in sociology with the 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 211.

CURRICULUM FOR A MAJOR IN SOCIOLOGY
(Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3	PSY 201-202 or 242	3	3
HIST 201-202	3	3	ENG 211-212	3	3
SOC 211, 330	3	3	SCI 121-122	3	3
SOC 100	1		Electives 200-300's	3	3
MATH 111	4		ART 133 or MUS 131	2	
PE or AFROTC	1	1	SPCH		2
HEA 151		2	Electives any level	2	
Elective		3	PE or AFROTC	1	1
	15	15		17	15

JUNIOR YEAR	Credit Hours Fall	Spring
ENG 310		2
SOC 300	3	
SOC 360	3	
SOC 451		3
ECON 211	3	
GPA 221-222	3	3
SOC 300 or 400 level	3	3
Minor 300-400 level	3	3
Electives 300-400 level	1	3
	18	17

SENIOR YEAR	Credit Hours Fall	Spring
SOC 452	3	
SOC 490		3
SOC 300-400 level	6	3
Minor 300-400 level	6	6
Electives 300-400 level	3	6
	18	18

A minimum of 133 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, 102	3	3
HIST 201, 202	3	3
GEOG 171, 172	3	3
MATH 111, PSY 201	4	3
SOC 100	1	
PE or AFROTC	1	1
HEA 151		2
	15	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
SOC 211, 330	3	3
ENG 211, 212	3	3
SCI 121, 122	3	3
PSY 242		3
ART 133	2	
HIST 301-2 or 401-2	3	3
MUS 131		2
ED 201	3	
PE or AFROTC	1	1
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
SOC 300	3	
SOC 350		3
SOC 360	3	
SOC 451		3
PSY 312		3
POS 221, 222	3	3
ECON 211, 212	3	3
ED 301	3	
ED 387		3
ENG 310	2	
	17	18

SENIOR YEAR	Credit Hours Fall	Spring
SOC 300's-400's	6	
SOC 452	3	
SOC 490	3	
ED 465	3	
ED 371		3
ED 491		3
ED 472		9
Electives	2	
	17	15

*If a student takes a lighter load during the sophomore or junior years, work may be completed in summer sessions between the freshman and sophomore years, sophomore and junior years, or junior and senior years. Education 371, 472 and 491 *cannot* be taken during the summer session, and they *must* be taken together either in the fall or the spring semester. Education 371 and 491 are to be completed during the first nine weeks of a semester and Education 472 during the last nine weeks of the same semester. Before enrolling in these courses all other Education (Educ. 201, 301, 387, 465), Psychology (Psy. 242, and 312) and three-fourths of the Social Studies courses (Economics, Geography, History, Political Science and Sociology) must be completed.

A minimum of 133 semester hours for the B.S. with Certification in Social Studies is required.

SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF SOCIOLOGY

COURSE OFFERINGS

SOCIOLOGY (SOC)

SOC 100. Orientation. (1) A course required of all freshmen in the Department of Sociology. Designed to orient the student to the University, and to acquaint him with the philosophy and opportunities for study and employment in Sociology.

SOC 211. 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 relationship to others.

SOC 300. 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.

SOC 310. Social Gerontology. (3) To acquaint the students with a body of scientific knowledge regarding the demography of aging, the influence of older people on the economic, social and political structure and institutions of society, and the measures society takes to meet the needs of older people.

SOC 320. Anthropology. (3) The student is introduced to the major divisions and subdivisions of anthropology. Human evolution, archeology, human variation--biological and cultural--, and applied anthropology are examined briefly. The nature of culture and its many variations are studied. Students will be expected to read ethnologies or ethnographics drawn from major cultural areas. Prerequisite: SOC 211 or permission of the instructor.

SOC 330. Social Problems. (3) Social behavior problems will be the focus of the course with emphasis placed upon the consequences for the individual and society. Suggested remedies will be examined.

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 child-parent relationships.

SOC 350. Social Psychology. (3) This course is designed to equip students with the intellectual insights which will allow them to understand and explain the various symbol systems building behavior related to social institutions, ideologies, and actions. Special attention is given to the biological and cognitive derivations of symbol systems.

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 inter-action, mate selection and family unity are studied. Attention is given to changes currently affecting the American family. Prerequisite: SOC 211.

SOC. 370. Minority Group Problems. (3) An 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) This course deals with social mobility, environmental adjustments, problems of male and female athletes. There will be some concern

with race, culture and background of various ethnic groups along with factors involved in apparent group superiority in some sport activities.

SOC 380. Industrial Sociology. (3) 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. Prerequisite: SOC 211 or the permission of the instructor.

SOC. 390. Black Nationalism: A Sociological Analysis. (3) Frazier has suggested that the Afro-American community is a Nation-within-a-Nation: This course will provide a sociological analysis of this concept and describe the evolution of national consciousness from domestic to international form. Also attention will be focused on race-consciousness and Black Nationalism.

SOC 395. Racism: A Sociological Analysis. (3) An in-depth analysis of the historical development and perpetuation of racism in the society. The course also will focus on the influences of racism on the social institutions within the Black Community.

SOC 400. Criminology. (3) Includes 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) Includes an examination of the 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, and the penal, and correction insititutions used in working with the delinquent. Visits to the institutions will be made available.

SOC 420. Population Problems. (3) Growth and change in the composition and distribution of population in the world and in the United States is traced. Basic demographic concepts, theories of population growth and decline, problems of population control and population policies are studied.

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 and larger 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 will be made of rural life in some selected countries and the United States. The course will look at past rural life as well as changes which have taken place and are currently in process. Primary emphasis will be on structure and change.

SOC 451. 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..

SOC 452. Senior Project Writing. (3) The Senior Project writing is designed to orient the student toward applying sociological knowledge and experience systematically to a specific social problem. The project writing must be in one of the three following areas:

OPTION A--A supervised Content Analysis. The project will be a critical and systematical examination and survey of the literature dealing with a specific and-or multiple social problem. An outline of the problem to be examined must be approved before initiating the analysis. Prerequisite: SOC 300 and 451.

OPTION B--A supervised Internship. This project will be a critical examination of the dynamics of human behavior, interpersonal relations and methods of helping clients within a selected community service agency. (For example, a case study).

An outline of the problem to be examined must be approved before initiating the internship. Prerequisites: SOC 300 and 451.

OPTION C--A supervised Analytical Project. The project will be (a) a critical examination of the operations and functions of two or more community service agencies, private or public, for dealing with specific and multiple social problems within the framework of group dynamics or (b) a survey of individuals or groups attitudes toward a social situation or problem. The student should develop a research design and have it approved before initiating this project. Prerequisites: SOC 300 and 451.

SOC 460. Urban Sociology. (3) A study of the growth of urbanism, its spatial and communicative extension into rural areas, and its impact upon the economy, the values and the social organization of communities. The spatial structure and land use patterns of urban and fringe areas and their implications for social services.

SOC. 465. Complex Organizations. (3) The structure and function of formal organizations will be the focus of the course. The interrelationships of organizational variables, such as power, authority, influence, efficiency, hierarchy and stability will be examined with the aim of understanding community organization.

SOC 470. Social Stratification. (3) The course will study theories and measure of social status, social mobility, and social stratification as forces in society. Emphasis will be placed on the relationship between social stratification and social orientation, as well as societal goals in relation to social stratification.

SOC 480. Collective Behavior. (3) Treatment of a wide variety of collective groupings and movements; their origin, organization, membership, leadership, and dissolution. Includes an analysis of such social phenomena as institutions, formalized and congenial groupings, audiences, publics, crowds, mobs, fads and fashions and mass movements such as social unrest and reform.

SOC 490. History of Sociological Theory. (3) Major sociological theories as represented by Comte, Spencer, Durkeim, Weber, Simmel, et al., including those of the contemporary period.

SOC. 495A, 495B, 495C, and 495D. Independent Study and Readings. (3) Designed to allow students to work independently 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.

During the sophomore year, Social Welfare majors are required to observe and participate in 5 Social Welfare Agencies (minimum 30 clock hrs.) During the junior year, they are required to complete two (2) written agency profiles. Students participating in the department's regular volunteer program may use that experience as a substitute for the observation and participation requirement of the sophomore year. Both requirements must be met prior to field experience course.

A student must spend 375 clock hours (one semester) in field experience in selected social agencies. The purpose of the field experience will be to give the student an opportunity to apply theory to actual practice under supervision and guidance of a qualified practitioner. He will be evaluated on the basis of his growth and development.

A student must have a cumulative average of at least 2.00 and must have earned the grade "C" in Social Welfare 320, 330, 340, 360, and 470, before being admitted to Field Experience.

Courses in the major field in which a student receives the grade of "D" must be repeated.

Students who wish to minor in Social Welfare must complete a minimum of 18 semester hours including the following: Social Welfare 320, 330, 340, 350, 360, and two electives.

DEPARTMENT OF SOCIAL WELFARE

MRS. MARTIN (Head), MR. BURTON, MRS. DEBERRY, MRS. HEMPSTEAD, MRS. SAMPSON, MRS. TURNER, MRS. WATSON.

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. Students will earn a minor in Socioloy.

Requirements for graduation: (1) A student must complete a minimum of 134 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.

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 five social welfare agencies for a minimum of 30 clock hours. In the junior year, students will complete two written agency profiles. Students participating in the Department's 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 minimum of 375 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 will be evaluated on the basis of his growth and development.

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, 360, and 400, before being admitted to Field Experience.

Courses in the major field in which a student receives the grade of "D" must be repeated.

Students who wish to minor in Social Welfare must complete a minimum of 18 semester hours including the following: Social Welfare 320, 330, 340, 350, 360 and two electives.

Courses required of all majors

Social Welfare		**37 Semester hours**
100	Orientation (1)	
320	Human Behavior and Social Environment (3)	
330	Introduction to Social Welfare (3)	
340	Social Policy (2)	
350	Interventive Methods (3)	
350L	Interventive Methods Lab (1)	
360	Interventive Methods-Community Organization (3)	
400	Social Work Intervention in Health (3)	
410	Field Experience (12)	
420	Field Experience Seminar (3)	
450	Analytical Review Literature (3)	
490	Senior Seminar (1)	
	Electives	

The Social Welfare Curriculum has been revised to offer students three options: (1) The generalist curriculum, (2) The generalist curriculum with a concentration in child welfare, and (3) The generalist curriculum with a concentration in health care and aging.

Curriculum:

GENERALIST CURRICULUM FOR MAJOR IN SOCIAL WELFARE

Freshman Year Courses	Semester Hours	Credit
English 101-102	3	3
History 201-202	3	3
Math 111-112	4	3
Sociology 211	3	
Art 133		2
Speech 220		3
Social Welfare 100	1	
P.E. or Air Science 151-152	1	1
Psychology 201		3
	15	18

Sophomore Year Courses	Semester Hours Credit	
English 211-212	3	3
Biophysics 121-122	3	3
Social Welfare 320-330	2	3
Sociology 350-360	3	3
Social Welfare 340	2	
GPA 221		3
P.E. or Air Science 151-152	1	1
Philosophy 323		2
G.P.A. 381	3	
	17	18

Junior Year Courses	Semester Hours Credit	
Economics 211-212	3	3
English 310		2
Psychology 321	3	
Sociology 300-451	3	3
Social Welfare 350-360	4	3
Social Welfare 400		3
Sociology 410	3	3
Electives		
	16	17

Senior Year Courses	Semester Hours Credit	
Sociology 460	3	
Social Welfare 450	3	
Electives	6	
Social Welfare Elective	6	
Social Welfare 410		12
Social Welfare 420		3
Social Welfare 490		1
	18	16

Curriculum:

GENERALIST/CONCENTRATION IN CHILD WELFARE

Freshman Year	Fall	Spring
Eng 101-102	3	3
Hist 201-212	3	3
Math 111-112	4	3
Soc 211	1	
P.W.-AFROTC	1	1
Spc 220		3
Art 133		2
S.W.	1	
	15	15

Sophomore Year	Fall	Spring
Eng 211-212	3	3
Sci 121-122	4	4
Psy 201-Pos 221	3	3
S.W. 320-330	2	3
S.W. 340	2	
Ed CD 201-Soc 360	3	3
Phil 323		2
P.E.-AFROTC	1	1
	18	19

Junior Year	Fall	Spring
Econ 211-212	3	3
Eng 310		2
Psy 321	3	
Soc 300	3	
Soc 451		3
S.W. 350-360	4	3
ECED 351		3
Soc. 410	3	
S.W. 440		3
	16	17

Senior Year	Fall	Spring
Soc 460	3	
S.W. 450	3	
S.W. 410		12
S.W. 420		3
S.W. 490		1
S.W. 442	3	
S.W. 444	3	
Art 241	3	
S.W. Elective	3	
	18	16

Curriculum:

GENERALIST/CONCENTRATION IN HEALTH CARE and GERONTOLOGY

Freshman Year	Fall	Spring
Eng. 101-102	3	3
Hist. 201-202	3	3
Math. 111-112	4	3
Soc. 211	3	
P.E.-AFROTC	1	1
SPC 220		3
Art. 133		2
S.W. 100	1	
	15	15

Sophomore Year	Fall	Spring
Eng. 211-212	3	3
SCT 121-122	3	3
Psy. 201-Pos. 221	3	3
S.W. 320-330	2	3
S.W. 340	2	
HCA 210-GPA 380	3	3
Phil. 323		2
P.E.-AFROTC	1	1
	17	18

Junior Year	Fall	Spring
Econ. 211-212	3	3
Eng. 310	2	
Psy. 321	3	
Soc. 300	3	
Soc. 451		3
S.W. 350-360	4	3
S.W. 400		3
Soc. 410	3	
HCA 450	3	
	18	15

Senior Year	Fall	Spring
Soc. 46-	3	
S.W. 450	3	
S.W. 410		12
S.W. 420		3
S.W. 490		1
S.W. 401	3	
S.W. 402	3	
S.W. 470	3	
S.W. Elective	3	
	18	16

COURSE OFFERINGS

100. Orientation. (1) A course required of all freshmen in the Area of Social Welfare. Designed to orient the student to the University, and to acquaint him with opportunities for study and enjoyment in the various areas of social work.

320. Human Behavior and Social Environment. (2) Analyzes the professional helping process and shows how the psychological and behavioral concepts drawn from the theories can be used by those preparing for the helping profession. It emphasizes understanding the functioning of human beings as it relates to their social environment.

330. Introduction to Social Welfare. (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, and the varying social work interventive methods utilized within the various social services. Prerequisite: 320.

340. Social Policy. (2) This course is designed to examine the interrelationships of history, politics, philosophy, sociology, and economics, and their influence in the development of the social welfare services. Prerequisites: 320 and 330.

350. Interventive Methods. (4) Interventive methods is an overview of social casework and groupwork as a method and process emphasizing fundamental concepts, values and principles. It is geared toward developing a conceptual framework for casework

and groupwork practice based on a problem-person-situation perspective which has problem-solving, growth-promoting, therapeutic, and educational dimensions. Interviewing skills and techniques will be developed through a laboratory experience. Prerequisites: 320 and 330.

S W 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, films, 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 integration of theory and practice. This course is to be taken concurrently with S W 350 - Interventive Methods.

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: 320, 330, 340 and 350.

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, illness 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 community resources for the continuation and preventive methods. One hour per week will be devoted to participatory-observation at a health related agency. Prerequisite: HCA 201 and S W 330.

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, incidence and nature of various handicaps, diagnosis, treatment, education, training, placement and follow-up. Prerequisite: S.W. 400.

402. Mental Health: Clinical Intervention and Services. (3) This course will provide an overview of current planning and service activities. Major issues and problems in the mental health field will be examined. Beginning skills applicable to the mental health fields will be emphasized. Prerequisite: S.W. 400 and 401.

410. Field Experience. (12) 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 from the field will be provided by a qualified practitioner from an agency committed to undergraduate Social Welfare Education. Social Welfare majors at Tennessee State University will be required to spend 375 clock hours in an educational oriented field experience (one semester). Seniors are admitted upon the recommendation of their major advisor.

420. Field Experience Seminar. (3) Gives students in field experience an opportunity to discuss and share problems encountered in agency settings. Discussion in the Seminar moves from the level of personal experience to the level of analysis, generalization and abstraction. Taken concurrently with 410.

430. Community Problems. (2) This course is designed to give individual and group study or research on problems which contribute to physical, socio-economic and political breakdown within the community. Prerequisite 360.

440. Casework 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, youth. The course will also increase the student's understanding of the adolescent peer group, family relationships, emotional and physical development and role. Prerequisite: ECED 201, 351; S. W. 330, 350.

442. Methods of Treatment for Children/Youth. (3) The course is designed to focus on the social treatment of children and youth with a comprehensive coverage of roles and functioning of the social worker in bringing about individual change. Emphasis will be placed on treatment goals and purposes, techniques of intervention and the utilization of appropriate intervention in the social environment. Prerequisites: ECED 201, 351 and S. W. 440.

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. Prerequisites: ECED 201, 351; S.W. 440-442.

450. Analytical Review of Social Welfare 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 in critical and analytical methods.

460. Social Work in the Black Community. (2) The Black Community will be examined through its political, economic, and social perspectives in a seminar experience. Social workers' perception of the Black community and the varied social work interventive roles will be analyzed. Future social policies, social welfare services, and changing societal values and technological advances will be viewed on the basis of each of these aspects and their effect on the Black community.

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: 320, 330, 340, 350 and 360.

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 area of interest and are required to submit a senior essay. Limited to students with 3.0 average. Prerequisites: 320, 330 and 340.

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. Offered to second semester seniors.

THE HONORS PROGRAM

The Honors Program, which was established in the Fall, 1964-1965, is administered by a Director, who is assisted by an Advisory Committee. This committee is composed of two faculty members who teach Honors courses, two who teach Colloquia, and two who are selected at large. The members serve on a rotating basis.

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 in their major who may be recommended by their department heads, 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.

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 to do a quality of work in keeping with his 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 ablilty.
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 score in English and his composite score, and/or his high school academic record, the Honors Office writes the student to invite him to participate in the Honors Program. Included with this letter is an application blank the student is asked to execute if he desires to become a member of the Program. He is also required to secure recommendations from two of his high school personnel: principal, counselor, teachers.

Admission to the Honors Program is made on the basis of the student's ACT scores and/or his high school record, and his recommendations. All students who are invited to participate in the Honors Program must, however, make separate application for admission to the University.

Students who are not invited to 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 evaluation of him, together with his grade point

average, will determine his acceptance. The Honors Office, being guided by the Dean's List, will also write students who will be interviewed according to the above formula. The latest point for a student to enter the Honors Program is the first semester of his sophomore year.

Students who have not been invited to join the Honors Program but who are interested and feel that they can meet the entrance requirement should write to:

Dr. McDonald Williams, Director
Honors Program
Tennessee State University
Nashville, Tennessee 37203

When a student enters the Honors Program, he is advised by his major department and by the Honors Office. During his 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 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." The Honors Program does not require additional courses beyond those required of other students. 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 semester evaluation of him by his Honors teachers, who determine whether he is of Honors calibre and whether he is working up to his potential.

Students who complete the requirements of the Honors Program will, at commencement, be graduated with "University Honors."

These requirements include:

1. Taking a minimum of 24 hours of Honors work, or 18 hours if the student enters during his sophomore year.
2. Writing and defending a senior thesis. The student will select a

topic for his Honors Thesis with the approval of his major adviser and instructor of the course. The topic may be related to his major field of interest or to a colloquium. In so far as possible, advisers 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 by the beginning of 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 University Honors are distinguished in the academic procession by a scarlet and gold cord.

The Honors Office offers its assistance to Honors students as they make application for fellowships and for admittance to graduate school.

HONORS COURSES

FRESHMAN YEAR	SEMESTER Hours Credit	
Name of Course	I	II
Orientation 100H	1	
English 101-102H	3	3
Biology 111-112H	4	4
Mathematics 111-112H	3	3
Bio-Physical Sciences 121-122H	4	4
Chemistry 121-122H	4	4
History 121-122H	3	3
Music 131H	2	
Art 133H		2
History 201-202H	3	3
Govt. Pub. Affairs 221H		

SOPHOMORE YEAR	SEMESTER Hours Credit	
Name of Course	I	II
Education 201H	3	
English 211-212H	3	3
Sociology 211H	3	
Speech 220H	3	
Psychology 242H		3
English 310H	2	

JUNIOR YEAR Name of Course	SEMESTER Hours I	Credit II
Junior Colloquim 300H		3
Sociology 300H	3	
English 361-362H	3	3
Education 387H	3	

SENIOR YEAR Name of Course	SEMESTER Hours I	Credit II
Honors Senior Colloquim 400H	3	
Honors Senior Thesis 410H	3	
Honors Sociology 451H		3
Honors Social Welfare 480H		3
Honors Sociology 490H	3	

The current offerings of the Honors Program are as follows:

HP 100H. Honors Orientation. (1) A course designed to assist the freshman student in his adjustment to college life in the areas of learning, educational and vocational planning, and interpersonal relations. Offered in fall semester. One lecture per week.

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 111-12H. Honors Animal Biology. (4-4) A course designed for students of exceptional caliber. Emphasis is 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 111H-112H. Introduction to College Mathematics I and II. (3-3) 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.

SCI 121-122H. Honors Introduction to Bio-Physical Sciences. (4-4) 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: 3 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, 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.

HIST 121H-122H. Honors Growth of Civilization (1500-present). (3-3) The major social, economic, political religious, and intellectual developments in European history from

the last medieval times to the Age of Metternich. History 122 is a continuation of 121.

MUS 131H. Honors Music Appreciation. (2) A study of basic materials of music; analysis of materpieces of music with reference to cultural, social, and economic life of the times; group attendance at concerts and recitals, with preliminary discussion periods.

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 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 education problems. Emphasis will be placed on aiding and encouraging creative thinking.

HIST 201H-202H. Honors American History. (3-3) An intensive and extensive study of American history from pre-European period to 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.

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 relationship to others.

SPCH 220H. Honors 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.

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 participation; 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 Colloquim. (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 colloquim 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, (OE), 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, trancendentalism, 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.

ED 387H. Honors Curriculum Development. (3) The course is designed (1) to give students an opportunity to critically study 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, practices, 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 Black Experience"—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.

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. His choice must, however, be approved by the Honors Advisory Committee. In so far 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 by the beginning of 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.

SOC 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 area of interest and are required to submit a senior essay. Limited to students with 3.0 average. Prerequisite 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.

THE SCHOOL OF BUSINESS

SCHOOL OF BUSINESS

OBJECTIVES

The programs in the School of Business provide an opportunity for a student to obtain a broad educational background in Business. The primary objectives are: to provide students with an understanding of the intricacies in business; to provide training in modern business principles; to provide students with a sound foundation for successful business careers; to provide students with a knowledge and understanding of the changing developing character of our economy; and to educate students for the teaching of business subjects on the secondary and collegiate levels.

ORGANIZATION

The School of Business offers five curricula: Accounting, Business Education, Business Administration, Management, and Office Administration. A Two-year Stenographic and Clerical Program may be followed by non-college degree seeking enrollees. A master's program is offered in Business Education.

The School of Business sponsors the following student organizations: Delta Mu Delta National Honor Society in Business Administration; Pi Omega Pi National Business Teacher Education Honor Society; National Collegiate Association of Secretaries, Phi Beta Lambda Business Fraternity and Phi Gamma Nu National Professional Society.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE

To complete this degree, the student must meet the General Education requirements of the University, as well as the specific requirements which apply to his emphasis in business (see the section entitled "University Requirements for a Bachelor's Degree"). At least 40 percent of the total hours required for the Bachelor's degree must be taken in subjects other than business. Students in Business Administration must earn the final 30 semester hours in residence at Tennessee State University. No grade less than "C" in any required course within the student's area of emphasis will be accepted as credit toward meeting departmental requirements.

DEPARTMENT OF BUSINESS ADMINISTRATION

FACULTY

DR. ELLZY (Head), MR. AWUJO, MR. BROWN, MR. CERMAK, MRS. FRANKLIN, MR. HOLZMER, MR. HOWELL, DR. KIM, MRS. LOWNES, MR. NIMMO, DR. NWODOBO, MR. PARUCHURI, MR. PHILLIPS, MR. TENPENNY, DR. WEIS.

CORE REQUIREMENTS

In order to obtain an understanding of the fundamentals of business operations every student seeking a Bachelor of Science degree in Business Administration must complete the following courses.

BA 101	Business Principles	3
AC 211-212	Elementary Accounting	8
EC 211-212	Economic Principles	6
BE 315	Business Communication	3
BA 323-324	Business Law	6
BA 335	Report Writing	3
BA 422	Corporate Finance	3
MG 300	Principles of Management	3
MG 450	Senior Seminar/Business Policies	3
MK 326	Principles of Marketing	3
MS 301	Introduction to Data Processing	3
MS 311	Business Math and Statistics	3

REQUIRED COURSES OF ALL FRESHMEN AND SOPHOMORE STUDENTS WITH AN EMPHASIS IN ONE OF THE AREAS OF BUSINESS ADMINISTRATION

FRESHMAN YEAR

BA 101	3
Eng. 101-102	6
Hist. 201-202	6
*Sci. 121-122 or Bio. or Chem.	8
Math 111-112	7
P.E. 11-19 or AS 151-152	2
Elective or OA 121	3

*Accounting students should enroll in AC 211-212, and take Sci. 121-122 during the sophomore year.

SOPHOMORE YEAR

*AC 211-212	8
EC 211-212	6
Eng. 211-212	6
MS 301	3
Psy. 201	3
Art 133	2
Music 131	2
PE 20-50 or AS 251-252	2

*Accounting students should enroll in AC 311-312.

MAJOR EMPHASIS REQUIREMENTS

A major emphasis consists of a minimum of 24 semester hours in related courses primarily within a given field. Major emphases are available in accounting, general business administration and management.

ACCOUNTING

This emphasis includes the essential academic training for: (1) the student who is preparing for professional careers in public accounting;

(2) the student who is preparing for jobs as comptrollers, heads of accounting divisions, cost accountants or internal auditors; (3) the student who wishes to serve in any of the numerous accounting positions offered in federal, state and local governments; or (4) the student who plans to operate his own business.

An emphasis in accounting shall consist of a minimum of 24 semester hours. The following must be included:

AC 311	Intermediate Accounting	3
AC 312	Intermediate Accounting	3
AC 314	Cost Accounting	3
AC 400	Advanced Accounting	3
AC 411	Income Tax Accounting	3
AC 413	Auditing Theory and Practice	3
AC Electives	300 or 400 Level	6
EC 420	Money and Banking	3

To complete the requirements, the student, with the approval of the advisor, shall select 18 additional hours (minimum of 9 in business) of course work from among upper division courses.

MANAGEMENT

The management function includes the planning, organizing and controlling of human physical resources in organizations. Through selection of courses, as outlined below, the student may concentrate in behavioral, quantitative or strategic aspects of management philosophy and practice. An emphasis shall consist of a minimum of 24 semester hours. The following shall be included:

MG 331	Organizational Theory	3
MG 332	Production and Operations Management	3
MG 368	Management Systems	3
MG 351	Human Behavior in Organizations	3
MG 423	Personnel Management	3
MG Electives	300-400 Level	9

To complete the requirements the student, in consultation with the advisor, shall select 18 additional hours (minimum of 9 must be in business) of course work from among upper division courses.

CURRICULUM FOR A MAJOR IN BUSINESS ADMINISTRATION
(General Business Administration)

FRESHMAN YEAR		SOPHOMORE YEAR	
BA 101	3	AC 211-212	8
Eng. 101-102	6	EC 211-212	6
Sci. 121-122 or Bio. or Chem.	8	Eng. 211-212	6
Math. 111-112	7	M.S. 301 or 302 or 303	3
P.E. 11-19 or AS 151-152	2	Psy. 201	3
Hist. 201-202	6	Art 133	2
Elective or OA 121	3	Music 131	2
		PE 20-50 or AS 251-252	2

JUNIOR YEAR		SENIOR YEAR	
AC 311-312	6	Unrestricted Elective	3
MS 311	3	EC 420	3
Econ 300 (any two)	6	MG 423	3
301-302-304-307-315		MG 450	3
BA 323-324	6	EC 400 Level (any one)	3
MK 326	3	BA 422	3
MG 300	3	MK 328-329-431- or 432 (any one)	3
MG 331	3	BA Electives	9
BA 335	3	BE 315	3

MINORS IN THE BUSINESS ADMINISTRATION DEPARTMENT

Inasmuch as minors are chosen to facilitate the student's career objective, reasonable latitude is allowed in course selection. The business administration minor requires 21 hours; the accounting minor 23 hours; the economics minor 18 hours; the marketing minor 18 hours; and the data processing minor 18 hours.

BUSINESS ADMINISTRATION MINOR

BA 301	Introduction to Data Processing		3
BA 323	Business Law		3
MG 331	(Organizational Theory)		3
MK 326	Marketing Principles		3
MG 423	Personnel Administration		3
AC 211 or	Principles of Accounting or	4 or	3
EC 211	Economic Principles		
BA 400 Level	Elective		3
		22	21

ACCOUNTING MINOR

AC 211-212	Elementary Accounting	8
AC 311-312	Intermediate Accounting	6
AC 314-315	Cost Accounting	6
AC 400 Level	Elective	3
		23

ECONOMICS MINOR

EC 211-212	Principles of Economics	6
EC 302	Intermediate Economics	3
EC 404	Comparative Economic Systems	3
EC 400 Level	Electives	6
		18

MARKETING

MK 326	Marketing Principles	3
MK 328	Principles of Retailing	3
MK 329	Salesmanship	3
MK 431	Advertising	3
MK 432	Purchasing	3
BA 400 Level	Elective	3
		18

DATA PROCESSING

MS 301	Introduction to Data Processing	3
MS 302	Programming Languages	3
MS 304	Advanced COBOL	3
MS 312	Management Science I	3
MG 300	Principles of Management	3
MS 412	Management Science II	3
		18

SCHOOL OF BUSINESS
DEPARTMENT OF BUSINESS ADMINISTRATION

Course offerings

BUSINESS ADMINISTRATION (BA)

BA 101. Business Principles. (3) A survey of the fundamental principles of business organization, banking, credit, management, salesmanship and advertising.

BA 323-324. Business Law. (6) Fundamental principles of law most frequently involved in business transactions, including contracts, sales, partnerships, principal and agent, corporations, negotiable instruments, property, bailments, and common carriers, with the view of enabling businessmen to avoid litigation.

BA 335. Report Writing. (3) The purpose of this course is 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.

BA 422. Corporate Finance. (3) Corporate organization and control; corporate securities, the management of fixed capital and income: reserve, surplus and undivided profits; investment banking and the securities market.

BA 425. Principles of Real Estate. (3) The course deals with real estate contracts, deeds, and mortgages, the value of leases and leaseholds, and the valuation of real estate.

BA 433. Principles of Insurance. (3) Presents the personal and business uses of insurance in general and the types and organization of the insurance enterprise. Emphasis is placed on life, accident and health insurance enterprise.

BA 435. Independent Study in Business. (3) For students who wish to pursue individual study and analysis of problems of particular interest and value.

BA 436. Business Internship. (1-6) For students who are engaged in full-time work experiences under supervised condition. May be repeated to a maximum of 6 hours.

BA 440. Principles of Investment. (3) Consideration is given to the functions and economic basis of investment; basis elements of investment program; although emphasis is on investment and securities, other avenues of investment are considered.

MANAGEMENT SCIENCE (MS)

MS 301. Data Processing. (3) A study of the basic principles and application of punched card and tape record keeping. The designing of business forms and survey instruments to facilitate use of cards and tape for data record and analysis. Also concepts preliminary to learning computer programming.

MS 302. Computer Programming—COBOL. (3) A general overview of Data Processing. Considerations: peripheral equipment, binary number systems, core storage, flow charting. The course is designed to develop computer programming techniques using the COBOL language to the point of practical business applications. No previous programming experience is required. Prerequisite: BA 301.

MS 303. Computer Programming—FORTRAN. (3) An introductory computer programming course designed to develop skills and techniques using the FORTRAN IV language on the IBM 1130 and 360 machines. Practical business applications including input/output, quantitative manipulation and data file management. No previous experience required. Prerequisite: MS 301.

MS 304. Advanced Cobol. (3) An analysis of selected topics in business and management related areas using the available capabilities of the IBM 1130 COBOL computer. 75% of the student's effort is devoted to actual programming and software development. Prerequisite: MS302.

MS 311. Business Math and Statistics. (3) A review of selected topics from Algebra, Analytic Geometry, Trigonometry and Elementary Calculus to strengthen the business student's analytical thinking. One third of the course deals with Basic Statistics. Prerequisite: Math 111-112.

MS 312. Management Science I. (3) The purpose of this course is to develop a sound understanding of the role of mathematical methods in the decision making process of Management. Specific emphasis is placed on linear programming. Prerequisite: Math 111-112 and MS 311.

MS 340. Management Information Systems. (3) Managerial application of digital computers particularly in areas where decisions are fairly structured. Emphasis on the use of computers in integrated information and decision systems. Topics covered include information-based technology, the cost and value of information, techniques of system analysis and design, organizational implications of information technology.

MS 412. Management Science II. (3) Applications of quantitative techniques in business organizations, queuing theory, inventory models, games and strategies, and simulation. Prerequisite: MS 312.

MS 422. Statistical Decision Theory. (3) Role of sampling and statistical control procedures in managerial decision-making under conditions of risk and uncertainity. Fundamental probability distribution and their use in classical and Bayesian inference.

MS 430. System Simulation Modeling. (3) Development and analysis of systems models through computer simulation. Prerequisite: MS 302 or any programming course.

MS 451. Special Problems/Management Science. (3) Opportunity for interested students to investigate recent developments in the field of management science. ADMISSION BY INSTRUCTOR'S PERMISSION ONLY.

MANAGEMENT (MG)

MG 300. Principles of Management. (3) Consideration of planning, organizing, directing, and controlling business operations. Theoretical background and thought with emphasis on leaders in the field. (Formerly BA 441).

MG 320. Small Business Management. (3) Problems and practices peculiar to the establishment and operation of small business enterprises will be considered: opportunities, hazards, and management problem will be analyzed; case studies will be reviewed. Prerequisite: Permission of the instructor.

MG 331. Organization Theory. (3) Examines aspects of various organizations, designs, and structures; integrated theory, research and application with focus on structure, processes and behavior.

MG 423. Personnel Administration. (3) An examination of the principles and methods of efficient labor management in the maintenance of harmonious relationships between management and employees. Personnel organization, personnel procedures and employee welfare considered.

MG 450. Senior Seminar/Business Policies. (3) Analysis of problems encountered by management in its daily operations. Investigation of sound business principles and practices. Integration of functional and other policy areas of the firm.

MG 332. Production and Operation Management. (3) Use of resources in producing goods and services. Concepts of planning, scheduling, and controlling productive activities and physical resources.

MG 351. Human Behavior in Organizations. (3) Human aspects of business, as distinguished from economic and technical aspects, and how they influence efficiency, morale and management practice. Concepts and practices which aid in integrating people.

MG 368. Management Systems. (3) Systems theory and management functions; basic tools for systems analysis; organizational systems design; systems application in recent business practices; introduction to business modeling and simulation.

MG 422. Supervisory Management. (3) Learning theory, orientation and basic level training, management development, resource materials and methods.

MG 424. Industrial Relations and Collective Bargaining. (3) Processes and procedures of collective bargaining. Negotiations of union contracts.

MG 459. International Management. (3) Management concepts and practices of multinational and foreign firms. Objectives strategies, policies and organizational structures of enterprises operating in various social, economical, political and cultural environments.

MARKETING (MK)

MK 326. Marketing Principles. (3) A general survey of the marketing structure as it exists and functions. Problems involving marketing procedure, policies, and techniques are considered.

MK 328. Principles of Retailing. (3) A basic survey course for students interested in retailing. Special consideration given to store organization, operation and current distribution problems.

MS 329. Salesmanship. (3) A study of the basic principles underlying the sales process and their application to the activities of salesmen. Course includes demonstration of sales techniques and lectures by practicing sales personnel.

MK 431. Advertising Principles. (3) The course is a study of the economics of advertising, the use of research in advertising, analysis of current advertising policies and methods of selecting media, writing copy, and constructing layouts.

MK 432. Purchasing. (3) A basic course in purchasing. The purpose of the course is to provide the student with basic concepts of purchasing and the applications of these concepts to current marketing and distribution methods.

MK 334. Buyer Behavior. (3) An integration of behavioral concepts in the analysis of buyer behavior and in marketing strategy formulation.

MK 341. Economics of Transportation. (3) Economic principles and legislative practices in the regulation of rates and services of rail, motor, air, water, and pipeline transportation. Theory of rates, discrimination, reasonableness, economic costs and policy toward transportation.

MK 350. Marketing Institutions. (3) A study of the marketing institutions in modern society and an analysis of their functions.

MK 411. Sales Management. (3) Application of management concepts to the administration of the sales operation.

MK 412. Marketing Communication. (3) The communication process as it relates to the promotional activities of the firm from a behavioral point of view.

MK 444. Marketing Channels. (3) Distribution channels used by firms engaged in marketing and manufacturing. Strategies for marketing-channels management. Relationships among marketing intermediaries.

MK 445. Physical Distribution Management. (3) Management of the physical distribution function of the business enterprise.

MK 451. Marketing Research. (3) Integrated treatment of the traditional and decision theory approaches to market research and analysis of environmental factors affecting decisions.

MK 460. Marketing Management. (3) Decision making by marketing executives. Integration of all elements of the marketing program.

ACCOUNTING (AC)

AC 211-212. Elementary Accounting. (4-4) A basic course in accounting theory and practice, a prerequisite to all other accounting courses. Three lectures and two hours of lab per week.

AC 311-312. INTERMEDIATE ACCOUNTING. (6) Accounting theory and practice applicable to determination of asset values and related problems of income determination. Accounting theory and practice applicable to liabilities and owner's equity. Special problem areas related to income determination and financial reporting.

AC 314-315. Cost Accounting. (6) A study of the principles of manufacturing and distribution cost accounting. Material and labor, overhead cost in job order and process cost accounting; determination analysis of costs of distribution; and related problems treated; cost systems analyzed. Prerequisite: AC 312.

AC 317. Managerial Accounting. (3) Designed to aid students who expect to become managers; provides information concerning the meaning of accounting figures, terms and techniques of analysis of exports; provides applications of techniques in making general decisions and judging performance.

AC 320. Governmental Accounting. (3) Accounting theory and problems peculiar to governmental units including organization, budgetary accounting figures, fiscal accounting, auditing, classification use of funds, and financial statements and reports. Prerequisite: Accounting 212.

AC 400. Advanced Accounting Problems. (3) Theory and problems in advanced topics, including partnership problems, insolvency estates and trusts and consolidate statements. Prerequisite: AC 312.

AC 411. Federal Tax Accounting. (3) Designed to provide a comprehensive explanation of the Federal Tax structure and to provide training in the application of tax principles to specific problems.

AC 413. Auditing Procedures. (3) Principles of auditing which include a critical examination of financial statements. The text materials are amplified by special problems. Prerequisite: Advanced status in Accounting.

AC 415. Comptrollership. (3) A study of the fiscal functions assigned the comptrollership connection with construction, control, and interpretation of accounts for internal use.

AC 418. Accounting Systems. (3) A study of the problems involved in the design and installation of accounting systems, including systematizing the clerical department of business. Prerequisite: Advanced status in AC.

AC 412. Income, Estate and Gift Taxation. (3) Complex problems of income taxation, estate, trust fiduciary and gift taxes. Emphasis is placed on tax research and tax planning.

ECONOMICS (EC)

EC 211-212. Economic Principles. (3-3). Principles and problems associated with the production, exchange, and the use of wealth. Fundamentals of Micro and Macro economic theory.

EC 301. Labor Problems. (3) A study of labor problems from union and management point of view with emphasis on the social and economic aspects of labor relations. Prerequisite: 6 hours in Economics.

EC 302. Intermediate Economics. (3) An examination of the theory of price and distribution, as to the price market system and the means by which it allocates scarce resources among competing wants. Topics included are: Consumer Behavior and Analysis, Product Pricing and Output, Resource Pricing, and the Welfare Implication of Alternate Market Organizations. Prerequisite: Economics 211-212.

EC 307. 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.

EC 315. Current Economic Problems. (3) Examination of key economic issues. Such major objectives as economic progress, economic justice provide a general framework of analyzing existing and proposed economic growth, inflation, unemployment, public debt, income maintenance, agricultural and international economic affairs. Prerequisite: 9 hours of Econ.

EC 403. Government Finance. (3) Survey of institutions and theories of government finance. Effects of public expenditures; functions of public revenues; forms of taxation; tax criteria; determination of tax policy; public borrowing; debt management; fiscal policy. Prerequisite: 12 hours of Economics or permission of instructor.

EC 404. Comparative Economic Systems. (3) The study and theories underlying capitalism, fascism, socialism, communism, and other economic systems. Prerequisite: 12 hours of Economics.

EC 405. International Economics. (3) Deals with the history and methods of international trade upon the efficiency, growth, and stablilty of national policies involving commodity agreements, trade restrictions, exchange controls, exchange rates, commercial treaties, custom unions, European economic integration, foreign investments and related topics. Prerequisite: 12 hours of Economics.

EC 419. Managerial Economics. (3) This course deals with the application of economic theory to business decision-making, with emphasis on profit objectives, capital budgeting, economic forecasting, and economic measurement. Prerequisite: 18 hours of Economics.

EC 420. Money and Banking. (3) The purpose of this course is to develop a sound understanding of the role of banks in our economy. Specific emphasis on central bank functions such as: the control of reserves, the supervising of bank operations, controlling the supply of money, and carrying out the fiscal functions of the government. Prerequisite: 12 hours of Economics.

FINANCE (FI)

FI 300. Personal Finance. (3) Financial problems and institutions affecting individuals. Borrowing, savings, insurance, investment and income estate and gift taxes.

FI 331. Financial Management. (3) Banking, savings, insurance, mortgage and other financial institutions and analysis of their functions.

FI 361. Managerial Finance. Capital budgeting, leverage, dividend and growth problems.

FI 426. Investment Management. (3) Problems of port-folio management, investment selection and timing techniques.

FI 431. Financial Markets. Asset, liability and capital management in financial institutions and the influence of market factors with current problems and issues.

FI 440. Securities Investment. (3) The environment and process of securities investment, and the appraisal of security value.

FI 461. Financial Management Cases. (3). Prerequisite: FI 361.

THE DEPARTMENT OF BUSINESS EDUCATION AND OFFICE ADMINISTRATION

FACULTY

DR. PATTERSON (Head), MR. BANKHEAD, DR. CRUMP, DR. ELLZY, MRS. RUCKER, and MISS ROBINSON.

Introduction

The Department of Business Education prepares students for teaching positions in secondary and post secondary institutions, and for administrative and clerical office positions.

The Department offers Baccalaureate Degrees in two major programs: (1) Office Administration, (with emphasis on preparation for supervisory and executive level positions; and (2) Business Teacher Education (with emphasis in stenography, general business, accounting and bookkeeping, and distributive education. The Department also offers Two-Year programs in stenographic and clerical occupations.

A minor in Office Administration is offered for students in other departments of the University.

Requirements for the Baccalaureate Degree

A minimum of 132 semester hours is required for graduation, 60 of which must be taken at the 300-400 level. A minimum of 40 hours is required for a major in Business Teacher Education or in Office Administration.

A grade of "C" must be earned in all major field courses. Major field courses are designated as Business Education (BE) or Office Administration (OA). Teacher Education students enrolling in the General Business or Bookkeeping and Accounting sequence must earn a grade of "C" in each course specified in their individual subject endorsements.

Requirements for Two-Year Programs

A minimum of 65 semester hours is required for graduation. Students who have proficiency in skills subjects may complete the requirements in less than two years.

Minors

The Department offers a minor in Office Administration. The minor requires a minimum of 18 hours in the area selected. The Department will plan the minor with a student according to his career objectives.

Required Field Experiences

Four-Year Program

Students in the department of Business Education engage in two types of field experiences: Student teaching and Office Internship. Requirements for student teaching are the same as those set forth by the University Teacher Education Program.

Office Internship is a senior level experience; students who enroll in this course should satisfy the following prerequisites:

1. Have senior classification.
2. Have a cumulative average of at least 2.00.
3. Have taken at least two stenographic tests.*
4. Have satisfactorily completed all Office Administration courses in their chosen sequence.

Two-Year Programs

Office Internship in the two-year program is a sophomore level experience. Students who enroll in this course should satisfy the following prerequisites:

1. Have sophomore classification.
2. Have a cumulative average of at least 2.00.
3. Have taken at least two stenographic tests.*
4. Have satisfactorily completed all two-year course requirements in their chosen sequence.

*Acceptable tests are the Atomic Energy Commission, Tennessee Valley Authority, Federal Civil Service, Union Carbide, and State Employment Tests. Other tests of equal repute will be considered by the Department.

BUSINESS EDUCATION CERTIFICATION REQUIREMENTS (STATE OF TENNESSEE)

The applicant shall offer a minimum of 18 semester hours, including a core of 12 semester hours in Accounting, Economics, and two of the following: Business Law, Introduction to Business Mathematics, and Business Communications.

Applicants meeting the above requirements may secure single subject endorsements by completion of the hours indicated, including hours completed in the core:

	Semester Hours
General Business: (Including Introduction to business or business principles, business law, and business mathematics.)	6
Bookkeeping	10
Typewriting: (Including 3 hours of advanced typewriting.)	6
Shorthand: (Including 3 hours of advanced shorthand.)	6
Business Law	6
Economics: (Principles and related subjects in that field.)	12
Salesmanship: (Selected from salesmanship, marketing, merchandising, advertising and retailing.)	6
Secretarial Practice: (Office practice plus certification in shorthand and typewriting.	3
Business Machines	3
Business English	3
Business Arithmetic: (3 in mathematics and 3 in business mathematics or 6 in business mathematics.)	6
Office of Clerical Practice: (Secretarial or clerical practice.)	3
Consumer Education: (Consumer economics or consumer education.)	3

TEACHER EDUCATION CURRICULUM IN BUSINESS EDUCATION
Accounting Emphasis

FRESHMAN YEAR	Semester Hours Fall	Spring	SOPHOMORE YEAR	Semester Hours Fall	Spring
English 101-102	3	3	English 211-212	3	3
Science 121-122	3	3	History 201-202	3	3
Mathematics 111, 172	4	3	Economics 211-212	3	3
Health 151		2	Education 201	3	
B. A. 101	3		Psychology 242		3
B. E. 100	1		Art 133	2	
OA 122-221	3	3	PE or AFROTC	1	1
PE or AFROTC	1	1	Accounting 211-212	4	4
Social Studies Elective		3	Music		2
	18	18	Total Hours	19	19

JUNIOR YEAR	Semester Hours Fall	Spring	SENIOR YEAR	Semester Hours Fall	Spring
Accounting 311-312	3	3	B.E. 450	3	
B. A. 323-324	3	3	OA 441-442	6	
MS 301-302	3	3	B.E. 371		3
B.E. 315	3		Education 465	3	
Education 301, 387	3	3	Education 491		3
B.E. 300		2	Education 472o		0
Psychology 312		3	B.E. 472		9
Elective	3		OA 310	3	
Total Hours	18	17	Total Hours	15	15

TEACHER EDUCATION CURRICULUM IN BUSINESS EDUCATION
General Business Emphasis

FRESHMAN YEAR	Semester Hours Fall	Spring	SOPHOMORE YEAR	Semester Hours Fall	Spring
English 101-102	3	3	English 211-212	3	3
Science 121-122	3	3	History 201-202	3	3
Mathematics 111, 172	4	3	Economics 211-212	3	3
Music 131		2	Education 201	3	
Health 151		2	Psychology 242		3
B.A. 101	3		Art 133	2	
B.E. 100	1		PE or AFROTC	1	1
PE or AFROTC	1	1	B.A. 323-324	3	3
OA 122-221	3	3	Social Studies electives		3
Total Hours	18	17	Total Hours	18	19

JUNIOR YEAR	Semester Hours Fall	Spring	SENIOR YEAR	Semester Hours Fall	Spring
MS 301, MK 326	3	3	BE 450	3	
Accounting 211-212	4	4	OA 441-442	6	
MG 300, Economics 307	3	3	BE 371		3
B.E. 315	3		Education 491		3
Education 301, 387	3	3	Education 472o		0
B.E. 300		2	BE 472		9
Psychology 312		3	Education 465	3	
Elective	2		OA 310	3	
Total Hours	18	18	Total Hours	15	15

TEACHER EDUCATION CURRICULUM IN BUSINESS EDUCATION
Stenography Emphasis

FRESHMAN YEAR	Semester Hours Fall	Spring
English 101-102	3	3
History 201-202	3	3
Mathematics 111, 172	4	3
Music 131		2
Health 151		2
B. A. 101	3	
B.E. 100	1	
OA 121-122	3	3
PE or AFROTC	1	1
Total Hours	18	17

SOPHOMORE YEAR	Semester Hours Fall	Spring
English 211-212	3	3
Science 121-122	3	3
Economics 211-212	3	3
Education 201	3	
Psychology 242		3
Art 133	2	
PE or AFROTC	1	1
OA 207-208	3	3
Total Hours	18	16

JUNIOR YEAR	Semester Hours Fall	Spring
Accounting 211-212	4	4
B.A. 323-324	3	3
OA 307	3	
BE 315	3	
Education 301, 387	3	3
BE 300		2
Psychology 312		3
Social Studies Elective		3
MS 301	3	
Total Hours	19	18

SENIOR YEAR	Semester Hours Fall	Spring
BE 450	3	
OA 441-442	6	
BE 371		3
ED 491		3
ED 472o		0
BE 472		9
OA 330	3	
OA 310	3	
ED 465		3
Total Hours	15	18

OFFICE ADMINISTRATION CURRICULUM IN BUSINESS EDUCATION

FRESHMAN YEAR	Semester Hours Fall	Spring
English 101-102	3	3
Mathematics 111, 112	4	3
OA 122-221	3	3
Music 131		2
Science 121-122	3	3
Health 151		2
PE or AFROTC	1	1
B.A. 101	3	
B.E. 100	1	
Total Hours	18	17

SOPHOMORE YEAR	Semester Hours Fall	Spring
English 211-212	3	3
Economics 211-212	3	3
History 201-202	3	3
Speech 230		3
Art 133	2	
B.A. 323-324	3	3
OA 207-208	3	3
PE or AFROTC	1	1
Total Hours	18	19

JUNIOR YEAR	Semester Hours Fall	Spring
Accounting 211-212	4	4
OA 307	3	
MS 301-302	3	3
BE 315	3	
Electives (300-400 level)		5
Psychology 221, 341	3	3
		3
Total Hours	16	18

SENIOR YEAR	Semester Hours Fall	Spring
OA 430	3	
MG 423	3	
BE 450		3
PSY 311	3	
MK 326	3	
MG 300	3	
OA 441-442		6
OA 330		3
OA 310		3
Total Hours	15	15

STENOGRAPHIC CURRICULUM FOR TWO-YEAR CERTIFICATE

FIRST YEAR	Credit Hours Fall	Spring	SECOND YEAR	Credit Hours Fall	Spring
BE 100	1		OA 221	3	
OA 207-08	3	3	OA 310	3	
OA 121-22	3	3	OA 307	3	
OA 111-12	3	3	OA 330	3	
OA 113-14	3	3	BA 301	3	
OA 115-16	3	3	SP 230	3	
OA 123		3	OA 224		4
OA 100	3		OA 225-26		8
	19	18		18	12

CLERICAL CURRICULUM FOR TWO-YEAR CERTIFICATE

FIRST YEAR	Credit Hours Fall	Spring	SECOND YEAR	Credit Hours Fall	Spring
BE 100	1		OA 221	3	
OA 121-22	3	3	OA 310	3	
OA 111-12	3	3	OA 330	3	
OA 113-14	3	3	SP 230	3	
OA 115-116	3	3	OA 224		4
OA 123		3	BA 301	3	
OA 110	3		Elective	3	
Electives (2)	3	3	OA 225-26		8
	19	18		18	12

BUSINESS EDUCATION AND OFFICE ADMINISTRATION COURSE DESCRIPTIONS

BE 100. Orientation to Business. (1) An orientation course designed to acquaint freshmen and new students with the Department, curricular offerings, and requirements.

OA 121-122. Beginning and Intermediate Typewriting. (3-3) A study and development of the basic typewriting skills. Students who have had typewriting should not register for the first course, they will be placed according to level performance.

OA 221. Advanced Typewriting. (3) Sustained production of professional business papers and communications using simulated office materials; and the development of higher typewriting speeds.

OA 207-208. Beginning and Intermediate Shorthand. (3-3) Development of an understanding of the basic principles of shorthand (Gregg, Diamond Jubilee Series), and the ability to apply these principles to an extensive shorthand writing vocabulary and the acquirement of basic transcription skills.

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.

OA 307. Advanced Shorthand. (3) Increased proficiency in sustained production of mailable transcripts; and development of skills for the transcription of legal, medical, and technical materials.

OA 310. Office Machines. (3) Basic instruction and training to develop skill in the use of duplicating, calculating, transcribing, multility and other office machines.

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.

OA 330. Executive Secretarial Procedures and Office Systems. (3) An integrated sequence emphasizing scientific development, analysis, and control of business information systems; routines for handling correspondence, oral and written internal communications; copy planning and production; records management; and computer assisted data processing.

OA 200. Computing Machines. (1) For Non-Majors only. Basic instruction and training to develop skill in the operation of computing machines, including adding machines, calculators, and comptometers.

OA 430. Administrative Office Management. (3) Systems, methods, and procedures for efficient office management.

BE 450. Senior Seminar. (3) Methods of educational research applied through critical evaluation of selected problems and review of current literature in the field of business education. A research project is required.

BE 371. Systems, Methods, and Procedures for Teaching Business Subjects. (2) Strategies for designing procedures and directing learning in business subjects.

OA 441-442. Business Internship. (6) Students enrolled in two courses concurrently to acquire full-time work experience under the supervision of the Department.

TWO-YEAR CLERICAL AND STENOGRAPHIC COURSE DESCRIPTIONS

OA 110. Personal-Social Relations. (3) An understanding of, and skill in inter-personal relationships, personality, morale, personal efficiency, and human behavior as they relate to work climate and productivity; and orientation to office decorum and the development of the ability to work with people.

OA 111-112. Record Keeping and Applied Arithmetic. (3-3) General aspects of record keeping for business, including cashier's records, checks, and bank statements, petty cash, budget, purchase, payroll, and retail sales-clerk records, and record keeping for the small retail businesses; related arithmetic computations are included.

OA 113-114. Clerical Training. (3-3) Basic clerical procedures, including filing, business forms, office communications, visual reproduction, mail and messenger service, receiving callers, typing business papers, sales procedures, and handling cash and checks.

OA 115-116. Business Communications. (3-3) Development of ability to write business correspondence, including a review of basic English principles.

OA 123. Intensive Employment Review. (3) A thorough review of the basic clerical and stenographic activities with which office workers are involved: the importance of employment tests, and procedures and psychology of taking tests.

OA 224. Sophomore Seminar. (4) Critical evaluation of experience and viewing of office administration as a career. Students are required to choose an issue for reporting; gathering data, analysis, and presentation of a written report.

OA 225-226. Business Internship. (3-3) Students engage in full-time employment under supervised conditions.

THE SCHOOL OF EDUCATION

SCHOOL OF EDUCATION

EVERETTE L. WITHERSPOON, Ed.D., Dean

Purposes of the School of Education

The basic concept for preparing teachers for service and life has been utilized as the foundation element for the development of the purposes of the School of Education, which are:

1. To prepare elementary and secondary teachers, supervisors, and administrators.
2. To provide opportunities for students to pursue research in the problems of education.
3. To assist graduates in finding teaching positions for which they are qualified and in advancing to better teaching positions after they have had teaching experience.
4. To provide students with opportunities for knowledge and understanding of the economic society in which they live and their relation and responsibility in such a society.
5. To provide a sound program of guidance and work cooperatively with the other departments and schools of the university implementing the program.

ORGANIZATION

The School of Education is composed of six (6) departments. It is organized as follows: The Department of Administration, Curriculum and Instruction; the Department of Art Education; the Department of Music; the Department of Criminal Justice; the Department of Health, Physical Education and Recreation; and the Department of Psychology.

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 these 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 throughout the State by university staff members, (3) development and distribution of materials to school personnel, and (4) cooperation with the State Department of Education in the administration of the State-wide Testing Program.

Curriculum Laboratory

A Curriculum Laboratory was organized at the University in the fall of 1952. The laboratory is located in Room 208 in the Education Building.

DEPARTMENT OF ADMINISTRATION, CURRICULUM AND INSTRUCTION

DR. HEMPSTEAD (Head), DR. CARAHER, MRS. CATHEY, DR. COX, DR. CULLUM, DR. DRAPER, DR. FANCHER, MR. FRANKLIN, MR. HOROWITZ, DR. HIGDON, DR. HUDDLESTON, DR. HURLEY, MR. B. JONES, DR. F. JONES, DR. MARTIN, DR. MATHIS, MRS. PAYNE, MRS. PEACOCK, MRS. POWELL, DR. REED, DR. REEVES, DR. ROBERTS, MRS. SIMMONS, DR. STICE, DR. TEAGUE.

The Department of Administration, Curriculum and Instruction is designed primarily for the education of teachers. It consists of curriculums in Elementary Education and Early Childhood Education, offering the Bachelor of Science degree. An Associate of Science degree program in Early Childhood Education is also provided along with courses in secondary education, library science, and special education.

The program of teacher education includes two broad areas of study: The General Education Program and the Professional Education Program.

The General Education Program, required of all departments in the School of Education, is described in the general "Academic Information" section of this Catalog. The Professional Education program 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. Orientation to the teaching profession: 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 or 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.

ED. 101 - Orientation
ED. 201 - History and Foundations of Education
ED. 301 - School Organization, Administration, Management, and Community Relations
ED. 387 - Curriculum Development
PSY 242 - Educational Psychology, Human Development and Psychology of Learning
PSY. 312 - Measurement, Evaluation and Guidance for Classroom Teachers
ED. 465 - Introduction to Special Education

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 1-9 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 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.

Specialized Professional Education Requirements for Elementary Education Majors

(Grades 1-9)		Credits
ED. 472e	- Student Teaching in the Elementary Schools (Includes Seminar and Principles of Teaching)	9 Sem. Hrs.
ED. 465	- Introduction to Special Education	
ED. 324	- Teaching Reading in the Elementary School	3 Sem. Hrs.
ED. 321	- Teaching Arithmetic in the Elementary School	3 Sem. Hrs.
ED. 322	- Teaching Language Arts and Social Studies	3 Sem. Hrs.
	Total	21 Sem. Hrs.

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)

ED. 465 - Introduction to Special Education
ED. 371 - Methods Course in the Special Subject Area
ED. 472s - Student Teaching and General Methods on the Secondary School Level
ED. 491 - Reading and Study in the Secondary School

General Requirements for Student Teaching 472e and 472s

All students desiring to enroll in Student Teaching (472e, 472k or 472s) must meet the following general requirements:

1. File application for student teaching one semester prior to the one in which he wishes to enroll in student teaching.
2. Must be classified as a senior (90 or more semester hours).
3. Have a scholastic average of at least 2.25 in the teaching field courses with a minimum grade of C in all methods courses.
4. Meet all course 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 in Elementary Education

Elementary education is one of the curricula in the Department of Administration, 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. Those who complete this program are qualified for State teacher certification in elementary education.

General Requirements for the Bachelor's Degree in Elementary Education

All candidates for the Bachelor of Science degree must complete a minimum of 136 semester hours (with a minimum average of 2.0; 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. The Minor Area Program (Minimum 18 semester hours)
4. Electives and-or Additional Minor Area Courses (6-9 semester hours)
5. Senior Project - Education 450 (2 semester hours)

Minor Area Program

A minimum of eighteen (18) hours of 300 and 400 level courses in one of not more than two related academic areas.

Some Suggested Minors

1. English
2. Geography
3. Social Studies
4. Industrial Arts
5. Library Service
6. Music
7. Special Education
8. Modern Foreign Language
9. Health & Physical Edu.
10. Early Childhood Education

Restricted Electives

Six (6) to nine (9) hours of course work on the 300 and 400 level must be selected. It is strongly recommended that Education 463 and Education 310 be included among the electives.

Curriculum Sequence

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 Administration, Curriculum, and Instruction concerning his program of work.

CURRICULUM FOR MAJOR IN ELEMENTARY EDUCATION

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
HIST 121 or 122	3	
PE or AFROTC	1	1
GEOG 171 or 172	3	
SCI 121-122	3	3
HLTH 151	2	
MATH 111		4
EDU 101	1	
SPCH 210 or 220		3
ART 133 or MUS 131		2
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
ED 201	3	
HLTH 307e	2	
HLTH 300		2
PE or AFROTC	1	1
HIST 201-202	3	3
PSY 242	3	
PE 300		2
MATH 120		2
Elective or Minor	3	3
LIB SCI 211		2
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
MUS 301	3	
SCI 301-302	3	3
Electives or Minors	5	3
ED 387	3	
ED 322		3
PSY 312	3	
ART 360		3
ED 301		3
ENG 320 or LIB SER 363		3
	17	18

SENIOR YEAR	Credit Hours Fall	Spring
ED 472-o	0	
ED 321	3	
ED 324	3	
ED 472-e	9	
ED 450		2
*Elective (ED 310 or 463	2	
Electives and-or Minor		6-9
HIST 341 or 342 or POS 313		3
ED 465		
	17	14-17

SCHOOL OF EDUCATION
DEPARTMENT OF ADMINISTRATION, CURRICULUM, AND INSTRUCTION

COURSE OFFERINGS

EDUCATION (ED)

ED 101. Orientation. (1) A course required of all freshmen registered in Elementary Education; designed to orient the student into the entire field of Elementary Education and to the life of the University.

ED 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.

ED 203. Basic Elements in Education. (3) An indepth study of the relationship of mathematics, the natural sciences, social sciences and English to education. (For students in Teacher Education who failed the STEP test.)

ED 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. Prerequisite: Admission to the Teacher Education Program.

ED 310. Penmanship. (2) Develop skill in simple letter forms; upper and lower case letters to facilitate the teaching of reading in the first elementary grades, for chart making, and chalkboard work.

ED 321. Teaching Arithmetic in the Elementary School. (3) An analysis of current methods in teaching arithmetic through firsthand experiences, the place of number meaning, thinking and drill in effective learning. Prerequisites: Math 120, Psych. 242, and admission to the Teaching Education Program.

ED 322. Methods and Materials in Language Arts and Social Studies. (3) A consideration of modern technique and trends in the teaching of language arts and social studies in the elementary school. Prerequisite: Admission to Teacher Education Program.

ED 324. Teaching Reading in the Elementary School. Includes methods, materials and modern practices and trends in the teaching of reading at the elementary school level. Prerequisite: Psy. 242 and admission to the Teacher Education Program.

ED 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. Prerequisites: Education 201, Psychology 242, and admission to Teacher Education Program.

ED 425. Field Study. (3) This field study provides the student an opportunity to learn the relationships of the school and community by working directly with community organizations and resources and by assisting in the improvement of parental attitudes and involvement with the school.

ED 435. Field Study. (3) This field study seeks to acquiant the student with the organization and management of the guidance services at the school. Under the supervision and guidance of trained guidance workers, the student works with records, tests and test results and individual students in educational, vocational, and personal areas.

ED 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 areas of interest.

ED 450. Senior Project. (3) Designed to give opportunity for students to work individually on any problem of their choice in the area of elementary education. If a student has completed 60 hours of 300 and 400 level courses this may be taken without credit. (Must be taken on the Senior level.)

ED 463. Audio-Visual Aids in Education. (2) A survey course designed to acquaint the student with audio-visual materials of instruction. Proper classroom utilization of film strips, 16 mm motion pictures, slides, graphic materials, field trips, exhibits, and models are studied.

ED 470. Educational Seminar. (3) A study of the foundation and history of education, curriculum development in education, methods of teaching, and present trends in education. (For students in Teacher Education who failed the Teacher Education Examination.)

ED 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.

ED 472s. Student Teaching in the Secondary Schools, Grades Seven through Twelve. (12) 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 quarter 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: Ed. 201, Psy. 242, Ed. 301, Psy. 312, Ed. 387 and 371, the Department's specific methods course.

ED 490. Education for the Disadvantaged. (3) This course is designed to develop an understanding of the circumstances of life for the disadvantaged, acquaint students with the characteristics and special needs of the disadvantaged, and develop understanding of materials and procedures for effective motivation and teaching the disadvantaged. Three semester hours credit. Offered in the Spring.

READING

ED 100. Reading Competence. (3) This course is designed as an experience in reception and processing of ideas for improvement of learning in the various disciplines. Efficiency in the use of study skills, reading in the content areas, and flexibility in reading will be stressed.

Note: On the basis of score results on the prescribed reading test, students are classified as either: (a) Freshmen who score at the level of success and are exempted from Education 100; (b) Freshmen who score at a level below the accepted norm and are required to enroll in Education 100.

ED 300. Flexibility of Rate and Speed of Comprehension. (3) This course is designed as a laboratory experience to help the student become aware of his capacity to use different rates of speed in reading and to give him the skills necessary for developing this flexibility of rate and speed of comprehension.

ED 474. Diagnosis of Reading Disabilities. (3) Procedures recommended for the diagnosis of retarded readers at both the elementary and secondary levels. Identification of common reading disabilities is stressed. Lectures and laboratory participation.

ED 475. Treatment of Reading Disabilities. (3) Materials, techniques and procedures recommended for the remedial treatment of retarded readers. Basic remediation techniques are stressed. Case studies. Prerequisites: Education (course above) or permission of instruction.

ED 476. Teaching Reading in Content Areas in Intermediate Grades. (3) Methods and materials of teaching reading through Science, English, Social Studies and Mathematics in grades 4 through 6. Emphasis is placed upon strategies for development of reading guides; cooperative grouping, and pupil involvement.

ED 447. Competency in Teaching Reading. (3) Guided practice in applying principles in designing and conducting tests and teaching strategies. Emphasis placed upon enabling children to attain the short and long range goals of reading.

ED 478. Seminar in Reading. (3) Major research in the field will be read, analyzed and discussed by members of the seminar. Members will write critical reviews of the research. Prerequisite: Permission of instructor.

ED 479. Corrective and Remedial Teaching of Reading Internship. (3) Instruction under supervision for approximately 5 hours a week with corrective or remedial reader.

Prerequisite: Education 475.

ED 491. Reading and Study in the Secondary School. (3) Emphasis is placed upon teaching vocabulary, comprehension, and study skills in the content fields. Demonstration of tests, devices, and reading guides.

ED 492. Remedial Reading. (3) Common causes of reading disabilities, procedures for diagnosis and basic remediation techniques are investigated. Both individual and group testing and treatment programs are covered.

SPECIAL EDUCATION

ED 465. Introduction of Special Education. (3) Designed to acquaint the student with the general field of special education—its purpose and scope. The course is a prerequisite of all courses either graduate or undergraduate. Offered each semester.

ED 466. Introduction to Learning Disabilities. (3) A survey course designed to provide the student with an overview of (1) the general types of learning disabilities of children with normal intellectual potential and (2) the diagnosis and educational prescriptive remediations.

ED 467. Characteristics and Needs of the Mentally Retarded. (2) A critical study of the classifications, etiology and specific characteristics of the various types of children with low intelligence. Prerequisite: Ed. 465.

ED 469. Vocational Guidance and Occupational Placement for the Mentally Retarded. (2) This course is designed to promote occupational competency for the mentally retarded secondary pupil through efficient vocational guidance. Prerequisite: Ed. 465.

ED 471. Methods and Materials for Teaching the Mentally Retarded Child. (2) Designed to acquaint the students with the principles underlying the methods and materials for teaching the children with low intelligence. Prerequisite: Ed. 465.

ED 473. Observation, Participation and Teaching the Mentally Retarded. (3) A practicum in actual classroom situations, guiding the learning experiences of the mentally retarded child. 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: Ed. 465, 467, 471, and Student Teaching 472.

LIBRARY SERVICE

LS 211. 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 Young People and Adults. (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 of unit cards, filing and other essentail 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 media.

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 function of libraries, library work and opportunities in librarianship.

EARLY CHILDHOOD EDUCATION (ECED)

ECED 232. Creative Arts for Young Children. (3) An adaptation of ECED 332 to meet the needs of Associate Degree students.

Students majoring in Early Childhood Education must comply with all general requirements that pertain to teacher education programs throughout the University.

CURRICULUM FOR A MAJOR IN EARLY CHILDHOOD EDUCATION (B.S. DEGREE)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng. 101-02	3	3	Eng 211-12	3	3
Hist 121 or 122	3		ED 201	3	
PE or AFROTC	1	1	HEA 201, 203e	2	2
Geog 171 or 172	3		HIST 201-02	3	3
Sci 121-122	4	4	CDFR 201, 332	2	2
CDFR 101	3		PSY 242	3	
Art 133 or Mus 131		2	ACTIVITIES PE	1	1
Math 111		4	LS 211		2
HEA 151		2	MATH 120		2
	17	16		17	15

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
MUS 301, Art 360	3	3	ED 324	3	2
SCI 301-302	3	3	CDFR 460, 462	3	3
ED 387, 301	3	3	CDFR 461	3	
PSY 312	3		ED 472e	9	
CDFR 351, 353	3	3	Electives		6
CDFR 352, 464	3	3	SPC 210 or 220		3
ENG 320 or LS 363		3		18	14
	18	17			

EARLY CHILDHOOD EDUCATION

CDFR 232. Creative Arts for Young Children. (3) An adaptation of CDFR 332 to meet the needs of Associate Degree students.

CDFR 251. The Young Child and His Family. (3) An adaptation of CDFR 351 to meet the needs of Associate Degree students.

CDFR 252. Nursery School Observation. (3) An adaptation of CDFR 352 to meet the needs of Associate Degree students.

CDFR 253. Infant Clinic. (3) An adaptation of CDFR 353 to meet the needs of Associate Degree students.

CDFR 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.

CDFR 332. Creative Arts for Young Children. (3) An interpretation and involvement with (1) art learning activities, (2) self-directed activities, and (3) integrated activities with emphasis on the role of creative and play materials for the young child. Related activities and experiences with various old and new materials, and correlation of contemporary trends in Art Education. Observation and participation in the nursery school and kindergarten.

CDFR 351. The Young Child and His Family. (3) A contemporary based modularized course of instruction designed to familiarize students with the basics 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 the student. 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.

CDFR 352. Nursery School Observation. (3) Observation in nursery school along with course 351. Required only of students concentrating in CDFR.

CDFR 353. Infant Clinic. (3) Observation and participation at Meharry Medical College and the infant laboratory.

CDFR 450. Senior Project Writing. (3) A requirement of the University to be taken by every major in the department.

CDFR 460. Nursery School and Kindergarten Methods. (3) Includes methods, materials and modern trends in teaching in the nursery school and kindergarten. Organization, equipment and housing are studied in relation to the development of children at these levels.

CDFR 461. Early Childhood Education Curriculum I. (3) A study of individual differences among children and theories of child development.

CDFR 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.

CDFR 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: CDFR 351.

SPECIAL EDUCATION

The program in Special Education may be selected as a minor by students taking a major in any area with teacher certification. Students who pursue the program 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 endorsement as a teacher of the Mentally Retarded.

Specialized Courses

ED. 466	- Introduction to Learning Disabilities	3 Sem. Hrs.
ED. 465	- Introduction to Special Education	3 Sem. Hrs.
ED. 467	- Characteristics and Needs of the Mentally Retarded	2 Sem. Hrs.
ED. 469	- Vocational Guidance of the Mentally Retarded	2 Sem. Hrs.
ED. 471	- Methods and Materials for Teaching the Mentally Retarded	2 Sem. Hrs.
ED. 473	- Observation, Participation, and Teaching Mentally Retarded	3 Sem. Hrs.
	Related Courses (6 hrs. of electives)	
SOC. 430	- Sociology of Child Development	3 Sem. Hrs.
PSY. 462	- Psychological Testing (Required)	3 Sem. Hrs.
SP. 380	- Language Development in Children	3 Sem. Hrs.

LIBRARY SERVICE

Evelyn Fancher, Ph.D., Coordinator

The Library Service program may be elected as a minor 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 schools; (2) students who plan to enter a graduate library school after receiving the bachelor degree; (3) in-service teachers, administrators, and prospective 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 minor so as to qualify for positions 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 a 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, 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.

COURSES FOR A MINOR IN LIBRARY SERVICE

Name of Course	Credit Hours
Library Service 362	3
Library Service 363	3
Library Service 361	3
Library Service 441	3
Library Service 451	3
Library Service 452	3

Courses required for a minor will be offered in Summer terms.

Elective Course	Credit Hours
Library Service 211	2

READING CENTER
Ruby Martin, Ed. D., Director

The Reading Center of the School of Education serves as a laboratory for students with reading and learning deficiencies. It occupies specially equipped classrooms, diagnostic facilities, and

offices. The vitality of this program is grounded in the assistance given to students in test-taking, study skills, comprehension, and vocabulary enrichment.

In addition to the work of corrective-developmental training, the Reading Center also serves as a resource center for the study of the teaching of reading.

DEPARTMENT OF ART

MR. GORDON (Head), MR. ARTERBERRY, MR. BEASLEY, MISS DERUISE, MR. RIDLEY, MISS WOOD

The Art Department offers a major in Art Education leading to the degree of Bachelor of Science in Education. The department also offers a minor in Art the curriculum of which is listed below.

The minimum number of Semester hours required for the Bachelor of Science Degree in Art Education is 132. The minimum number of semester hours in Art required is 57 of which 38 hours 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 weakness 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 work.
5. Art Majors are expected to keep comprehensive portfolios of their work to be inspected periodically.
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.
8. Art Majors are expected to make at least two museum or gallery tours under the auspices of the Art Guild.

The Art Curriculum, with emphasis on Art Education, has these objectives: (1) to offer courses which stimulate students to learn about art and express themselves creatively as a part of their cultural growth; (2) to guide students in the understanding of the importance of art experience in public school education, and life in general; (3) to guide students in the realization of the many ways that art affects their daily living; (4) to acquaint students with the arts of all people through assigned reading, observation and visual aids; (5) to show the

relationship of art to other fields of learning; (6) 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; (7) to effectively employ the use of leisure, and to develop creative productions.

CURRICULUM FOR A MAJOR IN ART EDUCATION

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3	ENG 211-212	3	3
ART 101, 132	3	3	SCI 121-122	3	3
ART 121-122	3	3	HIST 201-202	3	3
MATH 111		4	PSY 242		3
SOC SCI 211, 330	3	3	ED 201	3	
MUS 131	2		ART 221, 322	3	3
PE or AFROTC	1	1	PE or AFROTC	1	1
	15	17	Hea 151	2	
				18	16

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
PSY 312	3		ART 326	3	
ED 387		3	ART 434	3	
ART 301-302	3	3	ART 450	3	
ART 331-332	3	3	SOC 360	3	
ART 341-342	3	3	ED 301	3	
ART 350-351	3	3	ART 371		3
ED 465	3		ED 491		3
	18	15	ED 472		9
			ART 360		
				18	15

MINOR IN ART

A minor in Art consists of 21 semester hours of art, including courses in ART 101 (3 hours); 121 (3); 331 (3); 332 (3) and 360 (3).

An elective is to be selected from Art 350, 221, or 301.

SCHOOL OF EDUCATION
DEPARTMENT OF ART EDUCATION

COURSE OFFERINGS

ART

ART 100. Orientation to Art. (1) An orientation course designed to acquaint freshmen and new students with the department curriculum offerings and requirements.

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 121. Fundamentals of Drawing I. (3) An introduction to the various tools, techniques and materials of basic drawing. A study of perspective and the function of the visual elements of composition.

ART 122. Figure Drawing II. (3) An exploration of formal and expressive potentials of the human figure. Traditional and experimental approaches to drawing. Prerequisite: Art 121.

ART 131. 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 expression in design theory and innovation in the use of materials and techniques. Lettering techniques will be included in so far as it related to design.

ART 133. 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 fundamentals and historical fragmentations of Eastern and Western civilizations.

ART 221. Painting I. A study of techniques using various types of water based media. Transparent watercolor, Acrylic, Tempra, Casien and gouche. Prerequisite Art 131 or consent of instructor.

ART 241. Crafts. (3) A crafts course giving art experiences useful in community activities: such as, recreation center, camp scout programs, and for individuals seeking a hobby in plastic arts.

ART 322. Painting II. (3) Advance development in various painting media and techniques with emphasis on oils and acrylics. Individual selection of content encouraged. Prerequisite: Art 221.

ART 301. Ceramics I. (3) An introductory course in pottery making including designing, hand forming, decorating and firing ceramic objects.

ART 302. Ceramics II. (3) Learning to throw on the potters wheel, firing and glazing techniques, and mosaics.

ART 326. Photography. (3) The fundamentals of the photographic process, including the proper use and maintenance of the Camera, Photographic enlarger and related equipment.

ART 331. Art History I. (3) An introductory survey of the development of the visual arts from Pre-historic through the Early Medival era.

ART 332. Art History. (3) An introductory survey of the development of the visual arts from Romanesque Art through the Baroque in France and England.

ART 341. Sculpture I. (3) An introduction of the tools and techniques of indirect sculpture, with emphasis on modeling, mold-making and casting.

ART 342. Sculpture II. Advanced Sculpture. (3) Experimentation with the various tools and techniques of direct sculpture, with emphasis on working directly in wood, stone, plastic and fiber glass. (Prerequisite: Art 341.)

ART 350. Graphics I. (3) An introductory course in the art of printmaking, its history, methods, and techniques, including a comprehensive study of various printmaking processes: Intaglio (etching), Planographic (Lithography), Relief (block-cuts), Stencil (serigraphy).

ART 351. Graphics II. (3) A continuation of graphics 350 with emphasis on professional development of various print making processes. Work completed in this course should qualify as part of Senior exhibition. Prerequisite: Art 350.

ART 360. Public School Art. (3) A survey of various art education theories and problems encountered on the elementary and secondary 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 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.

DEPARTMENT OF CRIMINAL JUSTICE

DR. MORGAN (Head), MR. WOODS, MR. NIMMO (Part-time), MRS. GAITERS, MR. BASS (Part-time), MS GREER (Part-time).

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 behavorial 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 pre-service majors (those who are not at present full-time employees of a criminal justice institution or agency) and those in-service majors who elect it. This course is optional for in-service students. No minor is required for criminal justice majors since 15 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 maybe taken in either the sociology or psychology

department but does not count toward fulfillment of the substance sociology or psychology requirement.

All students will be expected to evidence 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, and 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.

CURRICULUM FOR A MAJOR IN CRIMINAL JUSTICE

FRESHMAN YEAR	Credit Hours Fall	Spring
MATH 111-112	4	3
ENG 101-102	3	3
SCI 121-122	3	3
HIST 201-202	3	
POS 221		3
Humanities	2	2
CJ 200		2
PE or AFROTC	1	1
	16	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
CJ 201-202	3	3
CJ 203		3
SOC 211-212	3	3
ENG 211-212	3	3
Humanities	3	
PSY	3	3
PE or AFROTC	1	1
	16	16

JUNIOR YEAR	Credit Hours Fall	Spring
PSY 311 or SOC 300	3	
CJ 300		3
PSY 462	3	
PSY Electives (300 level)	3	3
SOC Electives (300 level)	3	3
SOC Elective (300 level)		3
CJ Electives	3	3
Electives (300 level)	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
CJ 400	12	
CJ 450	3	
CJ Elective (300-400 level)		3
CJ Elective (300-400 level)		3
CJ Elective (300-400 level)		3
Elective (300-400 level)		3
Elective (300-400 level)		3
	15	15

SCHOOL OF EDUCATION
DEPARTMENT OF CRIMINAL JUSTICE

COURSE OFFERINGS

CRIMINAL JUSTICE (CJ)

CJ 100. Service Seminars. (1) Seminars (with or without credit) offered for our students and the community on topics such as hiring the ex-offender.

CJ 200. Introduction to Criminal Justice Studies. (2) This course will consist of a preliminary examination of the entire criminal justice system. It will emphasize the understanding of basic concepts in police science, correctional service studies, the law and our legal system, and the elements of the scientific method and research techniques. It will also function as an introduction to the orientation and demands of the Tennessee State University Department of Criminal Justice.

CJ 201. The American Police System. (3) This will be an intensive study of findings and concepts in the area of police science. It will cover law enforcement agencies, their procedures, and their problems. There will be discussion of police-community relations and the FBI. History will be emphasized. Three Hours.

CJ 202. The American Legal System. (3) This will be an intensive study of the concepts and findings of research on 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.

CJ 203. The American Correctional System. (3) This will be 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 corrections will be considered. The relationship of society and its norm to the operation of such systems will not be neglected.

CJ 300. Research Methods. (3) This will be an intensive survey of the various research methods appropriate to criminal justice research. Special emphasis will be devoted to the consideration of the 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.

CJ 400. Practicum. (12) This field experience will consist of nearly full-time work in an appropriate correctional institution or agency. It will also involve intensive, weekly discussions of problems that arise. Police and other appropriate field experience situations may be developed at the request of interested students. This is not required of "in-service" students. Consult the director of the field placement program regarding both entrance into this course and exemption from it.

CJ 450. Senior Project. (3) This course involves the preparation of an acceptable piece of research in the area of criminal justice.

CJ 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.

CJ 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.

CJ 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 the different crimes such as rape, robbery, murder, etc.

CJ 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 realtionship between deviance and the controlling and producing forces of soceity will be discussed. The relationship of deviance to crime will also be considered.

CJ 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.

CJ 313. Fundamentals of Guidance Counseling. (3) 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.

CJ 321. Juvenile Delinquency. (3) This is not 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 juvenile court system.

CJ 322. Penal Institutions and Treatment Methods. (3) Intensive discussion of the methods of correction involving prisons, jails, and other places of incarceration. Special emphasis will be devoted to the inmate community, treatment-custodial conflicts, and the utility (or lack of utility) of such institutions.

CJ 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 incarcerating him. There will be an examination of the merits and defects of such programs.

CJ 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 bribery.

CJ 421. Sociology of Law. (3) A discussion of the role of the legal system in our society. There will be a consideration of the actual effect of certain types of legislation. Other topics will include conflict resolution, the problem of a pluralistic society, the nature of the law, etc.

CJ 430, 431, 432. Special Topics. (3) There will be courses taught from time to time as faculty expertise and student interest warrant in such areas as police-community relations, behavior modification in corrections, etc.

CJ 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.

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION

DR. MITCHELL (Head), MR. ABERNATHY, MR. BASS, MR. CAREY, MR. COFFEE, MR. COOLEY, MRS. CRUTCHFIELD, MR. FOREMEN, MR. GILLIAM, MR. GREEN, MR. GROOMS, MR. JAMES, MR. JONES, DR. LEWIS, MR. MARTIN, MR. MERRITT, MR. MILLER, MRS. OVERALL, DR. SAWYER, MR. SIMMONS, MR. THOMAS, MRS. WATKINS, MISS WILLIAMS.

The curricula in the Department of Health, Physical Education and Recreation are designed to serve all students in the University by contributing to their health, organic vigor, and good mental and physical habits. The department aims: (1) to provide incentives for students to engage in some physical activities as a balance to the demands of college life; (2) to provide opportunities for students to develop a reasonable degree of skill in a variety of leisure-time activities, both for immediate and later use; (3) to offer opportunities for worthwhile social contacts in the activities of the service program, in intramural activities and in intercollegiate athletics; (4) to prepare prospective teachers in the field of health education, physical education, athletic coaching, and (5) to provide workers and supervisors in the important area of recreation. Recreation is not within the teacher certification pattern, though requirements are such that individuals pursuing this course of study develop the ability to teach many activities.

Achievement in all courses above the general education and service course level, including certification courses in the education and psychology sequence, must be at the "C" average level or above. It is stipulated further, that all students must have passed the physical fitness tests prior to enrollment in fundamentals and techniques courses.

In addition to the above items, all University regulations apply as they concern requirements, teacher education admission and retention and requirements of non-teacher preparation courses to study.

In addition to the basic majors offered, the department provides for stem concentration depending on the interests and desire of the student. One may elect to pursue a major in either elementary or secondary physical education. A student may also elect to develop a concentration in rhythms, within the concept of a major in physical education. In every instance, a student may select from a wide range of courses not specifically required, but which satisfy the student's interests.

The department has an important service course function for the general student population. These courses must be taken in the first four semesters.

SERVICE COURSES (1 Semester Hour Each)

NOTE: The "f" and-or "s" following a course indicates that it will normally be scheduled in the fall, spring or both.

PE 11	Team games and conditioning (required)	f-s
PE 12a	Introduction to swimming (majors only)	f-s
PE 12b	Elementary Swimming (required)	f-s

Select two from the following:

PE 15	Modern Dance and Social Dance	f-s
PE 16	Badminton and Deck Tennis	f-s
PE 17	Volleyball and Tennis	s
PE 18	Soccer and Speedball	f
PE 19	Handball and Shuffleboard	f-s
PE 20	Golf and Bowling	s
PE 24	Basketball and Softball	f-s
PE 25	Folk, Square and Tap Dance	f-s
PE 33	Touch Football and Wrestling	f-s
PE 36	Stunts and Tumbling	f-s
PE 43	Archery and Track and Field	s

The following courses are for those whom the campus medical staff adjudge to be suffering and physical impairment as to require limited (or adapted) activities, the energy cost of which is not heavy: PE 91, 92, 93, 94 Adapted Physical Education. f-s

A core of general education is required of all majors in the department. The core requirements are to be taken within the first two years of enrollment, as they provide a foundation for the more advanced concepts to be encountered.

GENERAL EDUCATION CORE

First Year	Hour
Art 133 - Introduction to Art	2
Eng 101-102 Freshman English	6
Hea 151 - Personal Hygiene	2
HPE 101 - Orientation, HPE	2
His 201-202 American History	6
Math 111 - Introduction to College Math; Math 112*	4
Music 131 - Music Appreciation	2
Natural Science 121-122 Natural Science	8
PE 11-12a - Team Games and Conditioning; Introduction to Swimming	2
Second Year	
Eng 211-212 - World Literature	6

Ntr 212 - Nutrition*	2
POS 221 - American Government	3
PE 36+ one other service course	2

* Teacher education aspirants should elect these courses.

PHYSICAL EDUCATION

Courses numbered in the 100's and 200's include theoretical and practical work and are designed for majors and minors in health and physical education. All majors in health and physical education must select skills courses in the following sequential order: two digit, fundamentals and techniques, coaching and officiating. The two digit service course in the activity is required before enrolling into each fundamental and technique course, unless one can demonstrate proficiency in the basic elements of the activity. All HPER majors will be evaluated separately in both two digit and three digit courses. Advancement to the Upper Division of this Department is contingent upon the results of these examinations in each two and three digit course.

Individual and Dual Sports - Fundamentals and Techniques

	Hour
PE 202 Theory of Aquatics	1
PE 205 Tennis and Badminton	1
PE 206 Track and Field and Archery	1
PE 207 Golf and Bowling	1
PE 208 Wrestling and Handball	1
PE 301 Gymnastics	2
PE 332 Water Safety and Instruction	2

Team Sports - Fundamentals and Techniques

PE 201 Football and Volleyball	1
PE 209 Volleyball, Soccer and Speedball	1
PE 204 Softball and Basketball	1

Rhythmics

This important area is planned to serve several populations within the teacher education concept. It is possible to establish concentration in dance, within the physical education major, on either the elementary or secondary level. The rhythmic section provides for requirements as well as electives for physical education, health and physical education or recreation majors.

		Hour
PE 227	Fundamental Rhythms and Music for Dance	2
PE 222A	Survey of Dance Forms: Folk, Square, Social	2
PE 222B	Survey of Dance Forms: Modern, Jazz, Tap	2
PE 323	Modern Dance, Techniques and Composition	1
PE 324	Tap Dance; Techniques and Choreography	1
PE 325	Square Dance Calling and Modern Square Dance	1
PE 336	Rhythmic Performance Groups	1
PE 372D	Methods of Teaching for Dance	2

Elementary Major or Certification:

PE 227	Fundamental Rhythms and Music for Dance	2
PE 222A	Survey of Dance Forms: Folk, Square, Social	2
PE 372D	Methods of Teaching for Dance	2
Rhythmic Electives (required)		4
		10

Secondary Major or Certification

PE 227	Fundamental Rhythms or PE 372D Methods of Teaching for Dance	2
PE 222B	Survey of Dance Forms: Modern, Jazz, Tap	2
		4

Health and Physical Education 1-12

PE 227	Fundamental Rhythms and Music for Dance	2
PE 222A	Survey of Dance Forms: Folk, Square, Social	2
PE 222B	Survey of Dance Forms: Modern, Jazz, Tap	2
		6

Recreation

PE 222A	Survey of Dance Forms: Folk, Square, Social	2
PE 222B	Survey of Dance Forms: Modern, Jazz, Tap	2
PE 326	Rhythmic Performance Groups	1
		5

One who majors in physical education, on either the elementary or secondary level, is required to complete the following semester hours:

HPE 101 Introduction to Health and Physical Education	2
HPE 304 Elements of Safety	2
HPE 402 Organization and Administration of Health, Physical Education and Intramural Programs	2
HPE 450 Senior Project Writing	2
Hea 300 The School Health Program	2
Hea 306 First Aid and Care of Injuries	2
PE Fundamentals and Techniques	5
PE 313-314 Anatomy, Kinesiology and Physiology of Exercise (One year course to be taken without a break)	2-2
PE 334 History and Philosophy of Physical Education	3
PE 335 Principles of Perceptual Motor Development	2
PE 371E or S Materials and Methods in Physical Education	3
PE 315 Teaching Individual, Dual and Team Sports	2
PE 331 Measurement and Evaluation in Health and Physical Education	3

In addition to the list above, requirements for either elementary or secondary physical education are as follows:

Elementary Physical Education

PE 300 Play and Leadup Games	2
PE 302 Movement Exploration	2
PE 434 Planning Special Events and Demonstrations	2
Rhythms	10

Secondary Physical Education

PE 420 Coaching of Football and Basketball	2
PE 425 Coaching of Track and Field and Baseball	2
PE 426 Coaching of Track and Field, Gymnastics and Aquatics	2
PE 424 Coaching of Basketball and Volleyball	2
PE Rhythms	4

Requirements for physical education majors beyond those listed above, in the general education core and the teacher education core are:

ZOO 201 Human Anatomy	4
ZOO 202 Human Physiology	4

CURRICULUM FOR A MAJOR IN PHYSICAL EDUCATION (SECONDARY CERTIFICATION)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
HIST 201-202	3	3
MATH 111; HEA 151	4	2
SCI 121-122	4	4
PE 11, 12a	1	1
HPE 101; ART 133	2	2
MUS 131		2
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
POS 221; ED 201	3	3
PE 36, 15-43	1	1
PE 202, 222B	1	2
HEA 300, PE 222A	2	2
ZOO 201-202	4	4
PSY 242, HEA 306	3	2
PE 206, 205	1	1
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
PE 301, 315	2	2
HPE 304. PE 335	2	2
PE 331, PE 420M or 424	3	2
PE 313-314	2	2
HPE 403, PE 334	2	3
PE 201 or 209	1	
PSY 312		3
ED 301	3	
PE 227 or 372D	3	
ED 465		3
PE 204		1
	17	18

SENIOR YEAR	Credit Hours Fall	Spring
ED 472-o, 472		9
HEA 307S	2	
PE 425 or 426	2	
ED 387, 491	3	3
HPE 450, PE 371S	2	3
HPE 402	2	
Electives (300-400)	6	
	17	15

TOTAL HOURS: 137
300-400 Level: 67
Suggested Electives: PE 300, PE 302

CURRICULUM FOR A MAJOR IN PHYSICAL EDUCATION (ELEMENTARY EDUCATION)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
HIST 201-202	3	3
HPE 101; ART 133	2	2
SCI 121-122	4	4
MATH 111; HEA 151	4	2
PE 11, 12a	1	1
MUS 131		2
	17	17

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
ED 201; PSY 242	3	3
POS 221; PE 301	3	2
PE 227, 202	2	1
PE 201 or 209	1	1
PE 302, 300	2	2
PE 36, 15-43	1	1
PE 204		1
PE 222A; 222B	2	2
Electives (300-400)	3	2
	20	18

CURRICULUM FOR A MAJOR IN PHYSICAL EDUCATION (ELEMENTARY CERTIFICATION)

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
HEA 300, PE 434	2	2	ED 387; 472O	3	0
ZOO 201-202	4	4	PE 334; 472E	3	9
PE 331; 335	3	2	HPE 403; ED 324	2	3
ED 301; PE 315	3	2	PSY 312; PE 371E	3	3
Rhythmic Electives	2		HEA 306	2	
PE 313; 314	2	2	PE 450	2	
PE 206; HPE 304	1	2	HPE 402	2	
PE 372D		2		17	15
HEA 303		2			
	17	18			

TOTAL HOURS: 143
300-400 Level: 65

CURRICULUM FOR A MAJOR IN HEALTH AND PHYSICAL EDUCATION (ELEMENTARY AND SECONDARY CERTIFICATION)

A student who desires the traditional degree of Health and Physical Education will be required to complete the health courses: HEA 300; HEA 307E or HEA 303 and HEA 305. Should the student desire the Health and Physical Education degree from grades 1 through 12, the elementary as well as secondary courses in both health and methods (PE 371E-371S) must be taken.

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3	ENG 211-212	3	3
HIST 201-202	3	3	POS 221, PE 222 A or B	2	2
MATH 111, ART 133	4	2	PE 36, 15-43	1	1
SCI 121-122	4	4	PE 201, or 209	1	
PE 11, 12a	1	1	PSY 242, ED 201	3	3
HPE 101, MUS 131	2	2	ZOO 201-202	4	4
HEA 151		2	PE 204-205	2	
	17	17	PE 202, HEA 300	1	2
			PE 227	2	
				19	18

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
HEA 307 E, 303	2	2	HEA 305, ED 472	2	9
PE 301, 315	2	2	HEA 306, ED 491	2	3
PE 313-314	2	2	ED 472O, PE 371E		3
PE 331, 334	3	3	HPE 450	2	
HPE 304, PE 335	2	2	PE 371S	3	
ED 301, 387	3	3	PE 420 or 424	2	
PE 302, PSY 312	2	3	HPE 403	2	
PE 206	1		HPE 402	2	
Elective	1		PE 372D	2	
HEA 307S		2	PE 425 or 426	2	
	18	19		19	15

TOTAL HOURS: 149
300-400 Level: 76
Required electives: Edu 465, PE 300, PE 434 or PE 481; Nutr 212.

RECREATION

The curriculum in recreation has as its purpose to give the student theory and practice in the broad field of 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 not designed to certify recreation education teachers or coordinators of public school recreation programs employed by school districts. 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 sequences 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
REC 102		2
ENG 101-01	3	3
HIST 201-02	3	3
SCI 121-22	4	4
MATH 111-12	3	3
PE 11-12a	1	1
HPE 101, ART 133	2	2
	16	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-12	3	3
HEA 151, POS 221	2	3
PE 36, 13-50	1	1
PSY 201-02	3	3
SPCH 201, ART 241	2	3
PE 300, 323	2	2
PE 222A, 301	2	2
PE 205	1	
PE 202	1	
	17	17

CURRICULUM FOR A MAJOR IN RECREATION

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
PE 313-14	2	2	REC 412, 473	2	6
MUS 131, THEA 301	2	2	SOC 451, REC 481	2	2
PSY 242, REC 303	3	2	REC 304, ED 463	2	2
IA 353, REC 302	3	2	HPER 450, REC 301	2	2
MUS 301, REC 353	3	2	PE 315	2	
HEA 303, 306	2	2	PE 332	2	
PE 201 or 209	1		PE 434	2	
ART 301		3	Electives (300-400)	3	
PE 204		1		3	3
	16	16		17	15

HEALTH INSTRUCTION

Persons who plan to teach as health specialists in the schools will be required to complete the same general education core as is required of other teacher education students. Health majors are responsible for the following semester hours:

	Hour
HPE 101 Introduction to Health and Physical Education	2
HPE 304 Elements of Safety	2
HPE 403 Physical Education for the Atypical	2
HPE 402 Organization and Administration of HPE and Intramural Programs	2
HPE 450 Senior Project Writing	2
PE 313-314 Anatomy, Kinesiology and Physiology of Exercise (A year course to be taken without a break.)	2-2
PE 331 Measurement and Evaluation in Health and Physical Education	3
Hea 300 The School Health Program	2
Hea 303 Environmental Sanitation	2
Hea 306 First Aid and Care of Injuries	2
Hea 305 Family Health	2
Hea 307E and S Health Instruction for the Elementary or Secondary School	2-2
Hea 371H Methods and Materials of Health Education	3

In addition to the above course, plus the general education and the teacher education core, a health instruction major must take the following courses:

Chemistry 121, 122 Elementary Analytical Chemistry	4-4

Micro 250	Principles of General Bacteriology	4
Micro 410	Pathogenic Microorganisms	4
Soc 320	Anthropology	3
Soc 420	Population Problems	
Zoo 201, 202	Human Anatomy and Physiology	4-4
Edu 463	Audio Visual Aids in Education	2
SW 320	Human Behavior and Social Environment	2

CURRICULUM FOR A MAJOR IN HEALTH INSTRUCTION

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101-102	3	3
HIST 201-202	3	3
MATH 111, MUS 131	4	2
CHM 121-122	4	4
PE 11-12a	1	1
HPE 101, MATH 112	2	3
HEA 151		2
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211-212	3	3
ART 133, MCRB 250	2	3
ZOO 201-202	4	4
ED 201, POS 221	3	3
PE 13-50	1	1
PSY 242, Nutr 212	3	3
HEA 303	2	
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
ED 301, PSY 312	3	3
PE 331, HPE 304	3	2
HEA 303, 306	2	2
PE 313-314	2	2
HEA 300, SOC 320	2	3
HEA 307E, 307S	2	2
HPE 402		2
HEA 305	3	
SW 320		3
	17	19

SENIOR YEAR	Credit Hours Fall	Spring
HPE 403, HEA 371H	2	3
SOC 420, ED 472	3	9
ED 472O, 491		3
ED 387	3	
MCRB 410	4	
HPE 450	2	
ED 465	3	
ED 463	2	
	19	15

Required elective: Physics 112
Total Hours: 140
300-400 Level: 72

SCHOOL OF EDUCATION
DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

COURSE OFFERINGS

HEALTH AND PHYSICAL EDUCATION (HPE)

HPE 101. Health, Physical Education and Recreation Orientation. (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 preparation of professional personnel in these areas.

HPE 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.

HPE 402. Organization and Administration of Health, Physical Education and Intramural Programs. (2) A major course concerned with the philosophies, policies

and procedures basic to establishing an effective program in the area, in consort with the curriculum of the school and the needs of the community. Instruction will include facilities and equipment, purposes for and the coordinating of intramurals, scheduling and content of classes, along with the same concern for varsity athletics, their control and impact. Required of Health and Physical Education and Physical Education (Elementary and Secondary).

HPE 403. Physical Education for the Atypical. (2) A study of the types of handicapping conditions requiring modified physical activity with instruction in specific activities for each type. Class work is organized on a laboratory basis to provide practical experiences in conducting the program. Prerequisite: 10 hours in health, physical education and recreation courses including Health 304 and Physical Education 313. Required of all majors.

HPE 450. Senior Project Writing. (2) 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.

HEALTH (HEA)

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 those involving the psychological or adjustive processes, those of a physiological or biological nature, and it addresses itself to the issues of health services and the environment in which we live. A requirement for students fulfilling the core in general education.

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. (2) 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 utulization of citizens for total community participation.

HEA 305. Family Health. (2) Aims to acquaint the student with the important individual, family, and community factors essentail to healthful living. The significane 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. Prerequisites: 6 semester hours in health education. Required of all majors in health, physical education and recreation.

HEA 306. First Aid and Care of Injuries. (2) 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 the athletic injury with discussion, demonstration and practical laboratory experiences related to techniques used in taping and bandaging provided. A Red Cross First Aid Certificate is awarded for successful completion of the course. Prerequisites are PE 313 and 314.

HEA 307E. Health Instruction for the Elementary School. (2) Fundamental principles of organizing and teaching health education at the elementary school level. Emphasis is placed on understanding the health problems and developmental levels of the elementary school child and the methods, materials, and techniques available for this purpose.

HEA 307S. Health Instruction for the Secondary School. (2) Special emphasis is

placed on a teaching methods, selection of course content, class organization, methods of evaluation and construction of teaching units and teaching aids on the secondary level.

HEA 371 H. Methods and Materials of Health Education. (3) Attention focused on the curriculum and content of the health education program with consideration given to procedures, techniques, and equipment used in teaching. Study, discussion, and experiences in planning and conducting the health lesson provided.

PHYSICAL EDUCATION (PE)

Service Courses - This section contains required and elective physical education courses for the general student body. In most cases, two activity experiences are provided. (Note: PE 12a is for HPER majors only).

PE 11. Team Games and Conditioning. (1) An elective service course which aims to acquaint the student with self-testing activities, dual sports, team games and related events to prepare one for healthful living. Required of all students.

PE 12a. Introduction to Swimming. (1) An introductory course, involving elementary swimming and academic concepts, for majors in HPER only.

PE 12b. Elementary Swimming. (1) A course in elementary swimming for the "service course" population. Required of all students.

PE 15. Modern Dance and Social Dance. (1) Designed to give an introduction to modern dance technique and elementary composition. Also, many traditional social dances (Fox Trot, Waltz, Tango, etc.) will be taught, as well as current popular dances of interest.

PE 16. Badminton and Deck Tennis. (1) An elective service course designed to develop skill in badminton and deck tennis.

PE 17. Volleyball and Tennis. (1) An elective service course in which the basic elements of volleyball and tennis are taught.

PE 18. Soccer and Speedball. (1) This is an elective service course. The course is designed to teach students the basic fundamentals of soccer and speedball and to acquaint the students with the rules and regulations of game situations.

PE 19. Handball and Shuffleboard. (1) This is an elective service course. The course is designed to teach the basic fundamentals of handball and shuffleboard and to offer them as meaningful experiences which may be used later in life.

PE 20. Golf and Bowling. (1) An elective service course in which the basic elements of both golf and bowling are taught.

PE 24. Basketball and Softball. (1) This is an elective service course. The course is designed to teach the basic fundamental skills of basketball and softball and to acquaint the students with the rules and regulations of the game.

PE 25. Folk, Square and Tap Dance. (1) This is an elective service course. The course is designed to teach coeds the sequence of fundamental movements and rhythmic patterns, culminating these movements and patterns into folk and square dances of different countries. It also incorporates the basic fundamental movements, steps, and step patterns of tap dancing and provides activities which are fun to do.

PE 33. Touch Football and Wrestling. (1) An elective service course. Provides practice in the fundamental skills and techniques of touch football and wrestling and acquainting students with the rules and regulations of the sport.

PE 36. Stunts and Tumbling. (1) An elective service course. Provides practice in fundamental stunts and tumbling skills including conditioning and lead-up activities. (Required of physical education majors).

PE 43. Archery and Track and Field. (1) An elective service course. A course offering development in the basic techniques involved in shooting with bow and arrow acquisition of knowledge of rules and courtesies of the sport. Survey of skills in track and field will be provided with some opportunity to select events as concentration specialties.

PE 91-94. Adapted Physical Education. (1) An experience in basic activities that students with handicapping conditions can perform effectively. The course requires active participation in modified activities, by students seeking to satisfy the general education requirements who cannot indulge in the more vigorous service courses.

MAJOR COURSES

PE 201. Fundamentals and Techniques of Football and Volleyball. (1) Emphasis is placed on the development of the ability to demonstrate the fundamental skills of these sports with proficiency as well as upon the recognition of problems related to the introduction or 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 204. Fundamentals and Techniques of Softball and Basketball. (1) A concentration upon development of proficiency in the performance of fundamental skills in these sports with some emphasis upon recognizing problems of the teacher in introducing and-or reviewing the skills involved.

PE 205. Fundamentals and Techniques of Badminton and Tennis. (1) A major course in which these two racquet activities are taught, for perfection of skill and for an understanding of teaching elements.

PE 206. Fundamentals and Techniques of Track, Field and Archery. (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 and Bowling. (1) A major course in which students learn to perform better and to understand the theory of the activities to the extent that they may instruct more effectively. Students frequently will be required to travel to off-campus sites for laboratory experiences.

PE 208M. Fundamentals and Techniques of Handball and Wrestling. (1) A major course designed to develop individual skill and understanding of the activities involved.

PE 209. Fundamentals and Techniques of Soccer and Speedball and Volleyball. (1) A required course for majors which discusses fundamentals and techniques of the activities and prepare the student in methods of organizing, strategy in competition, conditioning, and related matters for instructional purposes.

PE 222A. Survey of Dance Forms: Folk, Square and Social. (2) A study of the history, personalities associated with (past and present) and fundamental techniques and experiences related to folk, square, and social dance.

PE 222B. Survey of Dance Forms: Modern, Jazz, and Tap. (2) A study of the history, personalities associated with (past and present) and fundamental techniques and experiences related to modern, jazz, and tap 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 (standard and contrived) for dance accompaniment; surveys the area of fundamental movement patterns through participation in creative and exploratory experiences.

PE 300. 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 301. Gymnastics and Apparatus Work. (2) Deals with the acquisition of skill and the development of intermediate to advanced techniques in gymnastics and apparatus work.

PE 302. Movement Exploration. (2) Offers theoretical and practical experiences in developing the problem-posing 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 313. General Anatomy and Kinesiology. (2) An elementary course in anatomy and kinesiology enabling departmental majors to acquire knowledge of the structure of the human body and to understand its movement capacities and limitations.

PE 314. Physiology and Exercise. (2) 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. Along with the academic information, a laboratory experience is provided.

PE 315. Teaching Individual, Dual and Team Sports. (2) A course in which the implications of the fundamental and technique experiences are focused on the teaching of all activities. Methods of planning and presenting skills to be learned in the most effective manner are explored.

PE 323. Modern Dance: Techniques and Composition. (1) Intermediate advanced modern dance techniques and an introduction to the choregraph process. Elective for majors and non-majors with previous experience in modern dance.

PE 324. Tap Dance: Technique and Choreography. (1) 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. (1) 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. (1) 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.); laboratory experiences involving the actual training of such groups provided; prerequisite: previous dance experience.

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 students' achievements, criteria for classification of students, and marking. Required of majors in health and physical education.

PE 332. Water Safety and Instruction. (2) Practice is provided for all coordinate styles of swimming, instruction, life saving and water safety skills, and in techniques leading to the American Red Cross Senior Life Saving and Water Safety 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 processes 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.

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 to 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.

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).

PE 420M. Coaching of Football and Basketball. (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 and basketball. An important unit is that of officiating in both activities.

PE 424. Coaching of Basketball and Volleyball. (2) Concerned with the principles of team development including selection, training, and counseling involved in varsity or extramural participation in these sports. Rules and regulations of the games studied and techniques of officiating practiced.

PE 425. Coaching of Track, Field and Baseball. (2) A study of rules and regulations, organizing teams, schedules, strategy, practice sessions and the philosophy of coaching in track and baseball. An important facet of the course is officiating in both sports.

PE 426. Coaching of Track, Field, Gymnastics and Aquatics. (2) Primarily concerned with the coaching of teams, and officiating in the sports indicated.

PE 427. Sociological Implications of Sports. (2) 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 activities. An elective.

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 larger 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.

RECREATION (REC)

REC 102. Introduction to Recreation. (2) A survey experience designed to introduce students to the field of recreation. Topics included are the history of recreation in America; definitions of basic terms; career opportunities; the impact of recreation on the economy; and principles of recreation.

REC 301. Nature Education. (2) Designed to assist students in their understanding of nature and its many aspects, including astronomy, ecology, birds, camping, cave exploration, flowers, gardening, hiking, hunting, Indian lore, mountains, nature craft, trailing, trees, and zoos. Experience is gained directly by the student in a natural setting.

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 304. Recreation for the Handicapped. (2) Deals with the modifications of recreational activities for those persons with mental, physical and multiple handicaps. Prerequisites Recreation 302 and 303.

REC 353. Leadership Principles. (2) Purposes to equip the student to manage and supervise recreation programs. Emphasizes program planning, current trends in principles, philosophy, skills, and techniques in leadership.

REC 412. Administration of Recreation. (2) Aims to give the student a knowledge of the organizational, administrative, and supervisory policies and procedures utilized in the field of recreation. This knowledge is further supplemented with the skills and techniques necessary to prepare the student to meet and solve the many problems to be encountered as an administrator of recreation in parks, playgrounds, churches, camps, settlement houses, Christian associations, clubs, and community centers.

REC 473. Field Experience. (6) 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 MUSIC

DR. LEWIS (Head), MR. BARRETT, MR. HILL, MR. DAVIS, MR. GOOD, DR. GOINS, MR. LUSK, MRS. McDONALD, MRS. RHODES, MRS. SIMPSON, DR. SIMPSON, DR. SMITH, MISS STONE and DR. WATKINS.

The Department of Music is organized to serve 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 education and the Bachelor of Arts degree in music. The minimum number of semester hours required for either the Bachelor of Science degree or the Bachelor of Arts degree is 132. Minimum number of semester hours required in music courses is 53 for the Bachelor of Science degree and 45 for the Bachelor of Arts 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, violincello, 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 recitial 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 ensemble groups 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 instruemental majors **must** participate in University Band and Vocal majors **must** participate in University Choir. One credit per semester quarter is offered for each group.

The following ensembles are offered:
University Choir, University Band, Brass Choir, Stage Band, and String Ensemble. These groups are organized to study and perform the standard repertoire for various combinations of voices of instruments.

Concerts and Recitals

Organized music groups, small ensemble groups, 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.

Certification Programs

Three curricula culminating in the Bachelor of Science degree in Music Education are offered for those students wishing to be certified as teacher of music in the public schools. The three curricula are quite similar in content and differ only in so far as the major applied instrument varies and in so far as the special method courses vary to reflect the certification area sought (vocal and-or instrumental).

CURRICULUM FOR A MAJOR IN MUSIC WITHOUT CERTIFICATION
(Bachelor of Arts Degree)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3	ENG 211, 212	3	3
HIST 201, 202	3	3	Maj Applied	2	2
MUS 120, 121	4	4	Maj Ensemble	1	1
Maj Applied	2	2	MUS 220, 221	3	3
Maj Ensemble	1	1	Science	3	3
MATH 111, 112	4	3	W. W. or Brass Class	1	1
PE or AFROTC	1	1	For. Language	4	4
	—	—	PE or AFROTC	1	1
	18	17		18	18

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
MUS 337, 338	3	3	MUS 420, 421	3	3
MUS 305; 430	3	3	HLTH		2
Maj Applied (300 level)	2	2	Maj Applied (400 level)	2	2
Maj Ensemble (300 level)	1	1	Humanities Electives (300-400 level)	12	6
MUS 331; 320	3	3	Electives (300-400 level)		3
For. Language	3	3			
Humanities Elective (300 level)	3	3			
	18	18		17	16

Electives in Music:
Music 428 - Physics of Music - 3 sem hrs.
Music 433 - Composition - 3 sem hrs.
Music 434 - Seminar In Jazz - 3 sem hrs.

CURRICULUM FOR MAJOR IN MUSIC WITH CERTIFICATION
(Vocal and Instrumental Concentration)

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3	ENG 211, 212	3	3
HIST 201, 202	3	3	EDU 201, PSY 242	3	3
MUS 120, 121	4	4	SCI	3	3
INSTR. TECH	1		MUS 220, 221	3	3
MUS 11a, 11b	1	1	MUS 21a, 21b	1	1
Maj Applied	2	2	Maj. Applied	2	2
Maj Ensemble	1	1	Maj Ensemble	1	1
PE or AFROTC	1	1	PE or AFROTC	1	1
			MUS 313	1	
	18	18		18	17

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
EDU 301, 465	3	3	HLTH	2	
ART 133	2		MATH 111	4	
MUS 337; 320	3	3	PSY 312	3	
MUS 305; 371a	3	3	MUS 311; 421	1	3
MUS 312; 328	1	3	MUS 451	2	
MUS 331; 430	3	3	MUS 420	2	
Maj Applied (300 level)	2	2	MUS 371b or c		3
Maj Ensemble (300 level)	1	1	EDUC 491		3
	18	18	EDUC 472		9
			Maj Applied (400 level)	2	
			Maj Ensemble (400 level)	1	
				18	18

CURRICULUM FOR A MAJOR IN MUSIC WITH CERTIFICATION
(Piano Concentration)

FRESHMAN YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3
HIST 201, 202	3	3
MUS 120, 121	4	4
INSTR. TECH.	1	1
MUS 11a, 11b	2	2
Maj. Ensemble	1	1
PE or AFROTC	1	1
	15	15

SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 211, 212	3	3
EDUC 201; PSY 242	3	3
SCI	3	3
MUS 220, 221	3	3
MUS 21a, 21b	2	2
Maj Ensemble	1	1
PE or AFROTC	1	1
HLTH, MUS 311	2	1
	18	17

JUNIOR YEAR	Credit Hours Fall	Spring
EDUC 301; 465	3	3
ART 133	2	
MUS 337; 320	3	3
MUS 305; 371a	3	3
MUS 312; 338	1	3
MUS 31a, 31b	2	2
MUS 331; 430	3	3
Maj Ensemble (300 level)	1	1
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
SOC SCI	3	
MATH 111	4	
PSY 312	3	
MUS 41a	2	
MUS 451; 371c	2	3
MUS 420;421	3	3
Maj Ensemble (400 level)	1	
EDUC 491		3
EDUC 472		9
	18	18

SCHOOL OF EDUCATION
DEPARTMENT OF MUSIC

COURSE OFFERINGS

MUSIC (MUS)
APPLIED MUSIC COURSES
The laboratory fees, unless otherwise stated, are for each semester.

MUS 11A, B First Year Piano. (1 or 2-1 or 2) 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 or 2-1 or 2) Selected works Bach, and other composers. Prerequisite: Permission from the Office of the Music Department, and Piano 11C. 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 21C. Two one-half hour periods. Laboratory fee $15.00.

MUS 41A, B Fourth Year Piano. (4) The study of advanced piano materials. Prerequisite: Music 41C. Two one-half hour periods. Laboratory fee $15.00.

MUS 12A, B First Year Organ. (4) Pedal studies, major and minor scales, legato studies, little preludes and fugues of Bach, trios by Stainer Rheinberger, and others, and

selected books of Guilmant, Mendelssohn and other reputable composers. Prerequisite: The highest non-credt level of piano 10, and permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee $15.00.

MUS 22A, B Second Year Organ. (4) 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 pedal studies and scales in addition to the Toccate and Fugue in D Minor, and other major works, some from modern composers. Prerequisite: Music 22C. Two one-half hour periods. Laboratory fee $15.00.

MUS * 42A, B Fourth Year Organ. (4) A continuation of Music 32C with special emphasis on representative works from the various schools of composition including 20th Century composers. Two one-half hour periods. Laboratory fee $15.00.

MUS 13A, B First Year Violin or Viola. (4) 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. (4) Instruction with standard elementary violin or viola materials. Prerequisite: Music 13C. Two one-half hour periods. Laboratoy fee $15.00.

MUS 33A, B **Advanced Violin or Viola.** (4) Instruction with standard advanced
MUS 43A, B violin or viola materials. Prerequisite: Music 23C. Two one-half hour periods. Laboratory fee $15.00.

MUS 14A, B First Year Voice. (4) 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. (4) The study of voice drills in voice placement, intonation, breathing, phasing, diction, etc. Prerequisite: Music 14C. Two one-half periods. Laboratory fee $15.00.

MUS 34A, B **Third and Fourth Year Voice.** (4) The study of drills in vocal tech-
MUS 44A, B niques. Prerequisite: Music 24C. 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). (4) The study of standard intermediate materials. Prerequisite: Music 15C. Two one-half hour periods. Laboratory fee $15.00.

MUS 35A, B **Third and Fourth Year Cornet (Trumpet or French Horn).** (4)
MUS 45A, B Instruction with standard advanced materials. Two one-half hour periods. Laboratory fee $15.00.

MUS 16A, B First Year Trombone (Baritone Horn or Tuba). (6) 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 Horn or Tuba). (4) The study of standard intermediate materials. Prerequisite: Trombone 16C. 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). (2-2) 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). (2-2) The study of standard intermediate materials. Prerequisite: 17C. Two one-half hour periods. Laboratory fee $15.00.

MUS 37A, B Third and Fourth Year Clarinet (or Flute). (2-2) Instruction with
MUS 47A, B standard advanced materials. Two one-half hour periods. Laboratory fee $15.00.

MUS 18A, B First Year Oboe (or Bassoon). (2-2) 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). (2-2) Instruction with standard intermediate materials. Prerequisite: Oboe 18C. One-half hour periods. Laboratory fee $15.00.

MUS 38A, B Third and Fourth 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. (2-2) 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. (2-2) 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) Instruction with standard
MUS 49A, B advanced materials. Two one-half hour periods. Laboratory fee $15.00.

MUS 10A, B First Year Percussion. (2-2) 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. (2-2) 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 percussionists. Review of all rudiments, introduction of solo and ensemble materials for percussion. 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.

Major Ensemble Groups

MUS 002. String Ensemble. (1) The study and performance of representative literature for string ensemble and small orchestra with special emphasis on material suitable for beginning string programs for the public school. Membership 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 Office of the Music Department. 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. (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 edcuation. Consists of a thorough study in music fundamentals, terminology, scales, keys, rhythms, and sight singing drills and dictation. Prerequisite: Permission from the Office of the Music Department. Three lectures.

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.

MUS 371B. Choral Methods and Materials. (3) A study of the principles and problems of teaching voice, managing and directing choral organizations, and the analysis and evaluation of choral materials. Prerequisite: Permission from the Office of the Music Department. Three lectures.

MUS 371 C. Instrumental Methods. (3) A study of 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 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 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 119. Orientation to Music. (1) Elementary instruction in basic language of music, scale formation, rhythms, sight singing, melodic dictation. Attention given to practice and study habits for music majors.

MUS 120-1. Freshman Theory. (4-4) Basic notation, intervals, scales and modes, rhythms, contrapuntal harmony, written and keyboard, sight singing and ear training, harmonic 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. Counterpoint. (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 420-421. Forms and Analysis. (3-3) A study of compositions in the smaller and larger forms. Prerequisite: Music 321. Three lectures.

MUS 430. Orchestration. (3) A systematic study and application of the techniques for utilizing the capabilites of orchestral and band instruments in Music Composition. Prerequisite: Music 321. Three lectures.

MUS 428. Physics of Music. (3) Theoretical and applied consideration of 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 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 of 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.

• Approved for graduate credit.

DEPARTMENT OF PSYCHOLOGY

DR. DANSBY (Head), DR. ATCHISON, DR. BARRETT, DR. BRAGG, MRS. HERRON, DR. JOYNER, MS. LEWIS, DR. McKINNEY, MR. PHELPS, DR. SIMPSON, DR. STEWART, DR. THOMAS, DR. THREALKILL.

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 requirement.

Requirements for a Major in Psychology

The undergraduate curriculum in psychology terminates in a Bachelor of Science degree or a Bachelor of Arts degree if the prescribed courses are taken plus six semesters of a foreign language. All majors are required to take: Psychology Orientation 101, General Psychology 201-202 and 30 additional hours in psychology courses on the 300 and 400 level. The 30 hours must include the required courses: Psychology 311, 411, 450, and 481.

Supporting courses in other departments required for a major in psychology are: Biology 111-12, Mathematics 111-12, Sociology 211, 4 courses of Physical Education 11-43 or AFROTC 151-52 and 251-52, English 101-02 and 211-12, Art Appreciation 133, Music Appreciation 131, American History 201-02 and Political Science 221 or 222.

It is recommended that majors select electives from: Genetics, Human Physiology, Physics, Philosophy, Science, History, Anthropology, Foreign Languages, Economics and Sociology.

Advanced psychology majors shall have the opportunity to practice and acquire experience in using psychological techniques in the

psychological services laboratory, and shall be required to complete a project (minor research) under staff supervision and present and defend the same in the senior project seminar. The University Testing Service and the University Counseling Center are open to advanced undergraduate and graduate psychology majors as additional sources of training and experience.

Majors who receive a grade of "F" in a psychology course *must* repeat and pass the course. It is strongly recommended that majors repeat psychology courses in which a grade of "D" is earned.

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 some other area or minor in psychology and become certified in psychology.

The General Psychology courses 201-02 plus 12 additional semester hours of 300 and 400 level psychology courses are required for a minor in psychology. In order to be certified (teacher education) in psychology a student must take 12 semester hours of psychology courses including General Psychology 201 and Social Psychology 341.

CURRICULUM FOR MAJOR IN PSYCHOLOGY*

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng. 101-102	3	3	Eng. 211-212	3	3
Math 111-112	4	3	Bio. 121-122	4	4
Hist. 201-202	3	3	PE or AFROTC	1	1
PE or AFROTC	1	1	Psy. 202	3	
Psy. Orient	2		Pos. 221 or 222		3
Psy. 201		3	Soc. 211	3	
Art 133	2		Psy 311		3
Mus. 131		2	**Advised Electives	3	3
	15	15		17	17

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
Psy. 411	4		Psy. 481	3	
Psy Electives	6	9	Psy. 450		3
***Electives	8	9	Psy. Electives	3	
	18	18	***Electives	12	12
				18	15

*Graduate requirements for Bachelor of Arts degree in Psychology: Complete the prescribed core, plus three years 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 30 hours of 300 or 400 level courses. Recommended electives: Genetics, Human Psychology, Physics, Philosophy, Science, Anthropology, Foreign Language (French or German), Economics and advanced courses in the areas of Sociology and Economics.

SCHOOL OF EDUCATION
DEPARTMENT OF PSYCHOLOGY

COURSE OFFERINGS

PSYCHOLOGY (PSY)

PSY 101. Orientation for Psychology Majors. (2) General introduction to college life with major emphasis on the broad area of the field of psychology. Main focus is on acquainting the student with psychology as a profession through active participation in discussions with speakers and field experiences. Required of freshmen psychology majors.

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 202. General Psychology. (3) Prerequisite Psychology 201. Required of all psychology majors. Prerequisite for majors for advanced courses in psychology. The course is designed to give students more intense study of the areas of psychology with emphasis on methodology and critical thinking.

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.

PSY 311. Elementary Statistics. (3) An introduction to statistics for the general student, with emphasis on organizing, summarizing and describing numerical data; probability; sampling distributions; correlation; regression; point estimation; interval estimation; tests of hypothesis and distribution free methods.

PSY 312. Measurement Evaluation for the Classroom Management in Public Schools. (3) Primarily concerned with offering training in administering, scoring, processing, and using the results of standardized and teacher-made tests and other measures of progress in public schools; also training is offered in the construction of objective and subjective tests. Prerequisite Psychology 242. Required in the Professional Education Core. Attention is also given to various tests as they relate to the functions, techniques, and tools of guidance and counseling.

PSY 321. Abnormal Psychology. (3) A survey course of the psychology of deviant behavior. Emphasis is on the behavior syndromes associated with behavioral disorders; the biological, psychological, and sociological bases for disorders; and the kinds of treatments available.

PSY 323. The Psychology of the Black Experience. (3) The Psychology of the Black Experience deals with coping strategies of Black families, (as opposed to current emphasis on pathology of Black families); Psychology of the Black female; Black male. Research of Black authors will be emphasized.

PSY 341. Social Psychology. (3) Study of how human behavior is influenced by the group and how it in turn affects the group and its functioning. Emphasis is on group processes psycho-social bases of behavior, the impact of language on behavior, and the cognitive world of the individual.

PSY 351. Developmental Psychology. (3) Presentation of biological and psychological aspects of developmental processes. Experimental aspects of the development of behavioral systems stressed.

PSY 424. Behavior Modificiation. (3) Designed to give the student a firm grounding in operant 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 be thoroughly explored. Contrasts with other techniques and criticism will be documented.

PSY 431. Physiological Psychology. (4) Physiological mechanisms of motivation, emotion and reinforcement are discussed. Peripheral and central nervous system (brain) functions in behavior.

PSY 450. Senior Project. (3) Required of all seniors majoing in Psychology. A course in which students plan and carry out projects in the area of psychology under the supervision of a faculty person.

PSY 460. (A,B,C, or D) Special Topics. (3) Offered each semester with topics varying. Topics include Drugs and Behavior, Motivation and Emotion, Industrial Psychology, Electrical Brain Stimulation, Sexual Behavior. Can be taken more than once.

PSY 462. Introduction to Psychological Testing. (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 groups and individual testing. An intensive study of individual differences, with emphasis on discovery, measurement, and interpretation.

PSY 481. History and Systems of Psychology. (3) Special attention to the historical development of psychology as a science, and the fundamental concepts of various schools of psychology. The purpose of inductive and deductive research will be explored.

411. Experimental Psychology—Research Methods. (4) Offers training in applying scientific procedures of experimentation to the study of psychological phenomena. Topics include research methods and experimental design. (Combination of lecture and lab.)

412. Experimental Psychology—Learning and Perceptual Processes. (4) Offers training in the application of scientific procedures to the study of learning. Topics include human and animal learning. (Combination of lecture and lab.)

THE SCHOOL OF ENGINEERING AND TECHNOLOGY

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 150 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 degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, Industrial Art and Technology and Mechanical Engineering.

The school's curricula in these programs are structured to graduate quality engineers 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 develop sound judgement; must be willing to try; must recognize failures; and keep on trying until he 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 an 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.

The School of Engineering and Technology has a physical plant consisting of:

1. Engineering Building—In this building are located the electronics,

electrical, physical testing, cement and soils, combustion engines, refrigeration and air-conditioning hydraulics, vibrations, noise, and model-making laboratories; three drafting rooms; classrooms; and offices.

2. Industrial Arts Building—In this building are located the metals, wood technology, building construction, electronics and aeronautics laboratories; one drafting room; classrooms; and offices.
3. Operations Building—The printing technology laboratory is located in this building.

The School of Engineering and Technology annually awards scholarships and financial aids to all deserving students. These scholarships cover tuition costs and in many cases boarding and lodging. The amount of each student's award is based on his financial need and his academic rating.

The school also runs a tutorial center which offers assistance to all engineering students who are in need of additional academic clarification.

PROVISION FOR COOPERATION WITH THE UNIVERSITY OF TENNESSEE-NASHVILLE

The Bachelor of Science in General Engineering is jointly offered by Tennessee State University and the University of Tennessee at Nashville. Those courses taught at the University of Tennessee-Nashville will be available to the Tennessee State University students at registration. Students register in accordance with stated University policies; however, they will pay the stated fees of the University where registered. An adviser at the University of Tennessee-Nashville will be designated to assist the TSU student in his academic pursuits. The selection of an adviser at one institution automatically identifies a counterpart at the other institution. The adviser will assist the student with appropriate counsel concerning academic functions.

The combined schedules of appropriate courses in the Bachelor of Science in General Engineering program will be available to students of both universities and will be cross listed in each institution's schedule booklet. Registration for classes will be available at the student's base University for those enrolled in the program. Students registered in this program will have the freedom to transfer to Architecture, Civil, Electrical and Mechanical Engineering programs at Tennessee State University. Students will also have the freedom to change base universities by registering at the other institution.

ENGINEERING CORE

The following subjects are required in all engineering fields of specialization.

Mathematics and Physic Science	*33 cr. hrs.*
Analytical Geometry and Calculus	13
Applied Mathematics or Differential Equations I	3
Probability and Statistics	2
General Chemistry	4
Introduction to Material Science	3
General Physics	8
Communications	*15 cr. hrs.*
English Composition	6
Speech	3
Technical Report Writing	2
Engineering Development	1
Engineering Graphics	3
Engineering Science	*18 cr. hrs.*
Computer Science	3
Engineering Mechanics	6
Thermodynamics	3
Electrical Circuits I	3
Engineering Economics	3
Humanities and Social Studies	*19 cr. hrs.*
American History and Government	6
Literature	6
Social Studies Electives	3
Humanities Electives	4
University Requirements	*4 cr. hrs.*
AFROTC (Air Science or Military Science) or Physical Education	4
Total	89 cr. hrs.

Engineering students will not be allowed to accumulate more than two (2) "D" grades in all required engineering, mathematics, physics and chemistry courses.

Freshmen students in the School of Engineering and Technology are required to participate in the Freshmen Forum during their freshmen year.

GENERAL ENGINEERING COURSES

ENGR. 201. Engineering Mechanics I. (3) Statics of particles, statics of rigid bodies in two dimensions, centroids and centers of gravity, moments of inertia. Kinematics of particles, kinetics of particles including force, mass and acceleration, work and energy. Prerequisite: Math. 262.

ENGR. 202. Engineering Mechanics II. (3) Kinetics of particles including impulse and momentum, kinematics of rigid bodies including force and acceleration, work and energy, impulse and momentum. Introduction to mechanics of materials, including stress and strain due to axial loading and torsion. Prerequisites: Engr. 201 and Math. 341.

ENGR. 211. Engineering Mechanics III. (3) Statics of particles, statics of rigid bodies in two dimensions, statics of rigid bodies in three dimensions, centroids and centers of gravity, analysis of structures, forces in cable, friction and moments of inertia. Prerequisite: Math. 262.

ENGR. 212. Engineering Mechanics IV. (3) Kinematics of particles, kinetics of particles including force, mass and acceleration, work and energy, impulse and momentum, kinematics of rigid bodies, kinetics of rigid bodies including force and acceleration, work and energy, impulse and momentum. Introduction to mechanical vibrations. Prerequisites: Engr. 211 and Math. 341.

ENGR. 303. Applied Mathematics. (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. Prerequisite: Math. 341.

ENGR. 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.

ENGR. 220. Computer Science. (2) A basic course in computer problem solving, utilizing algorithms and the FORTRAN language. Included is familiarization with large-scale computer systems, descriptions of different languages, and actual usage of pre-written programs and subroutines; as well as development of new programs for their own use. Prerequisite: MATH 161 or consent of instructor. Note: To be taken in conjunction with ENGR 220L.

ENGR. 220L. Computer Science Lab. (1) Practical use and development of programming skills and actual case studies. Includes statement coding, flow charting, debugging, and running of actual student programs. Note: To be taken in conjunction with ENGR 220.

ENGR. 304. Applied Math II. (3) Introduction to complex analysis and boundary value problems and introduction to complex analysis. Prerequisite: Engineering 403.

ENGR. 330. Analog Computer. (3) Basic principles and techniques employed in the simulation and module analysis of physical systems and controls. Analysis of dynamic systems described by ordinary differential equations. Problem preparation and scaling; operational amplifiers, multipliers and function generators. Prerequisite: Math 462.

ENGR. 340. Numerical Methods in Engineering. (3) Numerical solutions of systems of linear and nonlinear equations; numerical differentiation and integration; numerical solutions of ordinary and partial differential equations. Prerequisite: Math 462.

ENGR. 400-401. Special Topics in Engineering. (1) Special subjects presented in the School of Engineering to cover current problems or unique advances in the state of the art. Prerequisite: Senior standing or consent of the instructor. Three hours per

week including biweekly laboratory.

ENGR. 410-411. Special Topics In Engineering. (1) Special subjects presented to cover current problems or unique advances in the state of the art. Prerequisite: Senior standing.

ENGR. 420. Engineer In Training License Review. (0) A course designed to prepare students for the EIT examination, a partial requirement for obtaining license as a professional engineer. Prerequisite: Senior standing.

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; amortization, sinking funds; cost and rate determination. Prerequisite: Econ. 211 and junior standing.

ENGR. 440. Probability and Statistics. (2-0-2) Statistics and engineering; Probability; Probability distributions; Chebyshev's theorem; Normal distribution; Applications to operations research; treatment of data; Hypothesis testing; method of least squares; Regression; Applications to engineering problems. Prerequisite: MATH 263.

***450 Senior Seminar.** (1-0-1) 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.

*AE 450, CE 450, EE 450, IE 450, ME 450 are all senior seminar courses with the above course descriptions. These courses are taught concurrently by the School.

THE DEPARTMENT OF ARCHITECTURAL ENGINEERING

MR. VINCENT (Head), MR. HARRIS, MR. JONES, MR. LARKIN, MR. WALKER (Part-Time).

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, building equipment, office practice, and ethics form the basic nucleus of the architectural discipline.

A full range of engineering and structural courses in steel, timbers, 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 desires to practice. Minimum semester hours required for the Bachelor of Science degree in Architectural Engineering are 139 hours.

DEGREE REQUIREMENTS

General Core	88 Cr. Hrs.
Technical Electives	3
Architectural Engineering Core	
Architectural Design	12
Strength of Materials	3
Theory of Structures	6
Materials of Construction	3
Working Drawings	3
Environmental Engineering Systems	3
Senior Project	2
Building Equipment	3
Reinforced Concrete Design	3
Surveying	3
Structural Design in Metals	3
Soils Mechanics	4
Total Credit Hours Required	139

The Architectural Engineering Technical electives are to be selected from the following courses:

1. Environmental and Urban Planning AE 320
2. Basic Photography AE 330
3. Descriptive Geometry AE 211

The Humanities elective may be chosen from the following areas: (A combination of any two fields).

Philosophy	(Introduction to Philosophy) PHIL 301
Music	Music 434 (Seminar in Jazz)
Art	Art History I and II Art 331-332
Drama	History of Drama I DR 301

DEPARTMENT OF ARCHITECTURAL ENGINEERING

BACHELOR OF SCIENCE DEGREE PROGRAM IN ARCHITECTURAL ENGINEERING

FRESHMAN YEAR	Credit Hours Fall	Spring
Math 261, 262	5	5
Chem 121, SPCH 220	3	3
Chem 121L, ENGR 100	1	1
ENGR 111, 230	3	3
ENG 101, 102	3	3
PE or AFROTC	1	1
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
Math 341, ME 301	3	3
Phy 221, 222	3	3
Phy 221L, 222L	1	1
ENGR 211, CE 211	3	3
AE 201, 202	3	3
Humanities Elective		4
ENGR 220	3	
PE or AFROTC	1	1
	17	18

JUNIOR YEAR	Credit Hours Fall	Spring
AE 301, 302	3	3
CE 341, 442	3	3
ENGR 440, EE 211	2	3
ENG 361, 362	3	3
CE 313, AE 312	4	3
Hist 201, 202	3	3
	18	18

SENIOR YEAR	Credit Hours Fall	Spring
AE 431, 432	2	2
AE 450, 411	2	3
AE 441, 442	3	3
CE 302, AE 430	3	3
CE 342, Tech Elective	3	3
CE 344, ENGR 303	3	3
ENGR 400, ENG 310	1	2
	17	19

Minimum credits required for the B.S. degree. 139 Semester hours.

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ARCHITECTURAL ENGINEERING

COURSE OFFERINGS

ARCHITECTURAL ENGINEERING (AE)

AE 201. Architectural Design I. (3) Introduction to architectural design; expressions of principles, in structural and aesthetic relationship. Lecture, 3 hours; Lab, 6 hours. Prerequisite: ENGR 111.

AE 202. Architectural Design II. (3) Problems of more complex nature involving principles, materials, space concepts and site relationship. Emphasizing design and the use of materials in the development of creative activity. Lecture, 3 hours; Lab, 6 hours. Prerequisite: AE 201.

AE 211. Engineering Graphics II (Descriptive Geometry). (3) Curved surfaces, their tangent lines and planes; the intersection of surfaces, developments, shades and shadows, perspective. Prerequisite: ENGR 111.

AE 301. Architectural Design III. (3) The design of architectural problems of a complex nature involving principles of organic order and the use of structural elements, site relationship, form and logical concepts to space and the process of architectural composition. Problems in planning with close co-ordination of site, materials, human needs and structural harmony. Lecture 3 hours; Lab, 6 hours. Prerequisites: AE 201-202.

AE 302. Architectural Design IV. (3) A continuation of Architectural Engineering 301, principles applied in a series of more complex problems, each problem presented on a design need covering the whole field of architectural procedures. Lecture, 3 hours; Lab, 6 hours. Prerequisite: AE 301.

AE 312. Working Drawings. (3) Graphical presentation of building material assembly, construction methods, framing systems and details.

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 exhibition techniques. Prerequisites: AE 330 or prior experience.

AE 430. Administrative Services. (3) 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. (2) Materials and forms of Architectural and related arts of the past and present, including emphasis on social, religious, and political life. Prerequisites: AE 201-202.

AE 432. Architectural History. (2) Continuation of Architectural History, AE 431.

AE 441. Building Equipment. (3) The selection, use and design of mechanical equipment for buildings; problems involving cost, maintenance and purchasing of standard and custom design equipment. Prerequisite: AE 312.

AE 442. Environmental Engineering Systems. (3) Design and layout of heating and air-conditioning systems, illumination and writing practice, water supply and treatment, drainage and sewage disposal systems. Prerequisite: Physics 222.

AE 450. Senior Project. (2) For completion of senior standards of Architectural Engineering this course is a continuation of course 302. All seniors are given practical problems within the community, having an actual site and having to meet requirements given by the faculty and concerned persons outside the university. Prerequisite: AE 302.

AE 411. Materials and Construction. (3) Prefabricated building materials, manufacturing processes, characteristics of new and old materials; emphasis on relationships between common use of materials and imagination; techniques directed toward limitations and potentialities. Lecture, 1 hour; Lab, 2 hours. Prerequisites: ENGR 230.

DEPARTMENT OF CIVIL ENGINEERING

DR. BALUCH (Chairman), MR. HINTON, P.E.: MR. DOUGLASS SHIELDS, DR. FENIG CHEN, P.E., DR. ROZENBERG

The Department of Civil Engineering offers a major program leading to the Bachelor of Science Degree in Civil Engineering.

The Department offers basic courses in the following areas of specialization: Solid Mechanics, Fluid Mechanics, Structural Analysis and Design, Soil Mechanics and Foundation Engineering, Environmental Engineering and Water Resources, and in Transportation Engineering. Specialization is provided through a choice of Technical Electives.

*Part-Time Faculty

Degree Requirements

Core requirements for all engineering students	90 credit hours
Technical Electives	4 credit hours
Civil Engineering Core	
Surveying	3
Strength of Materials	6
Fluid Mechanics and Hydraulics	5
Steel and Reinforced Concrete Design	6
Soil Mechanics and Foundation Engineering	5
Environmental Engineering and Water Resources	5
Transportation	3
Structural Testing	1
Structural Analysis	5
Senior Project	2
Total credit hours required	135

CURRICULUM FOR MAJOR IN CIVIL ENGINEERING

FRESHMAN YEAR	Credit Hours Fall	Spring
Hist. 201		3
Math. 261, 262	5	5
Chem. 121	4	
Engr. 100	1	
Engr. 111, 230	3	3
Eng. 101, 102	3	3
PE or AFROTC	1	1
Econ 211		3
	17	18

SOPHOMORE YEAR	Credit Hours Fall	Spring
Math. 341, Engr. 303	3	3
Phy. 221, 222	4	4
Engr. 211, 212	3	3
Hist. 202	3	
Eng. 310, CE 211	2	3
PE or AFROTC	1	1
Engr. 220	3	0
Speech 220		3
	19	17

JUNIOR YEAR	Credit Hours Fall	Spring
Humanities Electives	2	2
Eng. 361		3
EE 211, ME 301	3	3
CE 302		3
CE 310, CE 311	3	2
CE 312	3	
CE 341, CE 340	3	1
CE 313, CE 444	3	2
	17	16

SENIOR YEAR	Credit Hours Fall	Spring
Eng. 362	3	
CE 322, CE 421	3	2
CE 342, CE 442	3	2
CE 332, Engr. 430	3	3
CE 343, Engr. 440	3	2
Tech. EL. (300-400 level)	2	2
Engr. 400		1
Engr. 440		2
CE 450		2
	17	16

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING

COURSE OFFERINGS (CE)

CE 211. Strength of Materials. (3) Stress and deformation analysis of members under axial loading, torsion, bending and shear. Development includes both elastic and inelastic behavior. 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 angles; measurement of distance by tape and stadia, design, calculation and

layout of circular, spiral and vertical curves; introduction to optical tooling. Two lectures and two hours lab per week. Prerequisite: Math 261.

CE 310. Fluid Mechanics. (3) Static, dynamic and thermodynamic properties of real and ideal fluids; laminar, turbulent, compressible and uncompressible flow, Euler, Bernoulli and continuity equations. Prerequisite: Engr. 211.

CE 311. Hydraulics. (2) Flow in channels, conduits and networks measurements of properties of common hydraulics and hydraulic structures. 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, Atterberg Limits. Soil structures, permeability of soils, capillarity and frost action in soils, theory of quicksands and concept of effective stress in soils, stress distribution in soils, compaction of soils, compressibility and settlement due to consolidation. Two lectures and two hours lab per week. Prerequisite: CE 211.

CE 322. 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 332. Transportation. (3) Engineering design of transportation systems such as highways, airports, and railroads. Prerequisites: CE 302 and CE 211.

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) Analysis of determinate structures including trusses, beams, and frames. Prerequisite: CE 211.

CE 342. Reinforced Concrete Design. (3) Behavior and design of rectangular and T-sections in bending and shear, bond 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: roof and bridge trusses, plate girders and built-up columns, and main compression members. Prerequisite: CE 341.

***CE 403. Man and His Environment.** (3) Survey of environmental pollution and control involving the air, land, and water environments; the management and mismanagement of these environments; noise pollution, and other current problems such as the energy crisis and the population explosion. 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.

***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: Chemistry 121.

***CE 431. Traffic Control.** (3) Study of traffic congestion, road and street capacity, regulation of moving traffic, parking regulations, pedestrian control, traffic signs and signals, traffic counts, traffic laws and regulations, traffic accidents and street modifications. Prerequisite: CE 332.

***CE 432. Highways.** (3) A study of modern practices in the location and design of highways, including right of way acquisition, earth-work, geometric design, drainage structures, construction and maintenance problems. Prerequisites: 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 systems 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) Shearing strength of soils, Mohr-Coulomb theory of strength, lateral earth pressure, retaining walls, shallow foundation and bearing capacity of soils, spread and combined footings, raft foundations. Deep foundation, piles, caissons and piers. Prerequisites: CE 312, CE 313.

***CE 449. Advanced Steel Design.** (3) Design of complete structures including buildings and bridges. Introduction to plastic design concepts. Prerequisites: CE 342, CE 343.

CE 450. Senior Project. (2) A theoretical or experimental project on special topics in Civil Engineering coupled with a report and a seminar. Prerequisite: Senior standing.

*Technical Electives

DEPARTMENT OF ELECTRICAL ENGINEERING

MR. MALKANI (Head), DR. DEVGAN, DR. MAGINN and DR. ELDER

This department offers a major program leading to the Bachelor of Science Degree in Electrical Engineering. Also the Department offers two service courses in circuits and devices for non-majors.

The Electrical Engineering Department offers basic courses in the following areas: Control Systems, Digital Systems, Communication Systems Theory, Electronics, Electromagnetic Theory, Energy Conversion, Electrical Circuits, Network Theory and Power Systems. Specializations in any of the above areas is provided through a choice of technical electives.

Requirements in Electrical Engineering

Core requirements for all engineering students	90 Credit Hrs.
Technical Electives	9
Electrical Engineering core	
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 I (EE-342)	3
Communication Systems (EE-350)	3
Control Systems 1 (EE-400, 400L)	4

Digital Logical (EE-310, 310L)	4
Senior Project (EE-450)	2
Total credit hours required	137

The technical electives, courses at least the 300 level, may be chosen from the following courses *only, except in specially approved cases* or as approved by advisor.

Physics 361 - Solid State Physics (3)
EE 401 - Control Systems II (3)
EE 322 - Electomagnetic Theory II (3)
EE 343 - Power Systems II (3)
EE 430 - Digital Computer Structures (3)
Engr 480 - Numerical Methods in Engineering (3)
Engr 460 - Intro. to Optimization

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 261, 262	5	5
CHEM 121, ECON 211	3	3
CHEM 121L, ENGR 100	1	1
SPCH 220, ENGR 111	3	3
ENG 101, 102	3	3
PE or AFROTC	1	1
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
MATH 341, ENGR 303	3	3
PHYS 221, 222	3	3
PHYS 221L, 222L	1	1
EE 211, 212	3	3
ENG 310, HIST 201	2	3
ENGR 220, 230	2	3
PE or AFROTC	1	1
ENGR 220L, EE 212L	1	1
Humanities Electives	2	
	18	18

JUNIOR YEAR	Credit Hours Fall	Spring
EE 331,332	3	3
EE 331L, 332L	1	1
EE 310, 341	3	3
EE 310L, 341L	1	1
ENGR 201, 202	3	3
EE 320, EE 321	3	3
HIST 202, ENG 361	3	3
	17	17

SENIOR YEAR	Credit Hours Fall	Spring
EE 400, 350	3	3
EE 400L	1	
EE 342, ENGR 430	3	3
Tech Electives	3	6
EE 450, ENG 362	2	3
Humanities Electives	2	
ENGR 400	1	
M.E. 301, ENGR 440	3	2
	18	17

COURSE OFFERINGS

ELECTRICAL ENGINEERING (EE)

EE 211. Circuits I. (3) Fundamental concepts of charge, current, voltage and power; passive and active circuit elements; Kirchoff's Laws, mesh and node analysis; supersition, Thevenin's and Norton's Theorems; transient and steady state response of RL, RC and RLC circuits; phasors and the concepts of impedance, poles and zeroes. Prerequisite: Math 261.

EE 212. Circuits II. (4) Steady state AC circuits, polphase circuits and general network theorems; series and parallel resonance; magnetically coupled circuits; one and two port networks. Prerequisite: EE 211. Lecture: 3 credits; Laboratory: 1 credit.

EE 310. Design of Digital Logic Systems. (4) This course is for those who want to know how logic circuits can be put together to form working digital computing systems. Among the topics included in this course are: overview of computing; combinational and sequential logic circuit design, analysis and minimization; computing circuits; control circuits and microprograming. Prerequisite: EE 212. Lecture: 3 credits; Laboratory: 1 credit.

EE 312. Circuits and Devices. (4) General Network theorems, electronic devices, transistors and amplifiers, linear models of diodes and applications, logic circuits and digital devices, magnetically coupled circuits and transformers, electromechanical devices, and new methods of direct energy conversion. Prerequisite: EE 211. Lecture: 3 credits; Laboratory: 1 credit.

EE 320. Linear Systems. Fourier series and Fourier integral, Laplace transform, Z transform and applications. Network analysis by methods of tie-sets and cutsets. State variables, dynamic equations, difference and discrete state equations, signal flow graphs. Prerequisite: EE 212.

EE 321. Electromagnetic Theory I. (3) Vector analysis, vector algebra, coordinate system and transformations. Coulomb's law, E and D fields, Gauss's law, Divergence theorem. Concept of potential and potential gradient, capacitance, Poisson's and Laplace equations. Bio-Savart Law, Ampere's Law, B and H fields, Stoke's theorem, Magnetic Boundary Conditions. Time varying fields and Maxwell's equations. Prerequisite: Junior standing.

EE 322. Electromagnetic Theory II. (3) Application of electromagnetic theory to transmission lines, uniform plane waves, standing wave ratio, wave guide structures, microwave devices and antennas. Bi-weekly laboratory. Prerequisite: EE 321.

EE 331. Electronics I. (4) Diode characteristics, real, ideal and placewise linear models; transistor circuit biasing and stability analysis; small signal analysis of basic transistor amplifiers; AC and DC analysis of multiple transistor circuits. Prerequisite: EE 212. Lecture: 3 credits; Laboratory: 1 credit.

EE 332. Electronics II. (4) Analysis and design of feedback and power amplifiers; field effect transistor amplifiers; audio frequency amplifier frequency analysis; high frequency analysis of transistor amplifiers; Nyquist, Bode and pole-zero analysis. Prerequisite: EE 331. Lecture: 3 credits; Laboratory: 1 credit.

ENGR 340. Numerical Methods in Engineering. (3) Numerical solutions of systems of linear and nonlinear equations; numerical differentiation and integration; numerical solutions of ordinary and partial differential equations. Prerequisite: Engr. 303

EE 341. Energy Conversion I. (4) Magnetic circuits, single-phase and three-phase

transformers, essentials of voltage and torque equations as applied to electromechanical energy conversion devices. Theory, analysis, performance, and applications of DC machines, synchronous machines and induction motors. Prerequisite: EE 212. Corequisite: EE 321. Lecture: 3 credits; Laboratory: 1 credit.

EE 342. Power Systems I. (3) System model representation of synchronous machines, transformers and short, medium and long transmission lines. Per unit representations. Symmetrical components, symmetrical and unsymmetrical faults, load flow analysis. Prerequisite: EE 341.

EE 343. Power Systems II. (3) Symmetrical Components, Symmetrical and unsymmetrical faults, Z Bus, Y Bus matrices, Short Circuit studies. Prerequisite: EE 342.

EE 350. Communication Systems. (3) Spectral analysis, filters, amplitude modulation, frequency modulation, phase modulation, pulse amplitude and time modulation, pulse code modulation and delta modulation. Emphasis is on the band with requirements for these systems, as well as explanation of modulating, transmitting, receiving and demodulating circuits. Prerequisite: EE 320.

EE 400. Control Systems I. (4) Classical control system design and analysis; transfer functions 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. Prerequisite: EE 320, EE 341. Lecture: 3 credits; Laboratory: 1 credit.

EE 401. Control Systems II. (3) Modern control system design and analysis using state variable methods; analysis of non-linear control systems using phase plane and describing function methods; Popov's methods; introduction to optimal control theory and applications; controllability and observability; Pontryagin's maximum principle and its application. Prerequisite: EE 400.

EE 430. Digital Computer Structures. (3) This course is composed of readings which are descriptions of the major computer systems in use today. At least, one microcomputer, one mini computer, one standard computer, and one super-computer will be discussed and analyzed. Analysis includes size, input-output capacity, speed and the physical connection and operation of the various parts of a computer. Prerequisite: EE 310, ENGR 220.

EE 450. Senior Project. (2) A theoretical or experimental project on special topics in electrical engineering coupled with a technical report and a seminar. Prerequisite: Senior Standing.

DEPARTMENT OF MECHANICAL ENGINEERING

DR. BUSBY (Head), P.E., MRS. CLARK, P.E., DR. HOUGHTON, DR. SASTRY, P.E., MR. SUTHERLAND (Part-time).

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 or machine design. 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 developed within this field, and since mechanical engineers are employed in nearly all industries, their work varies with the industry and function 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, test, 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 degree of Bachelor of Science in Mechanical Engineering. Degree requirements are listed:

DEGREE REQUIREMENTS IN MECHANICAL ENGINEERING

Engineering Core Requirements	90 cr. hrs.
Department Core Requirements	
Strength of Materials, CE 211, 312	6 cr. hrs.
Fluid Mechanics, CE 310	3 cr. hrs.
Circuits and Devices, EE 312	4 cr. hrs.
Thermodynamics II, ME 302	3 cr. hrs.
Material Processing, ME 310	3 cr. hrs.
Kinematics, ME 321	3 cr. hrs.
Machine Design, ME 322	3 cr. hrs.
Heat Transfer, ME 340	3 cr. hrs.
Junior Mechanical Lab, ME 351, 352	2 cr. hrs.
Senior Mechanical Lab, ME 401, 402	2 cr. hrs.
Senior Project, ME 450	2 cr. hrs.
Engr. Graphics II, Engr. 112	3 cr. hrs.
Technical Electives	6 cr. hrs.
ME Systems	3 cr. hrs.
TOTAL	136 cr. hrs.

The ME Systems course is to be chosen from the following:
Instrumentation and Automatic Controls, ME 410
Heating and Air Conditioning, ME 420
Mechanical Energy Conversion, ME 430
Manufacturing Engineering, ME 440

CURRICULUM FOR MAJOR IN MECHANICAL ENGINEERING

FRESHMAN YEAR	Credit Hours Fall	Spring
Math 261, 262	5	5
Chem. 121, Spc. 220	3	3
Chem. 121L, Engr. 100	1	1
Engr. 111, 112	3	3
Eng. 101, 102	3	3
PE or ROTC	1	1
	16	16

SOPHOMORE YEAR	Credit Hours Fall	Spring
Math 341, Engr. 303	3	3
Phys. 221, 222	4	4
Engr. 211, 212	3	3
Engr. 220, 230	3	3
EE 211, CE 211	3	3
PE or ROTC	1	1
	17	17

JUNIOR YEAR	Credit Hours Fall	Spring
ME 301, 310	3	3
ME 321, 302	3	3
CE 310, ME 322	3	3
His. 201, 202	3	3
EE 312, ME 340	4	3
ME 351, 352	1	1
CE 312		3
	17	19

SENIOR YEAR	Credit Hours Fall	Spring
Hum. Elect.	2	2
Econ. 211, Engr. 440	3	2
Eng. 361, 362	3	3
Eng. 310, Engr. 430	2	3
ME 401, 402	1	1
*ME Sys., ME 450	3	2
Tech. Elect.	3**	3**
Engr. 400		1
	17	17

*To be chosen from ME 410, ME 420, ME 430, ME 440
**Must be 300-400 level.

* To be chosen from ME 410, ME 420, ME 430, ME 440
** Must be 300-400 level.

EE 312, Econ. 211	4	3
ME 351, 352	1	1
	18	18

SENIOR YEAR		
Humanities Elect.	2	2
Hist. 201, 202	3	3
Eng. 361, 362	3	3
Technical Electives	3**	3**
Eng. 310, Engr. 430	2	3
ME 401, 402	1	1
ME 450		3
*ME Systems	3	
	17	18

* To be chosen from ME 410, ME 420, ME 430, ME 440
** Must be 300-400 Level Courses

ME 301. Thermodynamics I. (3) An introduction to the nature and domains of thermodynamics; the Zeroth Law; properties and states of pure substances; work and heat; the First Law applied to both open and closed system; general observations and statements of the Second Law; the inequality of Clausius and entropy changes for closed and open systems; vapor power and refrigeration cycles. Prerequisite: Phy. 221.

ME 302. Thermodynamics II. (3) Study of gas mixtures involving ideal gases, the Gibbs-Dalton Law; properties of moist air, the psychrometric chart; gas power and refrigeration cycles, thermodynamic relations, equations of state, chemical reactions, the thermodynamics of combustion; availability and irreversibility. Prerequisite: ME 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 and machining processes. Prerequisite: Engr. 230, CE 211.

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. Prerequisite: Math 262, Engr. 112, Engr. 212.

ME 322. Machine Design. (3) The design of machine parts including shafting, gears, brakes clutches, bearings, (sliding and anti-friction), springs, flywheels and frames. Prerequisites: ME 321, CE 211.

ME 340. Heat Transfer. (3) Introduction of heat transfer machanisms; 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: ME 301.

ME 351-2. Junior Mechanical Laboratory. (2) A comprehensive range of laboratory experiments. The student is taught how to measure physical, thermal and mechanical properties and is introduced to a wide variety of instrumentation. Electromechanical instrumentation and the transfer function concept of calibration is emphasized. The short form of an engineering report is taught. Elementary experiments in mechanics of machines. Prerequisite: Junior Standing.

ME 401-02. Senior Mechanical Laboratory. (2) Experiments in the following areas; balancing of machines, vibrations and noise, internal combustion engines, heat transfer, air conditioning and control systems. 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. Prerequisite: Engr. 303, EE 312.

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, Corequisite: 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 and fusion reactors, and the steam power plant. Prerequisite: ME 302.

ME 440. Manufacturing Engineering. (3) A quantitative study of the manufacturing processes of metal forming, metal cutting, and non-traditional machining operations combining the theory of material science with the synthesis of mechanical design. Lab experiments and demonstrations in material behavior characteristics, metal forming operations, and topics related to metal cutting, e.g., machinability, cutting forces, surface finish, metrology, numerical control and process capabilities. Prerequisites: Senior Standing, ME 310, CE 312.

ME 450. Senior Project. (2) A culminating design project in Mechanical Engineering where the student applies analytical and experimental techniques to the solution of a problem. Written and oral reports must be given by all students. Prerequisite: 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 area 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 system. Balancing and whirling 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 exercises. 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.

DEPARTMENT OF INDUSTRIAL ARTS AND TECHNOLOGY

DR. RYAL (Head), MR. BROOKS, MR. FARBES, MR. PLEASANT, MR. RICHISON, MR. RYAN, DR. WITHERSPOON (PT), MR. WORD.

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 programs leading to the Bachelor of Science degree in the following majors: Technical Aeronautics, Industrial Arts Education, Industrial Technology, and Transportation and Services Technology. Students must have at least a 2.00 average in all lower division major courses before enrolling in upper division major courses.

Courses in Driver and Safety Education, and also, technical, trade and industrial education leading to teacher certification in these areas are provided by the department.

TECHNICAL AERONAUTICS

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.)

Total semester hours required - 133 hours

Total semester hours required for major core - 50 hours

Listed in pattern

Total semester hours required for minor - 21 hours

Consisting of ARO 112, 310, 311, 321, 322, 411

CURRICULUM FOR MAJOR IN TECHNICAL AERONAUTICS

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 101, 102	3	3	Eng 211, 212	3	3
IA 101, 102	3	3	ARO 201, 202	3	3
ARO 101, 102	3	3	Sci 121, 122	3	3
ARO 111, 112	2	2	HIST 201-202	3	3
Math 111, 112	4	3	HEA 151, IE 101	2	2
PE or AFROTC	1	1	ART 133, ARO 310	2	3
	16	15	PE or AFROTC	1	1
				17	18

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
ARO 301, 302	3	3	ARO 401, 402	3	3
ARO 311, 312	3	3	ARO 411, 12	3	2
ARO 321, 322	3	3	IED 450L, Soc Sci Electives	2	3
ME 210 or IA 321	3		Electives (300-400)	3	3
CS 193		3	ACCT 211, Electives (300-400)	4	3
BA 323, 324	3	3	PHIL 323		2
ARO 371, BA 335	2	3	Eng 400	1	
	17	18		16	16

CURRICULUM FOR MAJOR IN INDUSTRIAL ARTS EDUCATION

SAMUEL WORD, 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 for all students who wish to develop an appreciation for and an understanding of the technological society in which they live.

Students majoring 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:

AREA I - Drafting - 6 semester hours
IA 101 - Graphic Communication I (3)
IA 102 - Graphic Communication II (3)

AREA II - Electricity-Electronics - 6 semester hours
IA 231 - Electricity (3)
IA 232 - Basic Electronics I (3)

AREA III - Graphic Arts - 5 semester hours
IA 141 - Printing (2)
IA 142 - Platen Presswork (3)

AREA IV - Manufacturing and Construction Industries - 12 semester hrs.
(Woods) IA 111 - Woodworking Technology (2)
IA 312 - Machine Woodworking (3)
(Crafts) IA 353 - General Crafts (2)
(Metals) IA 121 - General Metals (2)
IA 321 - Machine Tools Technology (3)

AREA V - Power 4 semester hrs.
IA 361, 62 - Power Technology (2, 2)

In addition to the above 33 semester hours of general industrial arts requirements, 6 hours of Industrial Arts and Technology electives are also required. These electives should be used to secure single subject endorsements in various areas of industrial arts. Single subject endorsements may be obtained in any one of the following areas by completion of the hours indicated below:

Drafting	9 semester hours
Electricity-Electronics	9 semester hours
Graphic Arts	6 semester hours
Metals	9 semester hours
Woods	6 semester hours
Plastics	3 semester hours

CURRICULUM FOR MAJOR IN INDUSTRIAL ARTS EDUCATION

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
Eng 101, 102	3	3	ENG 211, 212	3	3
Math 111, 112	4	3	HIST 201, 202	3	3
IA 101, 102	3	3	SCI 121, 122	3	3
*IA 111, 121	2	2	ED 201, PSY 242	3	3
*IA 141, IED 101	2	2	IA 231, 232	3	3
ART 133		2	PE or AFROTC	1	1
PE or AFROTC	1	1	MUS 131 or PHIL 323		2
			HEA 151	2	
	15	16		18	18

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
ED 301, PSY 312	3	3	ED 387, IED 371	3	3
IA 321, 312	3	3	IED 331, ED 491	2	3
IA 361, 362	2	2	IED 450L, 472	2	9
IED 311, 401	2	2	ENG 400	1	
Technical Electives	3		Electives 300-400	6	
IA 353, IA 142	2	3	IED 453	3	
ED 465	3			17	15
Social Studies Elec. 300-400		3			
	18	16			

*These courses need not be taken in the order listed.

PROGRAM FOR CERTIFICATION IN DRIVER EDUCATION

Students may meet certification requirements in Driver Education by completing the following courses:

DSE 400 - Driver Education and Traffic Safety	3
DSE 410 - Teaching Methods in Driver and Traffic Safety Ed	3
DSE 412 - Advanced Problems in Driver and Traffic Safety Ed	3
DSE 420 - General Safety Education	3
HED 302 - First Aid	2
Total	14

PROGRAM FOR CERTIFICATION IN TECHNICAL TRADE AND INDUSTRIAL EDUCATION

Students may meet certification requirements in Technical, Trade and Industrial Education by successfully completing the following courses:

IED 311	Foundation of Industrial Education	2
IED 331	Shop Organization and Management	2
IED 332	Materials and Methods for Teachers of Shops and Related Subjects	2
IED 371	Methods of Teaching Education	3
IED 411	Foremanship Training by the Conference Method	2
IED 412	Job Analysis	3
IED 431	Curriculum Planning in Industrial Education	3
IED 435	Problems in Trade and Industrial Teaching	3
IED 36	Problems in Trade and Industrial Teaching	3
	Total	23

CURRICULUM IN INDUSTRIAL TECHNOLOGY

LEON C. FARBES, 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 an option 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.

A major in Industrial Technology requires a minimum of 39 semester hours. The courses required for a major in Industrial Technology are listed below:

IT 311 - Industrial Safety (3)
IT 314 - Industrial and Production Management (3)
IT 318 - Human Relations in Industry (3)
IT 374 - Industrial Internship (9)
IT 435 - Problems in Industrial Management and Technology (3)
Technology Option - 23 semester hours

The technology option must consist of a minimum of 23 semester hours from one of the areas listed below:

Construction Technology

IT 101 - Residential Construction Methods and Materials (3)
IT 102 - Residential Finish and Millwork (3)
IT 212 - Masonry Construction (3)
IT 321 - Construction Drawing I (3)
IT 322 - Construction Drawing II (3)
IT 330 - Concrete Technology (3)
IT 411 - Mechanical Equipment of Building (3)
IT 412 - Estimating (3)
IT 421 - Modern Building Technology (3)
IT 423 - Advanced Construction Drawing (3)

Electrical-Electronics Technology

IA 231 - Electricity (3)
IA 232 - Basic Electronics (3)
IT 304 - Electric Wiring I (3)
IT 305 - Electric Wiring II (3)
IT 331 - Electronics Communication I (3)
IT 332 - Electronics Communication II (3)
IT 431 - Electronics Instruments and Measurements (3)
IT 432 - Industrial Electronics (3)

Printing Technology

IA 141 - Introduction to Printing (2)
IA 142 - Relief Presswork (3)
IT 201 - Linotype Operation (3)
IT 202 - Make-up and Imposition (3)
IT 301 - Offset Fundamentals (3)
IT 302 - Cost finding Estimating and Bindery Operation (3)
IT 401-402 - Production (6)

Minor in Industrial Technology

Eighteen semester hours in Industrial Technology courses of which 12 hours must be in a single technology area.

CURRICULUM FOR MAJOR IN INDUSTRIAL TECHNOLOGY

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3	SCI 121, 122	3	3
MATH 111, 112	4	3	HIST 201, 202	3	3
IA 101, 102	3	3	ART 133		2
Major Tech. Option	3	3	ENG 211, 212	3	3
IED 101	2		Major Tech Option	3	3
BA 101		3	HEA 151; ECON 211	2	3
PE or AFROTC	1	1	PE or AFROTC	1	1
	16	16		15	18

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
IT 311, 314	3	3	BA 323, 324	3	3
Major Tech Option	3	3	IED 411	2	
IED 331, IT 318	2	3	IT 435	3	
ACCT 211, Elec	4	3	IED 450L, PHIL 323	2	2
Elective (300-400)	3	3	Major Tech Option	3	3
	15	15	Electives (300-400)	3	6
			Eng 400	1	
				17	14

Summer - IT 374 Summer Industrial Internship (9) prior to senior year.

TRANSPORTATION AND SERVICES TECHNOLOGY

A. J. RYAL, Coordinator

The Transportation and Services 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. The curriculum leads to a Bachelor of Science degree, and upon completion of it, the students should: (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 enter and effectively perform at the entrance levels in the transportation services.

Courses required for a major in Transportation and Services Technology are listed below:

IED 101	- Orientation	2
IT 314	- Industrial and Production Management	3
TST 201	- Fundamentals of TST	3
TST 301	- Transportation Rates and Economics	3
TST 302	- Transportation Managing and Marketing	3
TST 311	- Physical Distribution and Transportation Management	3
TST 312	- Transportation Terminal Management	3
TST 374	- Internship TST	6
TST 411	- Tourism Development	3
TST 412	- Problems in Transportation	3
TST	Electives	6
	Total	38

A minor in Transportation and Services Technology requires 18 semester hours.

CURRICULUM FOR MAJOR IN TRANSPORTATION AND SERVICES TECHNOLOGY

FRESHMAN YEAR	Credit Hours Fall	Spring	SOPHOMORE YEAR	Credit Hours Fall	Spring
ENG 101, 102	3	3	ENG 211, 212	3	3
MATH 111, 112	4	3	ACCT 211, GEO 271	4	3
SCI 121, 122	3	3	TST 201	3	
HEA 151, ART 133	2	2	ECON 211, 212	3	3
PE or AFROTC	1	1	SPCH 220		3
IA 101, CS 193	3	3	PE or AFROTC	1	1
	16	15	HIST 201, 202	3	3
				17	16

JUNIOR YEAR	Credit Hours Fall	Spring	SENIOR YEAR	Credit Hours Fall	Spring
TST 301, 302	3	3	TST Electives	3	3
TST 311, 312	3	3	TST 411, 412	3	3
IT 311, 314	3	3	IED 450L	2	
PHIL 301 or 323	2		SOC 461, Electives	3	6
ARO 312		3	Elect. (300-400)	3	3
BA 323, ENG 310	3	2	ENG 400	1	
Elect. (300-400)	3			15	15
	17	14			

TST 374 - Internship in TST (9 hr. cr.) must be taken the summer following completion of Junior Year.

COURSE OFFERINGS

AERONAUTICAL TECHNOLOGY (ARO)

ARO 101. 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.

ARO 102. Power Plants I. (1-5-3) Energy conversion principles and practices. Thermodynamic working fluids and pressure forcetorque conversion processes. Four-stroke cycle and two stroke cycle engine principles and design, carburetion and induction systems design and requirements. Battery and ignition system design, precombustion activities and the combustion process, cooling and lubrication systems. One hour lecture and five hours laboratory.

ARO 111. Model Building. (2-0-2) Deals with the nomenclature, structure, design, and the building of various aircraft models. Two hours lecture.

ARO 112. Aircraft Familiarization. (2-0-2) A survey course designed to acquaint the student with the basic areas of concentration within the field of aviation. Two hours lecture.

ARO 201. Airframe Structures I. (1-5-3) 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 transmission of force through liquids, problems and solutions in mechanical advantages and losses. Basic hydraulic system design and essential unit functions, plumbing for aerospace systems, pressure and mechanical instruments, Gyro instruments. One lecture and five hours laboratory.

ARO 202. Power Plants II. (1-5-3) Engine starting systems and essential units design and function. Performance and power calculation. Maintenance techniques and acceptable tune-up procedures. Output power and 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. Prerequisites: Aero 101, 102. One hour lecture and five hours laboratory.

ARO 301. Airframe Structures II. (1-5-3) Methods and materials of fabrication of aerospace structures, use of MIL and AN standards; FAA technical standard orders (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: Aero 201. One hour lecture and five hours laboratory.

ARO 302. Thrust Conversion. (1-5-3) 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. Prerequisite: Aero 202. One hour lecture five hours laboratory.

ARO 310. Meteorology. (3-0-3) General effects of weather phenomena, special study of its relation to aviation. Three hours lecture.

ARO 311. Communication. (3-0-3) The development of methods of communication, radio navigation, morse code, air traffic control, etc. Three hours lecture.

ARO 312. Federal Aviation Regulations. (3-0-3) Federal, state and local safety regulations with their application to aviation. Three hours lecture.

ARO 321. 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.

ARO 322. 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.

ARO 371. Link Operations. (1-2-2) The principles involved in the GAT-1 Simulator, its operation and maintenance. One hour lecture and two hours laboratory.

ARO 401. Aircraft Electrical Systems. (1-5-3) 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: 101, 202. One hour lecture and five hours laboratory.

ARO 402. Avionics. (1-5-3) This course covers the principles of electronics and electronics circuits elements as used in aircraft and aerospace vehicles for communication, naviagation, and direction finding equipment. Prerequisite 401. One lecture and five hours laboratory.

ARO 411. Flight Training. (1-5-3) How to fly with actual flight experience and instruction. Twenty clock hours of dual flight instruction. One hour lecture and five hours laboratory.

ARO 412. Aeronautics Workshop. (2-0-2) 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. Two hours lecture.

DRIVER AND SAFETY EDUCATION (DSE)

DSN 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.

DSE 410. Teaching Methods in Driver and Traffic Safety Education. (1-4-5) 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.

DSE 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.

DSE 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.

INDUSTRIAL ARTS EDUCATION COURSES (IA)

IA 101. Graphic Communication I (1-5-3) 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 five hours laboratory.

IA 102. Graphic Communication II. (1-5-3) A study of pictorial drawing, thread design and working drawing, intersection and developments, and applied drawing with controlled experience in drafting practices and theory. One hour lecture and five hours laboratory.

IA 111. Woodworking Technology. (2) (1-2-2) An introduction to the tools, materials, processes and personnel used in the woodworking industry. One hour lecture and two hours laboratory.

IA 121. General Metalworking. (2) (1-2-2) An introduction to the tools, materials, processes, and personnel of the metalworking industry. One hour lecture and two hours laboratory.

IA 231. Electricity. (1-5-3) An introduction to the tools, materials, processes, and personnel of the electronics industry with emphasis on basic circuits, magnetism, and electrical principles. Two hours lecture and two hours laboratory.

IS 232. Basic Electronics. (1-5-3) 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 five hours laboratory.

IA 141. Introduction to Printing. (1-2-2) An introduction to the tools, materials, processes, and personnel of the Printing Industry. One hour lecture and two hours laboratory.

IA 142. Relief Presswork. (1-5-3) Skills are developed in the care and maintenance, registration, making-ready, and feeding of hand-fed platen and automatic cylinder presses. Prerequisite: 141. One hour lecture and five hours laboratory.

IA 303. Modern Technology. (2-0-2) A study of the historical development of technology and its impact on man, industry, society and environment.

IA 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: IA 111. One hour lecture and five hours laboratory.

IA 313. Woodturning. (1-2-2) Spindle and face plate turning, re-chucking, finishing and polishing on wood lathes. One hour lecture and two hours laboratory.

IA 321. Machine and Tool Technology. (1-5-3) 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 grider. One hour lecture and five hours laboratory.

IA 322. Art Metal. (1-5-3) An introduction to art and jewelry making. Tapping, chasing and designing, shaping metal foil, sinking and beating down a tray, raising a bowl, decorating the surface or edge, etching design, doing wire work, hand soldering a joint, polishing, coloring and preserving, metal spinning, planning, designing and making projects, and developing subject matter as taught on the junior and senior high levels. One hour lecture and five hours laboratory.

IA 323. Sheetmetal Working. (1-5-3) Introduction to sheetmetal working. Developing pattern, laying-out cutting, bending, framing, forming, making seams, wiring edges, turning a burr, crimping, riveting, spot welding, and soldering sheetmetal. Planning and making projects and developing subject matter as taught in the junior and senior high levels. One hour lecture and five hours laboratory.

IA 352. Plastics Technology. (1-5-3) A study of the kinds and uses of plastics and an application of the fundamental principles and techniques of design and construction of plastics projects as used on the secondary school level. One hour lecture and five hours laboratory.

IA 353. General Craft. (1-2-2) 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 two hours laboratory.

IA 361. Power Technology. (2-1-2) A study of methods of generating, transmitting, controlling and applying power and energy; and the function of power systems in our present-day society. Two hour lecture and one hour laboratory.

IA 362. Power Technology. (1-2-2) Continuation of 361 with emphasis on the operation, design maintenance and repair of power engines and machines. One hour lecture and two hours laboratory.

IA 401. General Shop. (1-2-3) 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 two hours laboratory.

IA 412. Furniture Construction and Upholstery. (1-5-3) Problems in designing and selecting materials and making out bills of material for furniture construction. Fundamentals, skills, and processes in repairing and upholstering furniture. One hour lecture and five hours laboratory.

IA 423. Welding and Heat Treating. (1-5-3) An introduction to arc, tig and acetylene welding. Fundamentals foundry practices and heat treatment of metals. One hour lecture and five hours laboratory.

IA 453. Industrial Arts Research and Design Techniques. (2-2-3) Fundamentals of design as applied to the planning and construction of Industrial Arts shop projects, as commonly used in secondary schools. Two hours lecture and two hours laboratory.

INDUSTRIAL EDUCATION COURSES (IED)

IED 101. Orientation. (2-0-2) Acquaints the student with the departmental requirements, makes him aware of our present-day industrial and technological demand, with some of the implications for the future, and his role in our modern society.

IED 173. Technical Mathematics. (3-0-3) The study and application of basic mathematical principles and concepts as related to modern industrial technology. Subject matter is selected from the fields of Arithmetic, Trigonometry, and Geometry. Prerequisite: Math 111, 112.

IED 311. Foundation of Industrial Education. (2-0-2) 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 works in modern industry.

IED 331. Shop Organization and Management. (2-0-2) 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.

IED 332. Materials and Methods for Shops and Related Subjects for Teachers. (2-0-2) Detailed study, combined with actual operation of each of the several standard types of projects; lesson planning for teaching specific units involving audio-visual aids; maintenance, and repair of projection equipment. The design and construction of static and dynamic models, selected for use in specific teaching units.

IED 371. 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.

IED 411. Foremanship Training by the Conference Method. (2-0-2) 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 foremen's clubs and plant educational programs.

IED 412. 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.

IED 431. Curriculum Planning in Industrial Education. (3-0-3) Arranging course materials in trade subjects; following up results of job analysis; preparing check sheets and individual job sheets in both trade and related subjects. Prerequisite: IED 412.

IED 435, 436. Problems in Trade and Industrial Teaching. (3-0-3; 3-0-3) Individual or group work on assigned or chosen problems involving the preparation, use and evaluation of instructional material 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 lecture periods each week.

IED 450L. 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 laboratory.

ENGR 400. Senior Seminar. (1-0-1) (See course descriptions for senior seminar)

IED 472. Student Teaching. (9) Provides an opportunity for each prospective industrial education teacher enrolled at this institution to engage in the actual observation and teaching 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.

INDUSTRIAL TECHNOLOGY. (General) (IT)

IT 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.

IT 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.

IT 318. Human Relations in Industry. (3-0-3) This course deals with an analysis of the major problems in industrial and human relations. It consists of a study of labor problems, labor legislation and movements, employment conditions, and the problems in the work-a-day world which will aid one in getting along with people on the job.

IT 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 majors are required to take Industrial Internship at the end of their sophomore and junior years. The Head of the Department of Industrial Education must approve all internships before students are permitted to enroll. Internship may be conducted in a commerical establishment or at Tennessee State University. Efforts will be made to arrange with contracting agencies who cooperate in the Industrial Internship program to assist in 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. (Formerly IED 374.)

IT 435. Problems in Industrial Management and Technology. (3-0-3) A series of case problems are presented, analyzed and interpreted covering areas in industrial management and technology. In addition, each student is required to do original research in the field by collecting and analyzing data pertaining to specific problems either at the production or at the administrative level of an industrial enterprise.

CONSTRUCTION TECHNOLOGY (IT-BC)

IT 101. Residential Construction Methods and Materials. (1-5-3) Tools and materials of frame construction. Laying and sketching out of a building. Construction Methods. One hour lecture and five hours of laboratory.

IT 102. Residential Finish and Millwork. (1-5-3) Exterior and interior trim, cabinets and built-in stair construction, roof framing. Prerequisite: 101. One hour lecture and five hours laboratory.

IT 212. Masonry Construction. (1-5-3) 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 five hours laboratory.

IT 213. Concrete Construction. (1-5-3) Laying out footing, reinforced concrete, laying out walls, curbs, driveways. Cast in place beams and panels. Handling and placing concrete. One hour lecture and five hours laboratory.

IT 321. Construction Drawing. (1-5-3) 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: IA 102. One hour lecture and five hours laboratory.

IT 322. Construction Drawing II. (1-5-3) Basic house design, site consideration, modular aspects, drawing a complete set of plans. Two point perspective; designing small commerical buildings, steel framing drawings, concrete structural drawings. Prerequisite: IT 321. One hour lecture and five hours laboratory.

IT 330. Concrete Technology. (2-2-3) Designs of footing and foundations, forming and handling concrete, reinforced concrete construction, insulating and water proofing, etc. Two hours lecture and two hours laboratory.

IT 411. Mechanical Equipment of Building. (1-5-3) Reading and drawing heating plans, calculation of heat losses. Heating systems, all-year air-conditioning systems. Electrical features, calculating the required service entrance load, plumbing waste disposal systems.

IT 412. Estimating. (2-2-3) Specification writing, materials take off. Labor and subcontractors. Calculating cost of materials and labor, for residential and commerical structure. Job planning, requisition of materials, building permits, codes and restrictions.

IT 421. Modern Building Technology. (2-2-3) Low cost housing modular construction, precast concrete, tilt up erection and assemble load, and strength of materials. How to read span tables, load tables, glued laminated wood beams. Steel framed houses. One hour lecture and five hours laboratory.

IT 423. Advanced Construction Drawing. (1-5-3) An advanced study of electrical plans, plumbing plans, and residential climate control; plans specifications, writing construction cost and making material list. One hour lecture and five hours laboratory.

ELECTRICAL TECHNOLOGY COURSES (IT-ELEC)

IA 231. (1-5-3) For course description see Industrial Arts courses.

IA 232. (1-5-3) For course description see Industrial Arts courses.

IT 304. Electric 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: IA 231. Two hour lecture and four hours laboratory.

IT 305. Electrical Wiring II. (2-4-3) A continuation of IT 304 with emphasis on commercial and industrial wiring. Prerequisite: IT 304. Two hour lecture and four hours laboratory.

IT 331. Electronics Communication I. (2-4-3) A study of transmitting and receiving devices, their design and operation, the general requirements and analyzation of circuits, and networks utilized in the superhetorodyne radio and television receivers are covered. Prerequisite: 232. Two hours lecture and four hours laboratory.

IT 332. Electronics Communication II. (2-4-3) A continuation of IT 331 with emphasis on the testing, repair, service and construction of A.C. devices, radio receivers and other electronic equipment used in communication. Prerequisite: IT 331. Two hours lecture and four hours laboratory.

IT 431. Electronic Instruments and Measurements. (2-4-3) An examination of the various meters and test instruments and their practical application to electronic circuits and equipment. Prerequisite: IA 232. Two hours lecture and four hours laboratory.

IT 432. Industrial Electronics. (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 electro-mechanical innovations are studied. Two hours lecture and four hours laboratory.

PRINTING TECHNOLOGY (IT-PR)

IA 141. (1-2-2) For course description see Industrial Arts courses.

IA 142. (1-5-3) For course description see Industrial Arts courses.

IT 201. Linotype Operation. (1-5-3) The development of manipulative skills on the linotype keyboard and the performance of first and second echelon maintenance. One hour lecture and five hours laboratory.

IT 202. Make-Up and Imposition. (1-5-3) 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 five hours laboratory.

IT 301. Offset Fundamentals. (1-5-3) 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 halftone negatives and platemaking are developed. One hour lecture and five hours laboratory.

IT 302. Cost Finding, Estimating and Bindery Operation. (1-5-3) 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 five hours laboratory.

IT 401-402. Production. (0-6-0, 0-6-0) 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.

TRANSPORTATION AND SERVICES TECHNOLOGY (TST)

TST 201. 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.

TST 301. 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.

TST 302. Transportation Managing and Marketing. (3-0-3) A study of basic principles and existing practices used in managing and marketing transportation materials.

TST 311. 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.

TST 312. Transportation Terminal Management. (3-0-3) Study of 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.

TST 321. 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 problems. Advertising and sales. Business executive travel, airplane and automobile rental services. Physical and legal practices and requirements for leisure and group travel.

TST 322. 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: TT 101.

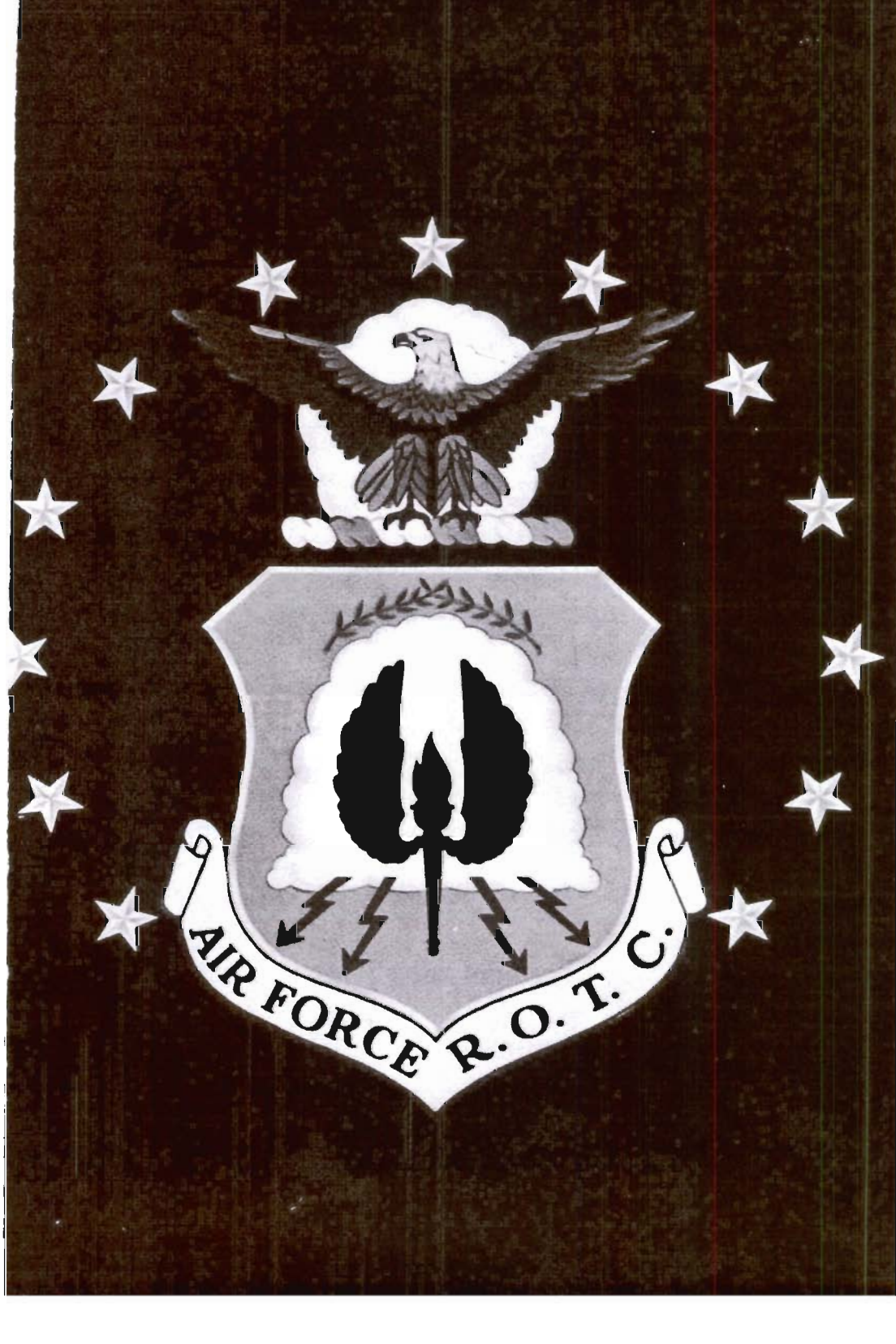
TST 374. Internship in TST. (9) (summer I & II) Actual experience from on the job training in Transportation and Travel Systems.

TST 401. 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.

TST 402. 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.

TST 411. Tourism Development. (3-0-3) A study of ways and techniques of promoting and developing the tourist industry; leisure industry facilities.

TST 412. 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.


AIR FORCE R.O.T.C.

ACTIVITIES

ARTHUR L. FOX, Lieutenant Colonel, U.S. Air Force, (Professor of Aerospace Studies), MAJOR HELEN D. WRIGHT, CAPTAIN ANTON J. WANIO, CAPTAIN WILLIAM S. THOMPSON, TSGT JERRY W. KIDWELL, SSGT ALFRED C. PAYNE, SSGT JAMES T. THREAT.

AIR FORCE RESERVE OFFICERS TRAINING CORPS PROGRAM

Purpose of Air Force ROTC

The Air Force ROTC Program is designed to qualify for commission, those college men and women who desire to serve in the United States Air Force. The program provides training and education that will develop skills and attitudes vital to the professional Air Force officer. Upon graduation from the university and completion of all AFROTC requirements as stipulated by the Department of Aerospace Studies, cadets are commissioned as Second Lieutenants in the Air Force Reserve. All officers who elect to take pilot or navigator training must serve at least five years on active duty. Non-flying officers who received Air Force Scholarships must serve a minimum of four years active duty; non-flying, non-scholarship officers must also serve four years on active duty. Opportunities exist throughout the period of active duty for graduate study through the Air Force Institute of Technology (AFIT), and commissioned service as a career. Those graduates (non-flying) who desire to continue their education may be deferred from active duty while pursuing advanced degrees.

AFROTC CROSS TOWN ENROLLMENT

Four-Year 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, Trevecca Nazarene College, and Aquinas Junior College have such agreements with the university.

UNIVERSITY CREDITS AND CURRICULUM

The following credits are granted for AS work:

AS 100 series (Freshman)—2 semester hours per year
AS 200 series (Sophomores)—2 semester hours per year
AS 300 series (Junior)—6 semester hours per year
AS 400 series (Senior)—6 semester hours per year

The Department of Aerospace Studies offers a minor consisting of 22 semester hours including:

Four (4) semester hours of general military course, 1 credit hour each semester during the freshman and sophomore year.

Eighteen (18) semester hours of 300 and 400 level courses during the junior and senior years as follows:

a. Six (6) semester hours of 300 and 400 level social science courses.
b. Twelve (12) semester hours of Aerospace courses. (Courses 351, 352, 451, 452.) Departments may allow these courses as alternatives for elective credit and certain required courses. Departments which require unspecified minors may use the Aerospace Program as a minor.

COURSES AVAILABLE

Flight Training, which includes ground instruction and 25 hours of airborne instruction and flight evaluation, is offered free of charge to qualified pilot applicants who are senior ROTC cadets. The cadet receives a Federal Aviation Agency Flight evaluation during the Flight Instruction Program.

ELIGIBILITY FOR THE PROFESSIONAL OFFICER COURSE
(Junior and Senior Years)

All cadets enrolled in the Professional Officer Course (junior and senior years) of the Air Force ROTC must:

a. Have either completed the General Military Course (freshman and sophomore years), or the off-campus six weeks Field Training course, or have the required amount of prior military service.
b. Have two academic years of college remaining (either graduate or undergraduate).
c. Have achieved a qualifying score on the Air Force Officer Qualification Test (AFOQT).
d. Execute a written agreement with the Government to complete the program, contingent upon remaining in school; and to attend the off-campus Four Week Field Training Program at the time

specified and to accept an Air Force Reserve Commission, if tendered.

e. Be selected by the Professor of Aerospace Studies.
f. Meet certain specified age requirements.

BENEFITS /General

All cadets enrolled in AFROTC are furnished texts and uniforms by the Government through the Military Property Custodian at Tennessee State University. At the completion of AFROTC, or when the student withdraws from the course, texts and uniforms must be returned to the Military Property Custodian. Uniforms, like library books, are university property and as such could delay the student from graduating if he fails to properly clear his university account. Professional Officer cadets (juniors and seniors) receive subsistance allowances of $100 per month; in addition, they are paid mileage to and from Field Training, plus a stipend based on current active duty pay scales. A four-week Field Training Course is normally required between the Sophomore and Junior years.

SCHOLARSHIP PROGRAM

High School seniors, college freshmen and sophomores are eligible to compete for four-year, three-year, and two-year scholarships respectively. These scholarships include the payment of full tuition and incidental fees, the cost of all required textbooks, plus $100 per month, tax free. Selection will depend mainly on three factors: Score on the Air Force Officer Qualifying Test, past academic performances, and the assessment of a Scholarship review board. They are given approximately equal weight. Interested persons should contact the Professor of Aerospace Studies or any AFROTC instructor.

DRAFT DEFERMENT

Participation in the AFROTC Program permits deferment from the draft under the Universal Military Training and Service Act. All freshmen and sophomores who show a valid need and are tentatively identified for acceptance in the Professional Officers Course and all Professional Officers Course cadets may be deferred. For further information on the subject of deferment, students should consult the Department of Aerospace Studies and the Dean of Admissions and Records.

FLIGHT INSTRUCTION PROGRAM

1. The Flight Instruction Program is an integral part of the Air Force ROTC Program and the training provides a nationally standardized evaluation device using Federal Aviation Administration performance standards.

2. The objectives of the FIP are: to motivate qualified Air Force ROTC cadets toward a career in the Air Force; to encourage qualified basic Air Force ROTC cadets to enroll in the Professional Officers Course as pilot training applicants; and to provide a screening device that will identify those pilot training applicants who lack the basic aptitudes for Air Force pilot training.

3. General Descriptions: Consists of a course of flight instruction in light, land aircraft of 100-200 horsepower with a separate and independent rudder, elevator or stabilizer and aileron control system, operable wing flaps, tricycle landing gear, approved by the FAA flight instruction. It provides 25.0 hours flying time to be apportioned as follows: 16.0 hours dual instruction, 8.0 hours solo flight and 1.0 hour maximum for final evaluation. The program also includes ground school instruction in weather, navigation, and FAA regulations taught in the ROTC classrooms.

FIELD TRAINING

Six-weeks Field Training Course. This course is designed to prepare the student for enrollment into the Professional Officer Course (AS 300 and AS 400). It enables transfer students and others who are unable to take the two-year General Military Course an opportunity to pursue the Advanced Program and thereby receive a commission in two years of study leading to the Baccalaureate degree at the university. The training is provided at a designated Air Force base.

Four-weeks Field Training Course. This course is designed to further prepare the four year cadet for enrollment into the Professional Officer Course (AS 300 and AS 400). This training is provided at a designated Air Force base and is the cadet's first extended exposure to an Air Force environment. The course includes cadet orientation, survival training, junior officer training, aircraft and aircrew indoctrination, physical training, organization and function of an Air Force base, career orientation, small arms familiarization, first aid, and other supplemental training.

SPONSORED ACTIVITIES

The Department of Aerospace Studies sponsors the following activities:

1. The AFROTC Drill Teams. The "Tiger Jets" and the "Blue Devils" are the official names of the AFROTC Drill Teams. These teams are composed of approximately 40 outstanding young men and women who possess desirable leadership potential. These teams perform at athletic events, both home and away, and at parades and ceremonies.
2. The Arnold Air Society. A national AFROTC Society for outstanding cadets.
3. The Honor Guard. Outstanding General Military Course cadets who perform selected duties for the university.
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. It is composed of selected coeds who are interested in enhancing esprit de corps, morale and appearance of the Air Force ROTC Cadet Corps.

CURRICULUM

The Department offers a minor consisting of 22 semester hours including: Four (4) semester hours of basic courses, 1 semester hour each semester during the freshman and sophomore years.

Eighteen (18) semester hours of 300 and 400 level courses during the junior and senior years as follows:

a. Six (6) semester hours of 300 and 400 level social science courses.

b. Twelve (12) semester hours of Aerospace courses, courses 351, 352, 451, 452. Some departments may allow these courses as alternatives for elective and certain required courses. Departments which require unspecified minors may use the Aerospace Program as a minor.

The Aerospace Studies' Program is voluntary. It has a number of advantages for all students. Interested students are encouraged to discuss the program with their major advisors and the Department of Aerospace Studies.

COURSES IN AEROSPACE STUDIES (AS)

AS 151, 152. The U.S. Air Force Today. (2) Freshman year. An introductory course concerning the history and doctrine of the United States Air Force to include its mission and organization. Includes a study of United States strategic offensive and defensive forces and their roles 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.

AS 251, 252. The Developmental Growth of Air Power. (2) Sophomore year. This course examines the development of air power over the past 60 years. It traces the development of various concepts of employment of air power and focuses upon factors which have prompted research and technological change. A variety of events and elements in the history of air power is stressed, especially where these provide the significant examples of the impact of air power on strategic thought.

AS 351, 352. National Security Forces in Contemporary American Society. (6) Junior Year. These courses are designed to improve the ability to speak and write with accuracy, clarity and dignity of style. Focusing on the Armed Forces as an integral element of society, this course provides 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 processes within the Armed Services; the requisites for maintaining adequate national security forces; political, economic, and social constrants upon the national defense structure; and the impact of technological and international developments upon strategic preparedness and the overall defense policy-making process.

AS 451, 452. Air Force Leadership and Management. The Professional Officer. (6) Senior year. These courses are designed to further develop the student's managerial and leadership abilities with emphasis on group discussions, lectures, short papers, and human relations. Includes the meaning of professionalism, professional responsibilities, the military justice system, leadership, theory, functions and practices; management principles and functions; problem solving; and management tools, practices and controls.

Arthur L. Fox, B.S., St. Augustine College, M.S. Tennessee State University, Lt. Colonel, USAF, Professor of Aerospace Studies

William S. Thompson, M.B.A. California State College, San Bernadino, Captain, USAF, Assistant Professor of Aerospace Studies

Anton J. Wanio, B.S., Florida Atlantic University, M.A., University of Missouri, Captain, USAF, Assistant Professor of Aerospace Studies

Helen D. Wright, B.S., Alabama A & M, M.B.A., University of Tennessee, Knoxville, Major, USAF, Assistant Professor of Aerospace Studies

COOPERATIVE EDUCATION PROGRAM
Andrew Minor, Director

The Cooperative Education Program is a plan whereby a student, after completing his first semester of study, alternates a semester of paid employment in his major field of interest with a like period of study until he has completed a minimum of two training semesters. This program enables the student to integrate classroom instruction with practical and valuable on-the-job experience during his college career, with business, industry, governmental agencies, or other employers. For students in the cooperative education program, five years are needed to complete baccalaureate degree requirements. Degree credits are not awarded for the on-the-job experience; however, the student is paid a salary for his services.

The Co-op Program is open to students in *all* majors. Each student entering the program has several interviews with a member of the

Cooperative Education staff who will serve as his coordinator. The coordinator helps the student plan a projected schedule of training assignments and study in order that the student will know of his approximate graduation date.

COOPERATIVE PLAN (COOP)

The following core courses are offered in all degree programs by the faculty of the individual departments. Students in the cooperative Plan require 5 years to graduate.

COOP 210. Cooperative Plan. Work experience under the guidance and supervision of practicing professional personnel. Open to cooperative plan students only. Emphasis on professional and personal development including reliability, efficiency and teamwork. Written report required of student. Passing grade awarded upon evidence of satisfactory job performance. Prerequisites: Completion of 30 credit hours of college work including English 102 with Grade Point Average of 2.5 or better, and preregistration as full time student.

COOP 220. Cooperative Plan. Continuation of Cooperative Plan 210.

COOP 310. Cooperative Plan. Work experience. Open to cooperative plan students only. Continuation of Cooperative Plan 220. Written report required of student. Passing grade awarded upon evidence of satisfactory job performance. Prerequisites: Completion of 60 credit hours of college work with Grade Point Average of 2.5 or better, and preregistration as a full time student.

COOP 320. Cooperative Plan. Continuation of Cooperative Plan 310.

COOP 410. Cooperative Plan. Work experience. Open to cooperative plan students only. Continuation of Cooperative Plan 320. Written report required of student. Passing grade awarded upon evidence of satisfactory job performance. Prerequisites: Completion of 90 credit hours of college work with Grade Point Average of 2.5 or better, and pre-registration as a full time student.

COOP 420. Cooperative Plan. Continuation of Cooperative Plan 410.

EXTENSION AND CONTINUING EDUCATION

DIVISION OF EXTENSION AND CONTINUING EDUCATION

James E. Farrell, Ed.D., Dean

The Division of Extension and Continuing Education is responsible, in conjunction with the seven schools, for the establishment and maintenance of all continuing education activities of the University including non-credit programs, short courses, conferences, and institutes. The Division of Continuing Education has accepted the following goals as primary to its assigned role in meeting the vast and varied educational needs of today's citizens:

1. To provide night and day courses, at centers and on campus, for adults who are unable to undertake regular, full-time study at the University.
2. To provide Community Education Programs designed to meet the occupational, vocational and avocational needs of adults in the community.
3. To provide opportunities for employment to improve skills and knowledge needed in current and projected occupations.
4. To improve managerial skills of individuals employed in business and industry.
5. To provide assistance in planning programs of community health, community development, family life and leisure time activities.
6. To increase participation in civic affairs through greater awareness of public affairs, community problems, local, state and national government.
7. To provide cultural enrichment of the community in such areas as art, literature, music, drama, speech and reading.

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."

CONTINUING EDUCATION UNIT CREDIT COURSES

CEU 2475. Bookkeeping for Small Business, Basic (1-3 CEU). The fundamental principles of bookkeeping includes a student practice set for the organization of ledgers, controlling accounts, special journals, work sheets and financial statements.

CEU 2490. Personal Finance. (1-3 CEU). Shows how the student can analyze and direct his financial affairs. Discusses property, auto, income taxes, borrowing and renting or buying a home; examines the benefits of certain investments such as savings banks, stocks, bonds, mutual funds and real estate; suggests ideas on how to build a retirement income.

CEU 2488. GRE & General Math Review I. (1-3 CEU). This course includes a review of arithmetic procedures, basic algebra and basic geometry. It is especially designed for those studying for the Graduate Records Exam, Civil Service Test, Scholastic Aptitude Test, or any other test requiring a thorough knowledge of high school mathematics.

CEU 2481. Rapid Reading. (1-3 CEU). Instruction designed to increase efficiency in reading; includes activity to increase speed, power of comprehension, concentration, vocabulary and reading for a purpose.

CEU 2480. Reading Improvements for Adults. (1-3 CEU). A course designed to increase reading comprehension and speed; provides for individual needs by beginning each student at a comfortable level and progressing the activity to increase rate and comprehension.

CEU 2462A. "The Frame Up". (1-3 CEU). This course deals with design, layout and actual construction of picture frames as well as other types of construction involving wood planters and memory boxes.

CEU 2462B. Weaving. (1-3 CEU). Techniques and practice in basic weaving including patterned weaves, tapestry and lace. Projects include wall hangings, throw pillows, purses, etc. No previous experience required.

CEU 2491A. Home Baking. (1-3 CEU). This course offers a rewarding alternative to store-bought baked goods; bake it better yourself. Learn why bread and cakes rise and how to bake anything yourself: muffins, biscuits, cakes, breads, Danish pastries, English muffins, bagels and more.

CEU 2491B. Food Freezing and Canning. (1-3 CEU). Course includes basic food freezing and canning techniques plus the extras such as frozen cooked foods, jellies, pickles, relishes and chutney.

CEU 2491C. Meat: How to Shop for it and Save Money. (1-3 CEU). This course is designed to provide the consumer with instruction in types of meats, meat grades and yields, carving methods and shopping hints.

CEU 2477. Gardening. (1-3 CEU). This course is designed to familiarize the beginning gardener with the requirements for a healthy, happy vegetable garden. Instruction will include: principles and practices of organic gardening, soil types, soil analysis, garden insects and biological control, soil microbiology, fertilizer requirements, and vegetable varieties. Good ecological practices will be stressed.

CEU 2487A. Beginning Sewing. (1-3 CEU). A beginners course in modern techniques of sewing; includes instruction in use and care of modern sewing and pressing equipment, pattern selection as related to body measurements, simple alterations, fabric selection with emphasis placed on "easy-to-sew" patterns and completion of a simple garment.

CEU 2487B. Advance Sewing. (1-3 CEU). This course is designed for the person who desires to develop the ability to make more difficult pattern alterations, use of more complicated patterns, use and care of fabrics requiring special treatment. Completion of at least one garment using more advanced techniques and details which give individuality to the garment, will be required.

CEU 2487C. Mother-Daughter Sewing. (1-3 CEU). This course is designed for mothers and daughters emphasizing the cooperative effort of working together. It also deals with the basic sewing techniques. New ideas concerning bedspreads, curtains, and small accessories that could be used in the home will be explored.

CEU 2487D. Window Coverings. (1-3 CEU). Make your own draperies, Roman shades and curtains. Window measuring, hardware, pros and cons of different fabric types explored. Hanging of finished product in your home.

CEU 2486A. Beginning Crochet. (1-3 CEU). Instruction in the basic steps and stitches of crocheting including learning to read and follow crochet patterns. Several small items and one or two major projects will be required.

CEU 2486B. Knitting. (1-3 CEU). Introduces the beginner to the basic steps of the modern method of knitting and how to read and follow knitting patterns and installations. Each student will have the opportunity to knit one sweater.

CEU 2486C. Home Interior Decoration. (1-3 CEU). A discussion of the principles that are involved to create unity in decorating a room or a whole area i.e. walls, floors, furniture. Materials needed for the class, tracing paper, ¼" grid paper, pencils and eraser.

CEU 2486D. Upholstery. (1-3 CEU). Instruction in design and repair of furniture; includes creative and artistic selection of materials, comfortable and durable construction by installing padding and aligning over-stuffed furniture. First time registrants in this course may re-do nothing larger than a chair. In the second enrollment a larger piece may be brought in.

GENERAL EDUCATION DEVELOPMENT PROGRAM

Among the many services offered by the division is a program designed to aid persons in preparing for the General Education Development Tests (High School Equivalency Tests). This program is outlined below:

Course Number	Course Title	Continuing Education Units
English 100	Basic English and Reading Skills	3
English 100A	Practical English Usage and Interpretation	3
Mathematics 100	Basic Mathematical Skills	3
Mathematics 100A	Logic and Reasoning in Life Situations	3
Science 100	Biological Science and Environmental Control	2
Social Studies 100	Social Institutions	2

FACULTY OF EXTENSION AND CONTINUING EDUCATION

Ozie L. Adams; B.S., M.S., Tuskegee Institute; Ph.D., Ohio State University. Professor of Animal Husbandry and Staff Member of Cooperative Extension.

Robert L. Boone; B.S., M.S., MA.Ed., Tennessee State University. Director of Institute of Public Service.

Marylouise E. Ritter Beasley; B.S., M.S., Tennessee State University. Assistant Professor of Textiles and Clothing and Faculty Member of Cooperative Extension.

Augustine S. Dartis; B.S., M.S., Tennessee State University. Assistant Professor of Foods and Nutrition and Staff Member of the Division of Extension.

Lena Pearl Farrell; B.S., M.S., Tennessee State University. Assistant Coordinator for Off-Campus nondegree programs of Extension and Continuing Education.

James E. Farrell; B.S., Tennessee A. & I. College; M.S., Indiana University; Ed.D., Oklahoma University. Professor and Dean of Extension and Continuing Education.

David C. Gandy; B.S., Morehouse College; M.S., Atlanta University. Associate Professor of Cooperative Extension.

James N. Lemons; B.S., M.S., Tennessee State University. Associate Professor of Cooperative Extension and Continuing Education.

Joseph W. Morris; B.S., Midwestern University; M.A., Memphis State University; Ed.D., University of Mississippi. Professor of Cooperative Extension.

Charles Spencer; B.S., Alcorn College; M.S., Tuskegee Institute. Assistant Professor of Cooperative Extension.

Alvin Wade; B.S., M.S., Tennessee State University. Assistant Professor, Cooperative Extension.

Richard Winston; B.S., M.S., Tennessee State University. Assistant Professor of Cooperative Extension.

COOPERATIVE STATE RESEARCH SERVICE

H. W. CARTER, Ph.D., Coordinator

Since 1967, Federal Funds administered by CSRS of the United States Department of Agriculture have been available to Tennessee State University for research related to improvement of rural and community development and physical environment, the welfare of limited resource farm families; and the food, nutrition, and health of the population.

Faculty members have the opportunity to develop research projects under this program. These research projects provide support and opportunities for graduate and undergraduate students to develop research capabilities.

THE GRADUATE SCHOOL

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.

At present, the following graduate degrees and major fields are offered:

MASTER OF ARTS

- Biology
- English
- French
- History
- Music
- Spanish
- Speech and Drama

MASTER OF ARTS IN EDUCATION

- Administration and Supervision
- Adult Education
- Agricultural Science
- Business Education
- Elementary Education
- Health and Physical Education
- Industrial Education
- Home Economics Education
- Music Education
- Secondary School Instruction
- Special Education

MASTER OF EDUCATION

- Administration and Supervision
- Adult Education
- Agricultural Science
- Business Education
- Elementary Education
- Guidance and Counseling
- Health and Physical Education
- Industrial Education
- Home Economics Education
- Music Education
- Psychology
- Secondary School Instruction
- Special Education

MASTER OF SCIENCE

- Agricultural Science
- Biology
- Chemistry
- Guidance and Counseling
- History
- Music Education
- Psychology
- Recreation
- Speech and Drama

SPECIALIST IN EDUCATION

- Administration and Supervision
- Curriculum and Instruction

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 Centennial Boulevard
Nashville, Tennessee 37203

All applications and transcripts should be mailed to the above address.

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UNIVERSITY PERSONNEL

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Helen B. Adams, B.A., M.A., Louisiana State University; Ph.D., University of Missouri, **Associate Professor of Communication.**

James A. Adams, B.S., Alcorn State University; M.S.Ed., University of Southern Mississippi, **Assistant Professor of Biology** (Ph.D., University of Pittsburgh).

Sterlin N. Adams, B.S., Morehouse College; M.S., Atlanta University, **Associate Professor of Mathematics.**

Ram N. Agarwal, B.A., Punjab University, India; M.S., Vanderbilt University. **Assistant Professor of Sociology.**

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Hezekiah L. Foreman, B.A., M.A., Tennessee State University. **Assistant Professor of Health, Physical Education and Recreation.**

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Dianne G. Franklin, B.A., Pepperdine University; J. D., Howard University. **Instructor of Business Administration.**

Arthur E. Franklin, A.B., Tougaloo College; M.S., Indiana University. **Assistant Professor of Education.**

Luther B. Franklin, B.S., Tougaloo College; M.S., Tennessee State University. **Assistant Professor of Home Economics.**

***Sandra M. Franklin,** B.A., M.A., Memphis State University. **Instructor of History.**

Loren Gaiters, B.S., Southern University; M.S., Tennessee State University. **Instructor of Criminal Justice.**

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Juanita Gaston, B.S., Alabama State University; M.A., Ph.D., Michigan State University. **Assistant Professor of Geography.**

Joe W. Gilliam, B.S., West Virginia State College; M.A., University of Kentucky. **Football Coach, Grade II and Associate Professor of Health, Physical Education and Recreation.**

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Pearl A. Gordon, B.S., M.S., Murray State University. **Clinical Coordinator for Speech Pathology and Audiology.**

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Leslie Horowitz, B.S., M.S., Virginia Commonwealth University. **Assistant Professor of Special Education.**

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Frances Hempstead, B.S., Tennessee State University, M.S.S.W.; University of Tennessee, **Instructor of Social Welfare.**

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Lewis D. Howell, B.S., M.S., University of South Mississippi. **Associate Professor of Business Administration.**

Darlene H. Huddleston, B.A., Lane College; M.A., Teachers College of Columbia University; Ed.D., University of Tennessee. **Professor of Elementary Education and Assistant Dean, School of Education.**

Earline H. Hudson, A.B., Flora Stone Mather College; B.S., M.S., Western Reserve University; Ed.S., George Peabody College. **Assistant Professor of Library Service.**

Robert J. Hudson, B.S., Tennessee State University; M.A., Ph.D., New York University. **Professor and Head of the Department of English and Dean of the School of Arts and Sciences.**

Jessie G. Hughes, B.S., M.A., Tennessee State University; M.L.S., George Peabody College. **Instructor of Library Science.**

***Patricia G. Hull,** B.S., M.S., Auburn University; Ph.D., Georgia Institute of Technology. **Associate Professor of Physics.**

Frederick S. Humphries, B.S., Florida A&M University; Ph.D., University of Pittsburgh. **Professor of Chemistry and President of University.**

Mildred S. Hurley, B.S., South Carolina A&M College; M.S., Ed.D., Indiana University. **Professor of Elementary Education.**

Baqar Husiani, B.A., M.A., Lucknow University; M.A., Ph.D., Wayne State University. **Assistant Professor of Sociology.**

Edward I. Isibor, B.Sc., Howard University; M.Sc., Massachusetts Institute of Technology; Ph.D., Purdue University. **Dean of the School of Engineering and Technology.**

Andrew Jackson, B.A., Alabama State University; M.A., Ph.D., University of California-Santa Barbara. **Assistant Professor of Sociology.**

*On Leave

Eloise Jackson, R.D.H., Temple University. **Instructor of Dental Hygiene.**

Jesse James, B.S., M.A., Tennessee State University. **Insructor of Health, Physical Education, and Recreation.**

Pauline M. James, B.S., M.S., Tennessee State University, (R.N.). **Instructor of Nursing Education.**

Geraldean Johnson, B.A., Tennessee State University; M.S., Ed.D., University of Tennessee. **Assistant Professor of Home Economics.**

*__Gloria Johnson,__ B.A., Tennessee State University; A.M., University of Illinois. **Instructor of English.**

Rother Johnson, B.S., Virginia State College; M.S., Ph.D., Michigan State University. **Professor of Biological Science.**

Bobby L. Jones, B.S., M.Ed., Tennessee State University. **Instructor of Reading.**

Franklin B. Jones, B.S., M.S., Murray State University; Ed.D., University of Mississippi. **Associate Professor of Education.**

Levi Jones, B.S., M.A., Arizona State University; Ph.D., Vanderbilt University. **Assistant Professor and Head of the Department of Sociology.**

Theodore Jones, B.A., Xavier University; M.F.A., Michigan State University. **Associate Professor of Art Education.**

Willie C. Jones, B.S., Alcorn A. & M. College; M.A., University of Southern Mississippi. **Instructor of Health, Physical Education, and Recreation.**

Geraldine Jordan, B.S., Meharry Medical College; M.S., Vanderbilt University, (R.N.). **Instructor of Nursing Education.**

John W. Joyner, B.S., M.S., Tennessee State University; Ph.D., Ohio State University. **Assistant Professor of Psychology and Director of Counseling and Testing.**

Prem S. Kahlon, B.S., Punjab University; M.S., Ph.D., Louisiana State University. **Professor of Biology.**

Ramachandra Rao Kari; B.V.Sc., Veterinary College, Madras India; M.S., Tennessee State University, Ph.D., Texas A. & M. University. **Research Assistant in the Department of Animal Science.**

Henry A. Kean, Jr., B.S., M.S., Tennessee State University. **Instructor of Biology.**

Doris M. Kennedy, B.S., M.S., Kansas State University, Ph.D., University of Tennessee. **Assistant Professor of Home Economics.**

Calvin E. King, A.B., Morehouse College; M.A., Atlanta University; Ph.D., Ohio State University. **Professor and Head of the Department of Physics and Mathematics.**

Jo Emily Knox, B.A., Benedict College; M.S.L.S., Atlanta University. **Part-time Instructor of Library Service.**

Nathaniel Knox, B.S., Benedict College; M.A.T., Duke University; Ph.D., University of South Carolina. **Assistant Professor of Mathematics.**

*On Leave

Gregory E. Komives, B.S., University of Chicago; M.A., Ph.D., Indiana University. **Assistant Professor of Biology.**

Eva B. Landers, B.S., North Carolina A&T College; M.S., Temple University. **Instructor of Biology.**

Lauree G. Lane, B.A., Fisk University; M.S., Indiana University. **Assistant Professor of Biology.**

***Sharon Langford,** B.S., Tennessee Technological University; M.B.A., Memphis State University. **Instructor of Business Administration.**

James R. Larkins, B.S., M.S., Tennessee State University. **Instructor of Architectural Engineering.**

Nancy R. Ledet, A.B., M.S., Tennessee State University. **Instructor of Mathematics.**

Sheila Lee, B.A., National Taiwan University; M.L.S., George Peabody College. **Instructor in Library Science.**

Audrey E. Lewis, B.S., M.S., University of Illinois; Ed.D., George Peabody College. **Professor of Health, Physical Education and Recreation.**

Edward C. Lewis, B.Mus., West Virginia State College; Diploma, The Army of Music School; M.S., University of Illinois; Ph.D., University of Wisconsin. **Professor and Head of the Department of Music.**

Gloria M. Lewis, B.S., M.S., Tennessee State University. **Assistant Professor of Psychology.**

Mary A. Love, B.S., M.S., Tennessee State University. **Assistant Professor of Mathematics.**

Bobby L. Lovett, B.A., Arkansas A.M.&N. College; M.A., University of Arkansas. **Instructor of History.**

Millicent Lownes, B.A., Fisk University; M.B.M., Vanderbilt University. **Instructor of Business Administration.**

Lloyd L. Lusk, A.B., Jarvis Christian College; M.S., Indiana University. **Associate Professor of Music.**

Neal McAlpin, B.S., Tennessee State University; M.S., University of Wisconsin; Ph.D., Rutgers, The State University (NJ). **Professor of Plant Science.**

Elizabeth McClain, B.S., M.S., Tennessee State University. **Instructor of History.**

Susan S. McCrumbly, B.S., Tennessee State University; M.L.S., George Peabody College. **Instructor of Library Service.**

Charlene H. McDonald, B.M., University of Tennessee; M.M., Indiana University. **Instructor of Music.**

Lois C. McDougald, B.A., Livingston College; M.A., Indiana University. **Associate Professor of History.**

Ruth A. McDowell, B.S., Princess Ann College; M.Ed., Pennsylvania State College. **Associate Professor of Home Economics and Director of the Nursery School.**

Phillip McGuire, B.S., Bishop College; M.A., Southern Methodist University; Ph.D., Howard University. **Assistant Professor of History.**

*On Leave

Cathryn M. MCKinney, B.S., M.S., Tennessee State University. **Assistant Professor of Clothing and Textiles.**

Frederick J. D. McKinney, B.A., M.A., Ball State Teachers College; Ed.D., Indiana University. **Professor of Psychology.**

Leonard Estes Joseph Maginn, B.S., M.S., Ph.D., Vanderbilt University. **Assistant Professor of Electrical Engineering.**

Mohan J. Malkani, B.S., M.S., University of Baroda, (India); M.S., Mississippi State University. **Professor and Head of the Department of Electrical Engineering.**

Rama J. Mani, B.Sc., Ph.D., University of Bombay. (Post-doctoral Study; Stanford University, Vanderbilt University, University of Southern California.) **Associate Professor of Chemistry.**

Richard Manson, B.A., Fisk University; J.D., Vanderbilt University. **Assistant Professor of Criminal Justice.**

Richard E. Matheny, A.B., Western Kentucky University, M.S., Ph.D., Vanderbilt University. **Assistant Professor of Government and Public Affairs and Public Administration.**

Annie B. Martin, A.B., Kentucky State College, M.S.S.W., University of Tennessee. **Assistant Professor and Head of the Department of Social Welfare.**

Edward A. Martin, B.S., North Carolina Agricultural and Technical College; M.E.D., Temple University. **Associate Professor of Health, Physical Education and Recreation and Basketball Coach, Grade 1.**

Jacqueline Martin, B.S., Stillman College; M.N.S., University of Oklahoma, Ph.D., University of Tennessee. **Assistant Professor of Biology.**

Ruby W. Martin, B.A., Bennett College; M.S., South Carolina State College; Ed.D., Syracuse University. **Professor of Reading.**

Edna C. Masuoka, A.B., M.A., Scarritt College; Ph.D., University of North Carolina. **Professor of Sociology.**

Delores W. Mathis, B.S., Florida A. & M. University; M.A., Ed.S., University of Michigan, M.A., Ohio State University; Ph.D., University of Michigan. **Assistant Professor of Special Education.**

Donald N. Menchise, B.A., M.A., Fairfield University; M.A., Central Connecticut State College; Ph.D., University of Connecticut. **Assistant Professor of English.**

John A. Merritt, B.A., Kentucky State College; M.A., University of Kentucky. **Head Football Coach, Grade 1 and Associate Professor of Health, Physical Education and Recreation.**

Maxine O. Merritt, B.S., Jackson State College; M.S., Tennessee State University. **Instructor of Health, Physical Education and Recreation.**

Sharon E. Meyer, R.D.H., State University of New York, B.S., State University of New York; M.P.H., University of Michigan. **Assistant Director, Division of Dental Hygiene.**

Richard A. Miller, B.S., North Carolina College; M.S., Tennessee State University. **Basketball Coach, Grade III and Associate Professor of Health, Physical Education and Recreation.**

Tyree J. Miller, B.S., Howard University; M.S., Kansas City University; Ed.D., Ball State University. **Associate Professor of English.**

Harold Mitchell, B.A., South Carolina State College; M.S., University of Denver; Ph.D., Ohio State University. **Assistant Professor and Director of Speech Pathology and Audiology.**

Jacqueline W. Mitchell, B.A., Howard University; M.S., Ph.D., Ohio State University. **Assistant Professor of Speech Pathology and Audiology.**

E. Preston Mitchell, B.S., North Carolina State College; M.A., Ph.D., State University of Iowa. **Professor and Head of the Department of Health, Physical Education and Recreation.**

Alonzo Moody, B.S., Jackson State College; M.A., Ball State University. **Instructor of English.**

Richard D. Morgan, B.A., David Lipscomb College; M.A., Middle Tennessee State University; Ph.D., George Peabody College. **Associate Professor and Head of the Department of Criminal Justice.**

Eva J. Morris, R.D.H., Meharry Medical College, B.S., and M.S., Tennessee State University. **Assistant Professor of Dental Hygiene.**

Marcella Mosely, B.S., Peabody College; M.S., Vanderbilt University. **Clinical Supervisor and Special Projects Coordinator.**

Lloyd E. Mulraine, B.A., M.A., Andrews University; D.A., Middle Tennessee State University. **Assistant Professor of English.**

Win Myint, B.EE., M.S., Rensellaer Polytechnic Institute. **Professor of Mathematics.**

Prem N. Narula, B.S., Punjab University; M.S., Ph.D., Oregon State University. **Professor of Biology.**

Maurice A. Ngou, B.A., Vanderbilt University; M.S., Fletcher School of Law And Diplomacy Harvard-Tufts; M.A.L.D. Harvard-Tufts; Ph.D., Harvard-Tufts. **Assistant Professor of Political Science.**

Roger P. Nimmo, B.A., Illinois Wesleyan University; L.L.B., Vanderbilt University. **Assistant Professor of Business Administration and Criminal Justice.**

Ikechukwu C. Nwobodo, B.S., West Virginia University; M.S., Ph.D., Iowa State University. **Assistant Professor of Business Administration.**

Roland Norman, B.S., M.S., Ph.D., Cornell University. **Professor and Head of the Department of Animal Science.**

Virginia S. Nyabongo, B.A., Bennett College; M.A., Ph.D., University of Wisconsin; Certificat d' Etudes Francaises, Diploma d' Etudes Superieures de Phonetique, University of Grenoble, France. **Professor of French.**

Edna F. Overall, B.S., M.S., Tennessee State University. **Instructor of Health, Physical Education and Recreation.**

Daniel E. Owens, B.M., West Virginia State College; M.F.A., Carnegie Institute of Technology; Ed.S., George Peabody College. **Assistant Professor of Music.**

Esen E. Ozgener, B.A., American College; M.S., Bank Street College; Ed.D., George Peabody College. **Professor of Home Economics.**

Eddie C. Paramore, B.S., Morehouse College; M.S., Atlanta University, Ed.D., Rutgers University. **Assistant Professor of Mathematics.**

Martha Parker, B.A., Butler University; M.L.S., Ball State University. **Instructor of Library Service.**

***Jyotsna Paruchuri,** B.A., Queen Mary's College; M.A., University of Madras. **Instructor of History and Political Science.**

Madhusudhana R. Paruchuri, B.A., Bsmania University; M.A., Wyoming University. **Assistant Professor of Economics.**

Donzaleigh Patterson; B.S., M.S., Tennessee State University; Ed.D., Indiana University. **Professor and Head of the Department of Business Education.**

***Gretchen B. Payne,** A.B., University of Denver; M.A., University of Colorado; Ed.S., George Peabody College. **Assistant Professor of Education.**

Tee B. Peacock, B.S., M.S., Tennessee State University. **Instructor of Elementary Education.**

Patricia Pearson, B.S., M.S., Tennessee State University. **Instructor of History.**

Harriett A. Peterson, A.B., Fisk University; M.S., Tennessee State University. **Assistant Professor of History.**

Harold L. Phelps, B.S., M.S., Tennessee State University. **Associate Professor of Psychology.**

Kenneth Phillips, B.S., M.S., University of Tennessee. **Instructor of Business Administration.**

Paul D. Phillips, B.A., David Lipscomb College; M.A., George Peabody College; Ph.D., Vanderbilt University. **Assistant Professor of History.**

Gilbert K. Pleasant, B.S., West Virginia State College; M.Ed., University of Cincinnati. **Associate Professor of Industrial Education and Director of the Printing Plant.**

Kathleen H. Poag, B.S., Ohio State University; M.S., Tennessee State University. **Associate Professor of Sociology.**

Ruth M. Powell, A.B., Johnson C. Smith University; M.S., Tennessee State University. **Assistant Professor of Education.**

Audrey M. Prather, B.S., North Carolina College; M.S., Tuskegee Institute. **Assistant Professor of Chemistry.**

***H. Leon Prather,** A.B., South Carolina State College; M.A., Ph.D., New York University. **Professor of History.**

Jo Helen Railsback, B.A., Baylor University; M.A., University of Arkansas; Ph.D., University of Tennessee. **Associate Professor of English.**

Antionette C. Rawls, B.S.N., University of Tennessee Nursing School, (R.N.). **Instructor of Nursing Education.**

Monetha Reaves, B.A., Tennessee State University; M.A., George Peabody College for Teachers. **Instructor of English.**

Lillie B. Redmond, B.S., M.S., Tennessee State University; M.S., Pennsylvania University. **Assistant Professor of Home Economics.**

Clayton C. Reeve, B.A., Beloit College; M.A., University of Chicago; Ph.D., University of Illinois. **Associate Professor of English.**

*On Leave

James Reeves, B.S., North Carolina A&T; M.A., Boston University; Ed.D., University of California-L.A. **Professor of Education and Dean of the Graduate School.**

Elizabeth C. Reed, B.S., Fayetteville State Teachers College; M.A., Teachers, College, Columbia University; Ed.S., Ph.D., George Peabody College. **Associate Professor of Education and Director of CBTE.**

Charolette Ann Rhodes, B.S., Tennessee State University; M.M., University of Cincinnati. **Instructor of Music.**

Ernest C. Rhodes, B.S., Tennessee State University; M.A., Fisk University. **Instructor of Sociology.**

William Eugene Richison, B.S., Austin Peay State University. **Instructor of Technical Aeronautics.**

Gregory D. Ridley, Jr., B.S., Tennessee State University; M.A., University of Louisville. **Assistant Professor of Art.**

Dean Roberts, B.S., M.S., Northwest Missouri State University; Ed.D., Kansas University. **Assistant Professor of Education.**

Marion T. Roberts, A.B., Philander Smith College; M.A., L.S., George Peabody College. **Assistant Professor of Library Service.**

Camille D. Robinson, B.S., M.S., Tennessee State University. **Assistant Professor of Business Education.**

Juda E. Rozenberg, B.S., M.S., The University of the City of New York; Ph.D., University of Notre Dame. **Associate Professor of Civil Engineering.**

Nora L. Roy, A.B., Ohio State University; M.A., Tennessee State University. **Assistant Professor of Sociology.**

Wilma E. H. Rucker, B.S., M.S., Tennessee State University. **Instructor of Business Education.**

Andrew J. Ryal, B.S., M.S., Tennessee State University; Ed.D., State University of New York at Buffalo. **Assistant Professor of Industrial Education and Assistant Dean, School of Engineering and Technology.**

Cecil M. Ryan, B.S., Langston University; C.F.I. United States Department of Commerce; M.S., Tennessee State University. **Assistant Professor of Technical Aeronautics.**

Helen J. Saffold, B.S., Alabama A&M University; M.Ed., Tennessee State University. **Instructor of Home Economics.**

Charles L. Sampson, B.A., Tennessee State University; M.A., University of Nevada; Ph.D., University of Pittsburgh. **Assistant Professor and Head of the Department of Political Science.**

Dorothy I. J. Samuel, B.S., Virginia Union University; M.A., Atlanta University. **Associate Professor of English.**

Vadali Sastry, B.S., Andra University; M.S., Tuskegee Institute; Ph.D., Vanderbilt University. **Associate Professor of Mechanical Engineering.**

Donald S. Savoy, B.S., M.S., Ohio State University. **Professor of Physics.**

Fred M. Sawyer, B.S., University of Louisville; M.A., Ball State University; P.E.D., Indiana University. **Assistant Professor of Recreation.**

Sandra H. Scheick, A.B., Vassar College; M.A., Ph.D., Syracuse University. **Assistant Professor of Mathematics.**

Gilbert W. Senter, B.S., M.S., Tennessee State University. **Associate Professor of Chemistry.**

Samuel H. Shannon, B.A., Vanderbilt University; M.A., Ph.D., George Peabody College. **Assistant Professor of History.**

Christine P. Sharpe, A.A., Independence Jr. College; B.S., Meharry Medical College; M.S., George Peabody College; (RN). **Instructor of Nursing Education.**

Arthur E. Simmons, B.S., Tennessee State University; M.S., Indiana University. **Associate Professor of Health, Physical Education and Recreation.**

Gwendolyn Simmons, B.S., Alabama State College; M.S., University of Pennsylvania. **Instructor of Education.**

Muriel H. Simmons, B.S., Tennessee State University; Ed.S., George Peabody College. **Assistant Professor of Education.**

Douglas Simpson, B.A., Free Will Baptist College; M.A., Ph.D., Bob Jones University; M.Ed., Middle Tennessee State University; Ph.D., University of Oklahoma. **Associate Professor of Psychology.**

Judy Simpson, B.S., Bob Jones University; M.A.T., Middle Tennessee State University. **Instructor of English.**

Lula G. Simpson, B.S., Alabama State College; M.A., Teachers College of Columbia University. **Instructor of Music.**

Ralph R. Simpson, B.S., Alabama State College; M.A., Columbia University; Ph.D., Michigan State University. **Professor of Music.**

Surendra P. Singh, B.S., M.S., Agra University; Ph.D., Pennsylvania State University. **Research Assistant of Rural Development.**

Alice Smith, A.B., Tougaloo College; M.S., Tennessee State University. **Instructor of Biology.**

Frederick D. Smith, B.S., Prairie View State College; M.S., D.V.M., Michigan State University. **Professor of Biology.**

Mary Elizabeth Smith, B.S.N., Meharry Medical College; M.Ed., Tuskegee Institute; M.A., Case Western. **Instructor of Nursing Education.**

William O. Smith, B.S., M.A., New York University; Ph.D., State University of Iowa. **Professor of Music.**

Asalean Springfield, A.B., Eastern Michigan University; M.A., Tennessee State University; Ph.D., American University. **Assistant Professor of English.**

Alonzo T. Stephens, A.B., Florida A&M University; M.Litt., Ph.D., University of Pittsburgh. **Professor and Head of the Department of History and Geography.**

Dorothy A. Stephens, A.B., B.S.L.S., North Carolina College; M.A., New York University. **Assistant Professor of Sociology.**

*Dorothy Stewart, B.S., Tennessee State University; Ph.D., University of Connecticut. **Assistant Professor of Psychology.**

James Stewart, B.A., M.A., Howard University; Ph.D., Ohio State University. **Coordinator of Research.**

Carole F. Stice, B.S., M.S., Murray State University; Ph.D., Florida State University. **Assistant Professor of Education.**

J. Weldon Stice, B.S., M.S., Murray State University; Ph.D., Florida State University. **Assistant Professor of Communication.**

Carol E. Stone, B.A., Fisk University; M.M., Indiana University. **Associate Professor of Music.**

Martha L. W. Stratton, B.S., Tennessee State University; M.A.T., University of Chicago. **Instructor of Biology.**

Helen N. Teague, B.S., Kentucky State College; M.S., Ph.D., Indiana University. **Professor of Secondary Education.**

Gul M. Telwar, B.S., University of Kabul; B.S., M.S., University of Wyoming; Ed.D., Oklahoma State University. **Professor and Head of the Department of Rural Development.**

Edward S. Temple, B.S., M.S., Tennessee State University. **Head Track Coach, Grade I and Associate Professor of Sociology.**

Joe C. Tenpenny, Jr., B.S., Middle Tennessee State University; M.B.A., Michigan State University. **Instructor of Business Administration.**

Chris L. Terrill, B.S., Case Institute of Technology; Ph.D., Case Western Reserve University. **Associate Professor of Mathematics.**

Michelle B. Thomas, B.A., College of St. Mary of the Springs; M.E., Ph.D., University of Mississippi. **Assistant Professor of Psychology.**

William Thomas, B.S., M.A., Tennessee State University. **Instructor of Health, Physical Education and Recreation.**

William S. Thompson, M.B.A., California State College, San Bernadino, Captain, USAF. **Assistant Professor of Aerospace Studies.**

James H. Threalkill, B.S., M.S., Tennessee State University; Ed.D., Ball State University. **Associate Professor of Psychology and Staff Member, Counseling Center.**

Ruby M. Torrey, B.S., M.S., Tennessee State University; Ph.D., Syracuse University. **Professor of Chemistry.**

Miriam G. Towns, B.S., Farmingham State Teachers College; M.S., Cornell University. **Associate Professor of Home Economics.**

Eugenia Turner, B.S., Tennessee State University; M.S.S.W., University of Tennessee. **Instructor of Social Welfare.**

Alfred C. Tyler, A.B., Morehouse College; M.A., Columbia University. **Associate Professor of Biology.**

Joseph H. Udelson, A.B., Bradley University; M.A., University of Michigan, Ph.D., Vanderbilt University. **Associate Professor of History.**

*On Leave

Eileen Marie Urbanek, A.A.N., Indiana University Northwest Campus (RN) B.S.N., Indiana University-Purdue, University at Indianapolis. **Instructor of Nursing Education.**

Elaine Van Everen, B.S., Vanderbilt University; B.S., Florence State College; M.S., George Peabody College: (R.N.). **Instructor of Nursing Education.**

Walter Vincent, B.S., Tennessee State University; M.A.E., Howard University. **Assistant Professor and Head of the Department of Architectural Engineering and Director of Planning.**

LaVerne Walker, B.A., Tennessee State University; M.S.L., George Peabody College. **Instructor of Library Service.**

Anton J. Wanio, B.S., Florida Atlantic University; M.A., University of Missouri. Capt., **Assistant Professor of Aerospace Studies.**

Clifford Watkins, B.A., Clark College; M.Ed., Ph.D., Southern Illinois University. **Associate Professor of Music and Director of Marching Band.**

Louise R. Watkins, B.S., M.S., Memphis State University. **Instructor of English.**

Mary B. S. Watkins, B.S., M.S., Tennessee State University. **Instructor of Health, Physical Education and Recreation.**

Carole M. Watson, B.S., Western Michigan University; M.S.W., Wayne State University. **Instructor of Social Welfare.**

Sherman Webster, B.A., South Carolina State College; M.A., New York University; Ed.D., Indiana University. **Professor of Sociology.**

Charles E. Weis, B.S., David Lipscomb; J.D., Vanderbilt School of Law; M.B.A., University of Pittsburgh; D.B.A., Arizona State University. **Assistant Professor and Head of the Department of Business Administration.**

***Alexander C. Wells,** B.S., M.S., Tennessee State University. **Assistant Professor of Biology.**

Vesta R. Wheaton, B.S., M.S., Tennessee State University. **Assistant Professor of English.**

Katie K. White, B.S., M.S., Tennessee State University. **Assistant Professor of Biology.**

Charles A. Williams, A.B., Miles College; M.A., University of Illinois. **Associate Professor of Mathematics.**

Harry E. Williams, A.B., Princeton University; M.A., Ph.D., University of California. **Assistant Professor of Political Science.**

James E. Williams, B.S., M.A., Ohio State University; Ph.D., University of Colorado; M.A., University of Wisconsin. **Associate Professor of Modern Foreign Languages.**

Jamye C. Williams, B.A., Wilberforce University; M.A., Fisk University; Ph.D., Ohio State University. **Professor of English.**

Jeanetta Williams, B.S., Tennessee State University; M.A., University of Michigan. **Instructor of Mathematics.**

McDonald Williams, A.B., Litt. M., University of Pittsburgh; Ph.D., Ohio State University. **Professor of English.**

*On Leave

Peggy M. Williams, B.S., Tennessee State University; M.A., New York University. **Assistant Professor of Health, Physical Education and Recreation.**

Everette L. Witherspoon, B.S., M.S., North Carolina A&T College; Ed.D., State University of New York at Buffalo. **Associate Professor and Dean of the School of Education.**

Henderson K. Wood, B.A., Ohio Wesleyan University; M.A., Fisk University; Ph.D., Indiana University. **Professor of Biology.**

Viola M. Wood, B.A., Fisk University; M.A., M.F.A., Northern Illinois University. **Instructor of Art.**

Rudolph Woodberry, B.S., M.S., Tennessee State University. **Instructor of Chemistry.**

Larry Woods, A.B., Emory University; J.D., Northwestern University. **Assistant Professor of Criminal Justice.**

Samuel L. Word, B.S., M.Ed., Tennessee State University. **Assistant Professor of Industrial Education.**

Helen D. Wright, B.S., Alabama A & M; M.B.A., University of Tennessee, Knoxville; Major, USAF. **Assistant Professor of Aerospace Studies.**

EXTENSION AND CONTINUING EDUCATION

Ozie L. Adams, B.S., M.S., Tuskegee Institute; Ph.D., Ohio State University. **Professor of Animal Husbandry and Staff Member of Cooperative Extension.**

Robert L. Boone, B.S., M.S., M.A.Ed., Tennessee State University. **Director of Institute of Public Service.**

Marylouise E. Ritter Beasley, B.S., M.S., Tennessee State University. **Assistant Professor of Textiles and Clothing and Faculty Member of Cooperative Extension.**

Augustine S. Dartis, B.S., M.S., Tennessee State University. **Assistant Professor of Foods and Nutrition and Staff Member of the Division of Extension.**

Lena Pearl Farrell, B.S., M.S., Tennessee State University. **Assistant Coordinator for Off-Campus nondegree programs of Extension and Continuing Education.**

James E. Farrell, B.S., Tennessee A. & I. College; M.S., Indiana University; Ed.D., Oklahoma University. **Professor and Dean of Extension and Continuing Education.**

David C. Gandy, B.S., Morehouse College; M.S., Atlanta University. **Associate Professor of Cooperative Extension.**

James N. Lemons, B.S., M.S., Tennessee State University. **Associate Professor of Cooperative Education and Continuing Education.**

Joseph W. Morris, B.S., Midwestern University; M.A., Memphis State University; Ed.D., University of Mississippi. **Professor of Cooperative Extension.**

Charles Spencer, B.S., Alcorn College; M.S., Tuskegee Institute. **Assistant Professor of Cooperative Extension.**

Alvin Wade, B.S., M.S., Tennessee State University. **Assistant Professor, Cooperative Extension.**

Richard Winston, B.S., M.S., Tennessee State University. **Assistant Professor of Cooperative Extension.**

UNIVERSITY CALENDAR

ACADEMIC CALENDAR
August, 1976-August 1977

Last Date to Receive Applications and Transcripts for Fall Semester	August 30 (Monday)
Residence Halls Opened for Freshmen and New Students	August 22 (Sunday)
Faculty Reports at 8:00 a.m.	August 23-25 (Mon., Tues., Wed.) FACULTY PLANNING INSTITUTE
Registration for Freshmen and New Students	August 26, 27 (Thursday, Friday)
Residence Halls Opened for Upperclassmen and Graduate Students	August 27 (Friday)
Registration for Upperclassmen and Graduate Students	August 28, 30, 31 (Saturday, Monday, Tuesday)
Classes Begin at 8:00 a.m.	September 1 (Wednesday)
Applications for Graduation due for students completing degree requirements during Fall Semester	October 15 (Friday)
Mid-Semester Examinations	October 21-22 (Thursday, Friday)
Pre-Registration for Spring Semester	November 2-5 (Tuesday-Friday)
Thanksgiving Holidays	November 25-26 (Thursday, Friday)
Last Day to Receive Applications and Transcripts for Spring Semester	January 4, 1977 (Tuesday)
Final Examinations for Fall Semester	December 14-17 (Tuesday-Friday)
Christmas Recess	December 20-January 2
Faculty Reports at 8:00 a.m.	January 3, 4 (Monday, Tuesday) FACULTY INSTITUTE
Registration for Spring Semester	January 5-7 (Wednesday-Friday)
Classes Begin at 8:00 a.m.	January 10 (Monday)
Applications for Graduation due for students completing degree requirements during Spring Semester	February 11 (Friday)
Mid-Semester Examinations	March 3, 4 (Thursday, Friday)
Spring Recess	March 7-11 (Monday-Friday)
Pre-Registration for Fall Semester	March 15-18 (Tuesday-Friday)
Final Examinations for Graduating Seniors	April 21, 22 (Thursday, Friday)
Grades Due for Graduating Seniors	April 25 (Monday)
Final Examinations for Spring Semester	May 3-6 (Tuesday-Friday)
Commencement Exercises	May 7 (Saturday)
FACULTY INSTITUTE	May 9-13 (Monday-Friday)

SUMMER SCHEDULES
1977

I

Registration	June 6
Classes Begin	June 7
Final Examination	July 8

Registration	July 11
Classes Begin	July 12
Final Examinations	August 12
Commencement Exercises	August 13

ACADEMIC CALENDAR
1977-1978

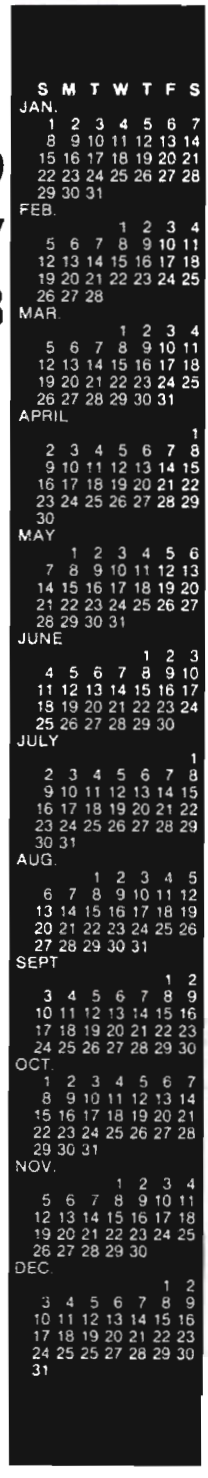
Last date to receive applications and transcripts for Fall Semester	August 29 (Monday)
Residence Halls Opened for Freshmen and New Students	August 21 (Sunday)
Faculty Reports at 8:00 a.m.	August 22, 23, 24 Faculty Institute
Registration for Freshmen and New Students	August 25 & 26
Residence Halls opened for Upperclassmen and Graduate Students	August 26
Registration for Graduate Students	August 27
Registration for Upperclassmen	August 29-September 3
Classes Begin at 8:00 a.m.	August 31
Applications for Graduation Due for Students Completing Degree Requirements During Fall Semester	October 14
Mid-Semester Examinations	October 20, 21
Pre-Registration for Spring Semester	November 1-4
Last Day to Receive Applications and Transcripts for Spring Semester	January 3
Study Day	December 12
Final Examinations for Fall Semester	December 13
Christmas Recess	December 19 - January 3
Faculty Reports at 8:00 a.m.	January 3 Faculty Planning Session
Regisration for Spring Semester	January 4, 5, 6
Classes Begin at 8:00 a.m.	January 9
Application for Graduation Due for Students Completing Degree Requirements During Spring Semester	February 10
Mid-Semester Examinations	March 2 & 3
Spring Recess	March 6-10
Pre-Registration for Fall Semester	March 14-17
Final Examinations for Graduating Seniors	April 20-21
Grades Due for Graduating Seniors	April 24
Study Day	May 1
Final Examinations for Spring Semester	May 2-5
Commencement Exercises	May 6
Faculty Institute	May 8-12

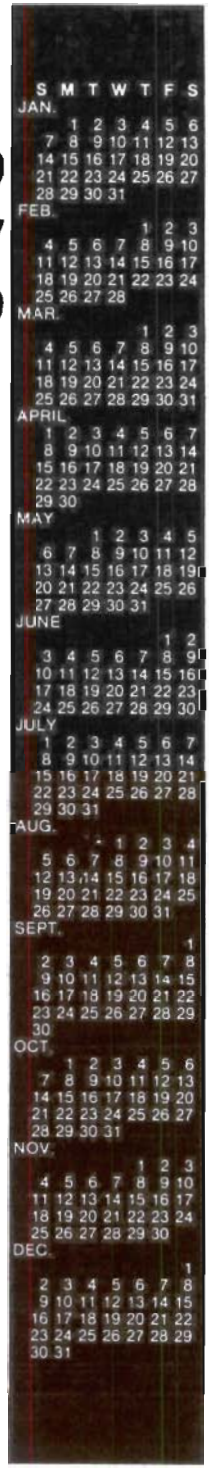
SUMMER 1978

First Five Week Session	
Registration	June 12
Classes Begin	June 13
Final Examinations	July 14
Second Five Week Session	
Registration	July 17
Classes Begin	July 18
Final Examinations	August 18
Ten Week Session	
Registration	June 12
Mid-Term Examinations	July 14
Final Examinations	August 18


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