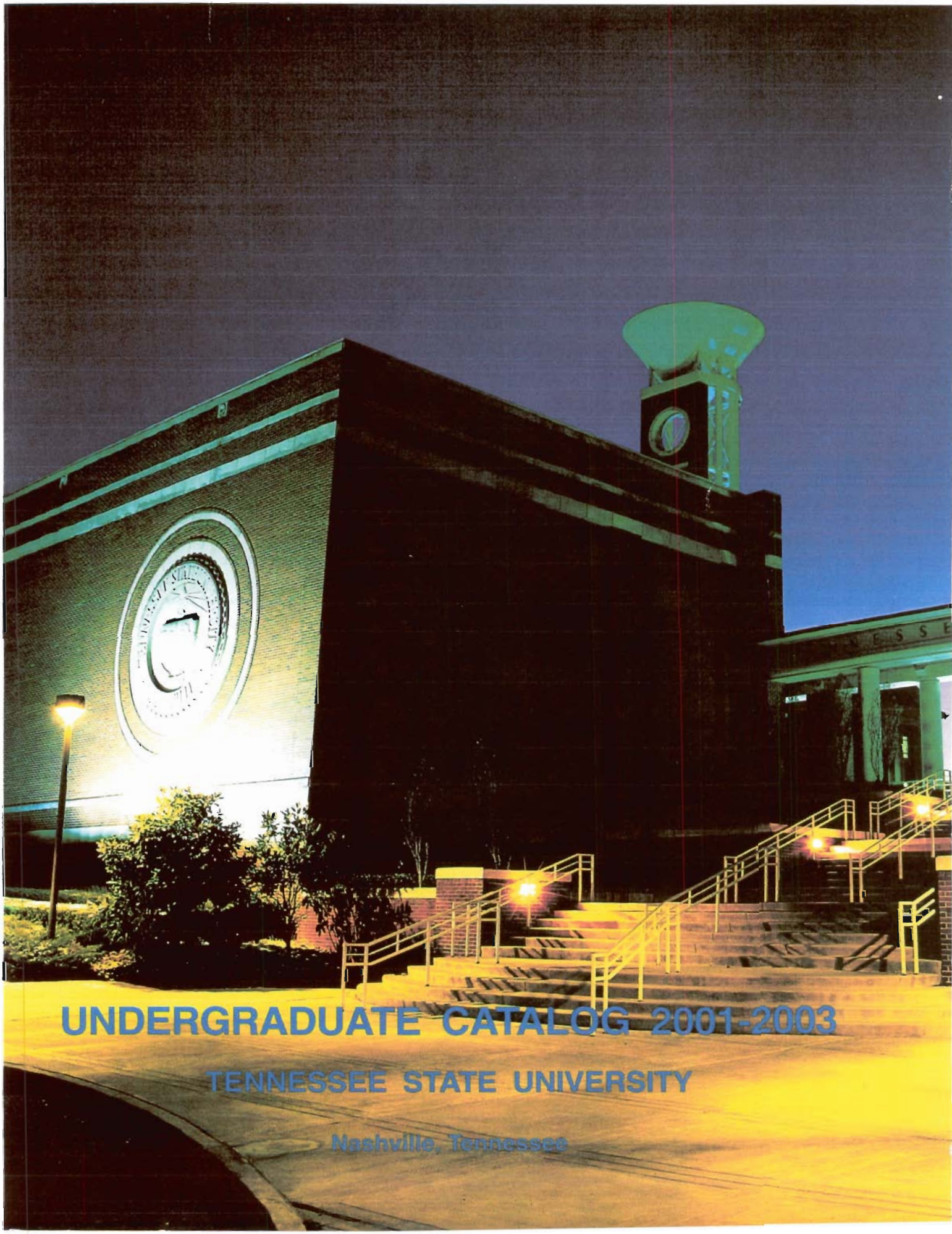
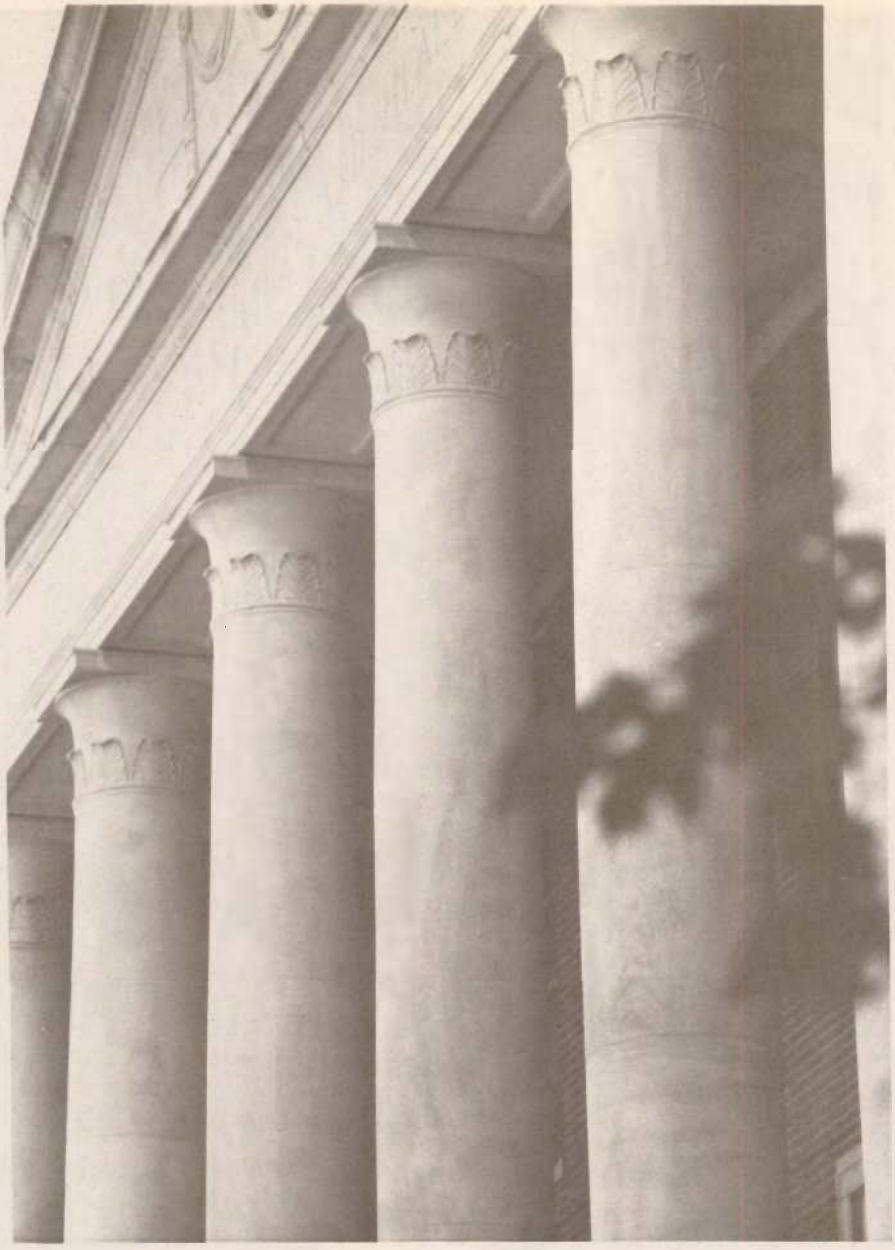


UNDERGRADUATE CATALOG 2001-2003

TENNESSEE STATE UNIVERSITY

Nashville, Tennessee



Undergraduate Catalog 2001-2003
Tennessee State University

A Tennessee Board of Regents Institution

VOL. LXIII-2001-2003

Scope of Catalog

The provisions of this catalog do not constitute a contract between the University and a student who commences any program of study insofar as it relates to the degree requirements for that program during the effective period of this catalog. Degree requirements are subject to change during such period only to the extent required by federal or state laws or accreditation standards. The specific courses or activities constituting the degree requirements for any program are subject to substitution at any time prior to completion by the student.

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

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

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

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

Purpose of Catalog

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

Students should thoroughly familiarize themselves with the General Information section of the catalog. This section answers questions concerning location of buildings and other facilities on campus, requirements for admission and graduation, financial aid information, student services and housing.

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

The TSU UNDERGRADUATE CATALOG is published biennially by Tennessee State University, 3500 John A. Merritt Blvd., Nashville, Tennessee 37209-1561.

Application to mail at Second-Class Postage Rates are pending at Nashville, Tennessee.

POSTMASTER—Send address changes to:
Tennessee State University
3500 John A. Merritt Blvd.
Nashville, Tennessee 37209-1561.

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

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

University Policy on Equal Opportunity, Affirmative Action, and Compliance with Title IX

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

Office of Equal Employment Opportunity/Affirmative Action
Tennessee State University
Nashville, Tennessee 37209-1561

Tennessee State University is committed to educating a non-racially identifiable student body.

James A. Hefner
President

Dear Tennessee State University student:

With great pleasure I welcome you to Tennessee State University.

Many paths lead prospective students to TSU. Perhaps you have family members who graduated from Tennessee State University and have always known its reputation. The university has a proud history and is rich in cultural diversity as well. Today, TSU has students from 43 states in the U.S. and 54 countries around the world.

Perhaps you are interested in becoming an educator, a medical practitioner, an engineer, or some other professional and have heard of TSU's excellent programs. TSU's nursing students consistently outrank all other students on Tennessee state boards and are quickly acquired by medical facilities in the region. Our engineering students also enjoy immediate career opportunities and acclaim. Since 1987, when U.S. Black Engineer magazine instituted its awards program, nine TSU graduates have been honored as Black Engineer of the Year. And TSU's College of Business is accredited at both the undergraduate and graduate levels by the AACSB- the International Association for Management Education.

For those of you who may not be familiar with Tennessee State University, let me be the first to tell of TSU's Olympic tradition...of the legendary Wilma Rudolph and Ralph Boston and their TSU track teammates, who collectively earned 29 Olympic medals-which is more than some countries have won. Other notable graduates have been engineer Jesse Russell, a pioneer in the development of cellular telephone technology; Curtis Collier, a U.S. Federal Judge; Ralph Cook, Alabama Supreme Court Justice; Zerona Clayton, retired Corporate Vice President for Turner Broadcasting/CNN; Harvey Johnson, Mayor of Jackson, Mississippi; S. Allen Counter, noted explorer and Harvard University neurophysiologist; Lloyd "Fig" Newton, retired Four-star General in the U.S. Air Force; Freddie Jefferies, retired Admiral in the U.S. Navy; Levi Watkins, cardiac surgeon at Johns Hopkins University who invented the automatic defibrillator for the heart; Carl Rowan, noted author and columnist; Wilmer Cooksey, general manager of the only Corvette plant in the United States; Bobby Jones, world-renowned gospel singer; and of course, entertainment entrepreneur Oprah Winfrey.

Whatever the path that has led you to Tennessee State University, I hope you will enjoy reading the following pages. They will tell you more about the university and its ongoing achievements, as well as outline the requirements for all our undergraduate programs.

Sincerely,

James A. Hefner
President

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Mailing Addresses

Main Campus
Tennessee State University
3500 John A. Merritt Boulevard
Nashville, Tennessee 37209-1561

Avon Williams (Downtown) Campus
Tennessee State University
10th and Charlotte Avenues
Nashville, Tennessee 37203-3401

GENERAL INFORMATION

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Historical Statement

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

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

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

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

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

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

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

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

A School of Allied Health Professions and a School of Business were created in 1974. Also, the School of Nursing was established in 1979.

Currently, the University consists of four colleges: The College of Arts and Sciences, The College of Business, The College of Education, The College of Engineering and Technology; and three schools: The School of Agriculture and Consumer Sciences, The School of Allied Health Professions, The School of Nursing, and The School of Graduate Studies.

On July 1, 1979, the former University of Tennessee at Nashville was merged with Tennessee State University as a result of a court order.

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

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

It was the erection of the above mentioned building which gave rise to a decade-long litigation to "dismantle the dual system" of higher education in Tennessee. The litigation culminating with the merger of both institutions resulted in an expanded mission of the present-day Tennessee State University as a Tennessee Board of Regents Institution.

Statement of Mission

Tennessee State University, an 1890 land grant institution, is a major state-supported, urban and comprehensive university. This unique combination of characteristics differentiates the University from others and shapes its instructional, research, and service programs designed to serve Metropolitan Nashville, Middle Tennessee, the State of Tennessee, the nation, and the global community. The University is committed to maintaining its diverse student body, faculty, and staff.

Tennessee State University provides quality instruction through academic programs which are broadly comprehensive at the baccalaureate and masters levels. Doctoral programs are offered in select areas where the University exhibits strength in instruction and research and consistent with the University's unique mission. The University's educational programs are intended to increase the student's level of knowledge, enhance the student's skills, and expand the student's awareness.

Tennessee State University is committed to engaging in pure and applied research which contributes to the boy of knowledge and which broadens the application of knowledge. Whenever possibly, the University strives to provide its students with the opportunity to be involved in the research activities of the faculty and academic staff.

Tennessee State University serves its constituents through an array of programs and services which apply the knowledge, skills and discoveries of the instructional and research units at the institution. These services are intended to broaden the perspectives and enhance the quality of life of the University's service constituents.

Tennessee State University expresses its commitment to students' overall development by promoting life-long learning, scholarly inquiry, and a commitment of service to others. Programs and services are geared toward promoting and nurturing students' growth and development as persons who are liberally educated, appreciate cultural diversity, and embody a sense of civic and social responsibility.

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

Tennessee State University remains committed to the education of a non-racially identifiable student body and promotes diversity and access without regard to race, gender, religion, national origin, age, disability, or veteran status.

Glossary

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

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

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

College: Part of the University offering a wide selection or a specialized group of courses leading to a variety of degrees. A large body of faculty having a common purpose or common duties in instruction, research, scholarship, and public service that grants bachelor's and graduate degrees. TSU has four units so designated-Arts and Sciences, Business, Education, and Engineering and Technology.

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

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

Dean: The administrative head of a school, college, or academic related or student related unit within the University. Academic related deans report to the Vice President for Academic Affairs, and student related deans report to the Vice President for Student Affairs.

Department Heads: Persons in charge of providing administrative and academic leadership for a department within the University (i.e. the Head of the Art Department).

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

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

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

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

Major: The academic area in which one specializes.

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

Minor: 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 fewer than 12 credit hours a semester.

Prerequisite: A course that must be completed before another 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 catalog.

School: A particular division of the University. The school is organized according to faculty who provide instruction and grant degrees in the same or related disciplines. TSU has a Graduate School and three undergraduate schools: Agriculture and Home Economics, Allied Health Professions, and Nursing.

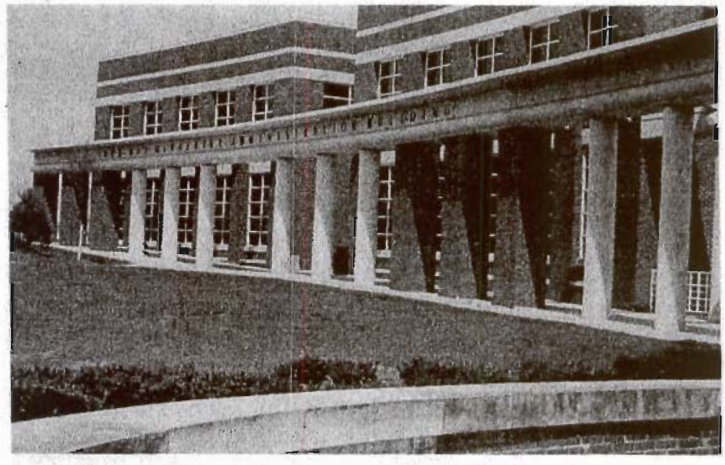
Semester Hour of Credit: The semester hour is a unit of academic credit. A student, for example, must earn a minimum of 130 semester hours in order to graduate. The number of hours earned in a given semester is the measure of a student's academic load. A normal load ranges from 12 to 18 semester hours of work. The hours of credit of various courses are indicated in the catalog.

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

The Campus

The University has two convenient campus sites. Its central or main campus is located between 28th and 39th Avenues North and is bounded by the Cumberland River on the North and Albion Street on the South. The main campus occupies more than 450 acres with 65 buildings, parking lots, outdoor facilities, pasture and farm lands.

The Avon N. Williams, Jr. campus is located at Tenth and Charlotte Avenues, in downtown Nashville, with adjacent parking facilities. The "downtown campus" is the site for the Center of Excellence for Research in Basic Skills, Center of Excellence Information Systems Engineering and Management, the Center for Extended Education and Public Service, the Institute of Government, the Testing Center and Departmental offices of the College of Business. Other facilities include faculty offices, classrooms, lecture halls, computer laboratories, library, and a 200-seat auditorium. Daytime and evening class are available at the Williams campus.

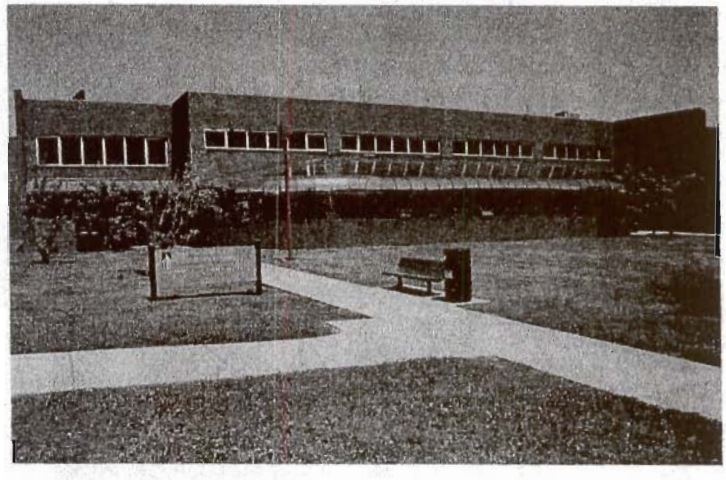


Major Buildings—Main Campus

The **Walter S. Davis Building ("A" Building),** originally occupied in 1933, was renovated and enlarged in 1967 and 1997. The building houses the Department of Languages Literature and Philosophy, and the Center for Administrative Computer Services.

The **Ned Ray McWherter Administration Building** at Tennessee State University encompasses nearly 25,000 square feet and includes the offices of the President, Vice Presidents for Academic Affairs, Business and Finance, and University Relations and Development, other administrators, and a number of auxiliary offices. Its architectural style complements that of the Otis L. Floyd-Joseph A. Payne Campus Center, dedicated in 1992, and the two buildings are connected by a colonnade.

The **James E. Farrell and Fred E. Westbrook Agricultural Complex (The Barn)** is located behind the Lawson Agriculture Building. Extension renovations were completed in 1991. The building now houses the office of the Research Director, the Extension Program, the greenhouse, laboratories, and a banquet room.



The **Alger Boswell Science Complex**, completed in the fall 1965 and since renovated and enlarged, is located south of Crouch Hall. It houses research laboratories, classrooms, two auditoriums, and faculty offices, as well as the departmental offices of the Department of Chemistry, the Department of Physics and Mathematics.

The **Martha M. Brown-Lois H. Daniel Library** is adjacent to the Floyd-Payne Campus Center. The main library is a three-story contemporary structure built in 1977 with 82,000 square feet of space for study and research, including two computer laboratories with 50 workstations and an electronic classroom with 30 workstations. The Special Collections area houses the archives, theses, dissertations, art objects, documents, and other media related to the University's unique and colorful history. The Library holdings include 406,170 book volumes, subscriptions to 1,555 print periodicals with 95,044 bound periodicals, 15,578 microfilm reels, and 816,415 microfiche sheets. Electronic resources include 48 bibliographic and/or full-text databases, 77 online journals, and over 12,000 books in full-text electronic format (e-books). Media Centers at both campus locations provide audio visual services and collections in multiple media formats. The Avon Williams Campus Library in downtown Nashville also supports the academic programs of the University with a full range of services and collections, including books, periodicals, microforms, and electronic resources.

The **R. E. Clay Education Building**, erected in 1958 and renovated in 1992, is located on 35th Avenue and Alameda directly west of Clement Hall. This building is equipped with classrooms and special laboratories for teacher education, psychology and

reading. The office of the Dean of the College of Education and the Departments of Administration, Teaching and Learning, Psychology, and Teacher Education are housed in this building.

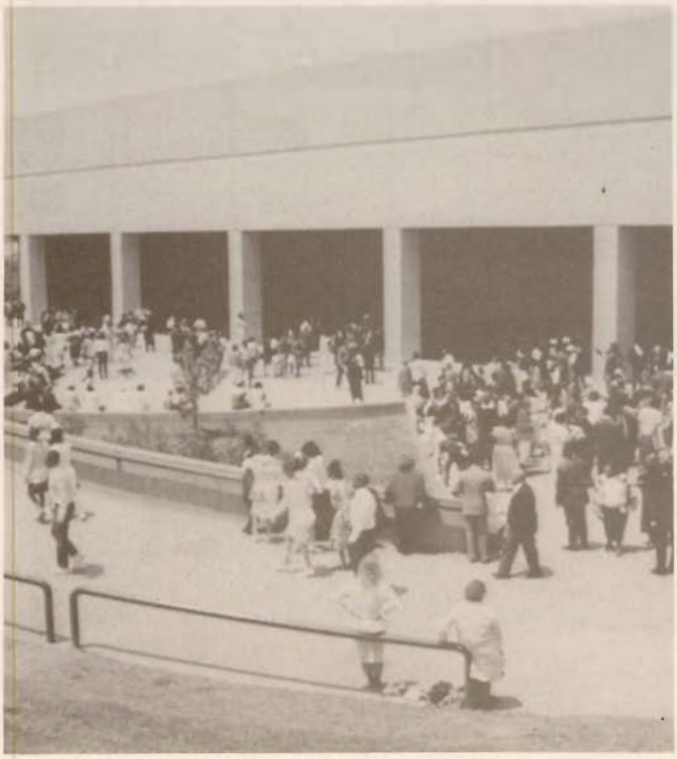
Frank G. Clement Hall is located on 35th Avenue and Alameda, south of the Brown-Daniel Library. This structure was formerly used as a men's residence hall. It was renovated in 1991 and serves as a classroom/laboratory building containing the Office of the Dean of The School of Allied Health Professions, the Departments of Dental Hygiene, Occupational Therapy and Physical Therapy and the Dental Hygiene Clinic.

The **Hubert Crouch Hall** (also known as the Graduate Building) contains classrooms, laboratories, faculty offices, and offices for the Dean of the Graduate School and the Dean of the College of Arts and Sciences. Also located in this building are the main offices of the departments of Communications; Criminal Justice; History, Geography, and Political Science. The program of Modern Foreign Languages, along with the language laboratory, is located in the building.

The **Frederick S. Humphries Family and Consumer Sciences and Nursing Education Complex** is located on John A. Merritt Boulevard between the Lawson Agriculture Building and the President's residence. It is a three-story building that contains the School of Nursing and the departmental offices, classrooms, and laboratories for the Department of Family and Consumer Sciences.

The **Jane E. Elliott Hall** (also known as the Women's Building) is located west of the Learning Resources Center, on the north side of campus. The building contains laboratories, lecture rooms, faculty offices, work rooms, studios for the fine arts and crafts, and the Hiram Van Gordon Memorial Gallery. The main offices of the departments of Africana Studies; Art; and Social Work and Sociology are located in the building.

The **Otis L. Floyd-Joseph A. Payne Campus Center** was conceptualized and constructed to be one of the nation's most modern facilities of its type. With 229,253 square feet of floor space, the three-level arena is an accommodating addition to Tennessee State University. It is a masterful architectural structure, three stories high, featuring brick and limestone and an award winning interior design. It combines Kean Hall, a renovated athletic building, with a contemporary multi-purpose center including a 350 seat auditorium. The facility serves a broad array of offices, services and activities.



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The **Howard C. Gentry, Health, Physical Education, Athletic and Convocation Complex** is located on the north side of the campus east of the Edward S. Temple Track. This facility contains a 10,000 seat basketball and convocation arena, an indoor track, handball courts, dance studio, offices, classrooms, and a 35 meter

swimming pool. The main offices of the Physical Education and Athletics Departments are housed in this complex. Exterior accommodations include basketball courts, softball fields, a baseball diamond, and parking for 2,000 cars.

Goodwill Manor is a two-story colonial house that was formerly used as the residence of the University President. It was completely renovated in 1991 and is maintained as an historical University landmark. It also serves as the location for the Office of Alumni Affairs. The Manor is located in the "horseshoe" just north of Harned Hall.

The **Harned Hall of Science**, erected in 1927, houses classrooms, lecture auditoriums, laboratories, staff offices and other facilities for instruction and research in the biological sciences.

The **Lewis R. Holland College of Business Building** is located on the southwest side of the campus, west of Crouch Hall. This building contains computer laboratories, classrooms, lecture halls, and faculty offices for personnel of the College of Business.

The **Industrial Arts Building**, renovated in 1999, is located at John A. Merritt Boulevard and 35th Avenue. Instructional staff offices for the Department of Industrial Arts and Technology are in this building. This facility also houses The School of Allied Health Professions Departments of Cardio-Respiratory Care Sciences, Health Information Management and Medical Technology.

The **W. W. Lawson Agriculture Building** is located on the north side of John A. Merritt Boulevard between the Davis Complex and the football stadium. The building contains classrooms and laboratories equipped for teaching and agricultural research.

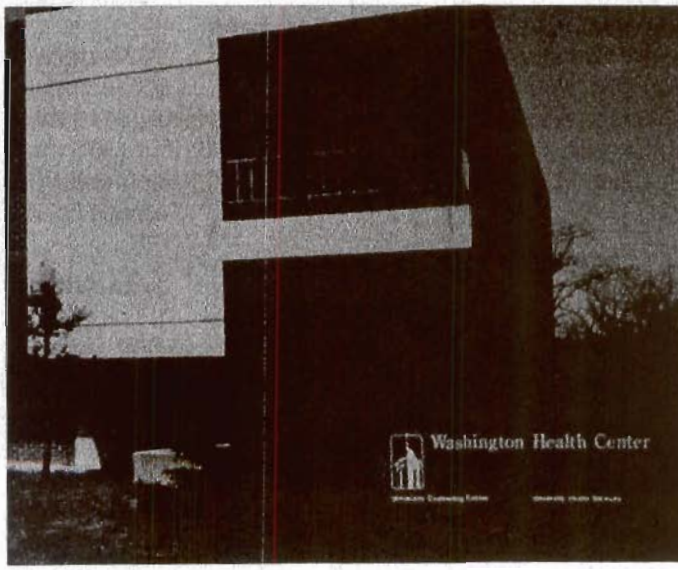
The **Jim Nance McCord Hall** houses classrooms and laboratories for biological sciences and computer science, as well as faculty offices, the central offices of the Department of Biological Sciences and the Department of Computer Science, as well as the Academic Computing Center. It is located directly west of the Library and north of the Clay Education Building.

The **Marie Brooks Strange Music Building**, erected in 1968, contains the offices of the Head and faculty of the Music Department, classrooms, listening laboratories, studios for piano and instrumentation, and a recital hall seating 226. It is located at the south end of the campus near 35th and Alameda.

The **Andrew P. Torrence Engineering Building** is located behind the Alger Boswell Science Complex. Its laboratories are equipped with up-to-date equipment for instruction and research in civil, mechanical, architectural and electrical engineering. The building was completed in 1982.

The **Harold M. Love Building,** informally known as "The Old Library," is the location for the Media Center which has multimedia study carrels available to students on an individual basis and an inventory of audio-visual equipment for loan to faculty for classroom use. The offices of Developmental Studies, Academic Advisement, and Orientation, and the University Honors Program are in this building which also houses the campus radio station and a 300 seat auditorium.

The **Queen Washington Health Service Building** has facilities for complete examination and limited treatment for students. The Health Service staff includes two nurses and three physicians. The University Counseling Center occupies the 2nd floor where staff is available to provide individual and group counseling. This facility is located north of Elliot Hall (the Women's Building).



General Fee Information

Tennessee State University reserves the right to increase the charges listed herein or to add new fees whenever such increases or additions become necessary. All fees and housing rents detailed below are those approved for the academic year 2000-2001 and are subject to change by action of the Tennessee Board of Regents. The listing of any fee or incidental charge in this catalog in no way constitutes a contract between the University and the student. As a condition of registration, each student must pay the appropriate fees in effect at the time of registration. Fees assessed at the time of registration are subject to audit and correction at a later date.

The Admissions Office determines a student's residency classification for fee-paying purposes. If a student is incorrectly classified, he/she will be billed for additional fees owed or refunded fees overpaid.

Checks given in payment of fees, including charges for University housing and board, which are subsequently dishonored by the bank, must be paid by cash, cashiers check, money order or credit card.

The University assumes no responsibility for monies lost through the mail. Students are advised not to send cash. All monies should be sent to the Vice President for Business and Finance, Tennessee State University, 3500 John A. Merritt Boulevard, Nashville, TN 37209-1561 or paid at the Bursar's Office in the Administration Building, unless otherwise specified.

Registration and Other Fees

NOTICE: The fee amounts listed below are those approved for the 2000-2001 academic year. Fees for the 2001-2002 and 2002-2003 academic years will be published when approved by the Tennessee Board of Regents.

REGISTRATION FEES:

All fees are subject to change by the Tennessee Board of Regents. Changes, if made, will be effective July 1, 2001.

	In-State	Out-of-State
Full-Time:		
Undergraduate (12+ hours)	$1,336/ semester	$4,150/ semester
Graduate (9+ hours)	$1,717/ semester	$4,531/ semester
Part-Time:		
Undergraduate	$ 97/hour	$339/hour
Graduate	$156/hour	$398/hour

Additional Part-Time Registration Fees:

Student Government	$2/semester
Student Activity	$35/semester
Technology Access	$12/hour ($113 max)
Debt Service	$6/hour ($65 max)
Post Office Box	$10/semester (for 7+credit hours)

Residence Facility Fees:

	On-Campus	Heiman	Off-Campus
Single (per semester)	$1,500	n/a	n/a
Double (per semester)	$1,100	n/a	$1,455
Triple (per semester)	$710	n/a	n/a
Per Resident (per semester)	n/a	$1,645	n/a

Meal Plans:

19 meals	$755
10 meals	$645
10 meals + $200	$845
5 meals	$250

Residents of Heiman and off-campus University-leased apartments are not required to participate in any meal plan. The 19-meal plan is the minimum required for on-campus students with less than 30 hours earned. The 10-meal plan is the minimum required for on-campus students with 30 or more hours earned.

Other Fees:

New Student Orientation	$40
International Student	$30/semester; $0 Summer
Student Parking	$45/academic year

65-Year-Old/Disabled Student Credit

In accordance with T.C.A. Section 49-7-113, persons 65 years of age or older and persons permanently and totally disabled who are domiciled in Tennessee may register for classes for credit on a space-available basis after regular registration is completed by paying a minimum registration fee. The fee is one-half the semester hourly rate, up to a maximum of $75.00. No late fee is charged. Application and automobile registration fees may also be required. In addition, the applicant must be eligible for admission and submit proof of age or disability. Eligible persons are advised to check with the Office of Admissions and Records prior to attempting to register for courses.

Other Applicable Charges

FEES SUBJECT TO CHANGE WITHOUT NOTICE:

Application Fee (non-refundable)	$ 15.00
Automobile Registration (non-refundable)	$ 45.00/yr
Replacement Decal	$ 2.00
Child Care (per term):	
Main Campus	$ 75.00/wk
Avon Campus - First Child	$ 2.00/hr
Avon Campus - Each Additional Child	$ 1.50/hr
Class Audit	same as for credit
Thesis - Microfilming	$ 45.00
Dissertation - Microfilming	$ 55.00
Copyright	$ 45.00
International Student Fee	$ 30.00
Graduate Comprehensive Exam	$ 15.00
Graduate Oral Exam	$ 15.00
Graduation Fee (non-refundable):	
Baccalaureate	$ 30.00
Master and Specialist	$ 35.00
Doctor and Juris Doctor	$ 45.00
Mailing Fee	$ 7.00
Housing/Room Deposit	$100.00
I.D. Card Replacement (non-refundable)	$ 10.00
Incomplete Project Writing (after three semester hours)	$ 25.00
Incomplete Theses Writing (after four semester hours)	$ 25.00
Meal Card Replacement (non-refundable)	$ 15.00
Music, Voice and Instrument Lessons (per course)	$ 30.00
Music Organ Lessons (per course)	$ 35.00
New Student Orientation	$ 40.00
Post Office Box (after seven credit hours)	$ 10.00
Returned Check Fee	$ 20.00
Room and Board Deferment Plan	$ 5.00
TSU Deferred Payment Plan	$ 10.00
Late Fees:	
Registration	$ 25.00
Room and Board Deferment Plan	$ 5.00
TSU Deferment Payment Plan	$ 25.00

Testing Fees (non-refundable):	
ACT (Residual)	$ 25.00
Credit by Exam (per course)	$ 15.00
CLEP (per test)	$ 12.00
GED (5 sub-tests @ $9.00/test	$ 45.00
DANTES	$ 35.00
GRE - General	$ 80.00
GRE - Subject	$ 80.00
NCLEX	$ 28.00
NLN - Single Exam	$ 13.00
NLN - Comprehensive - Associate Degree	$ 28.00
NLN - Comprehensive - Baccalaureate Degree	$ 28.00
MAT	$ 36.00
Speech Pathology & Audiology Courses (per term):	
Diagnostic	$ 15.00
Screening	$ 2.00
Therapeutic	$ 2.50
Thesis Binding	$ 40.00
Dissertation Binding	$ 45.00

Additional charges will be made for courses which require materials and supplies in excess of the average required for courses within the department.

Application Fee - $15.00

A one-time non-refundable fee is paid by any individual who applies for admission to the University. (A student is required to pay this fee when he/she applies for admission as a graduate student, even if the student attended as an undergraduate.)

New Student Orientation Fee - $40.00

A non-refundable fee is charged to first-time students enrolled for 12 or more hours for credit in a semester, or 6 credit hours if the first enrollment occurs in a Summer term, or those students enrolled with an accumulation of less than 36 semester hours.

Late Registration Fee - $25.00

Students who complete registration during the late registration period will be charged a $25.00 late fee.

I.D. Card Replacement - $10.00

Each student is issued an identification card which certifies that he/she is enrolled as a student at the University. There is no charge for the original card. A non-refundable fee of $10.00 is required for replacement. This identification card bears the student's photograph and is required for registration, all financial transactions; library privileges, entrance to campus activities and other identification purposes.

Automobile Registration - $45.00

All students operating vehicles on campus must register their vehicles (including motorcycles) with the TSU Police Department and pay the appropriate non-refundable fee to the Bursar's Office. Decals are required to be displayed on all vehicles.

Graduation Fee

This fee is assessed according to degree level and includes the cost of the diploma and rental of academic regalia. The fee is refundable only if the University has incurred no cost on the student's behalf. Additional fees may be charged for optional graduation-related activities or services. This fee must be paid 30 days before graduation.

Returned Check Charge - $20.00 Per Check

All checks presented to the University are expected to clear the bank upon which they are drawn. If a check is returned, all fees are considered unpaid and a $20.00 service charge is assessed on each check. Check-writing privileges may be revoked for any individual who has a check returned by a bank.

Library Fines

All fines imposed by the University Library become due to the University and must be paid at the Library or the Bursar's Office. Fines may be imposed for late return of books, lost or damaged books, or other related charges as specified by the Library.

Class Audit Fees

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

Traffic Fines

All fines imposed by the University for traffic violations must be remitted to the Bursar's Office. Fines will be assessed for violations of TSU Police regulations.

Financial Regulations

No student is allowed to register or obtain grades, diplomas, degrees or transcripts until all accounts are paid. A student is not officially enrolled until all fees are paid to the Bursar's Office.

Refund of Fees

Registration fees will be refunded for canceled classes and in the case of a student's death. No refund of rent, tuition, or other fees will be made to students who are dismissed or suspended.

Fall and Spring Semesters

Students who withdraw from the University before the first day of classes will be refunded 100% of fees assessed. Those who withdraw within 14 calendar days from the first day of classes for the Fall and Spring terms will be refunded 75% of their registration fees. Those withdrawing after the 14th day, but before 25% of the time period covered by the term has passed, will be refunded 25% of their fees. No refund will be made beyond the 25% period. Specific refund dates for each semester are given in the Schedule of Classes for that semester. The same refund schedule applies to students who drop to an hourly load below full-time. The percentage then applies to the difference between the new fees calculated on an hourly basis and actual fees paid.

Summer/Intersession

The 75% refund period and the 25% refund period will extend a length of time which is the same proportion of the Summer sessions and Intersession as the 75% and 25% periods are of the regular terms. Students who have pre-registered for the second Summer session, but drop or withdraw before the first day of class for Session II classes, will be refunded 100%. Otherwise, the regular refund schedule will apply. Specific dates applying to each session are listed in the current Summer Schedule of Classes.

Students who register after the official registration period and withdraw from the University will have their refunds calculated as if registration had taken place on the first day of registration.

REFUNDS OF HOUSING EXPENSES

Rent

Full rent will be refunded if:

1. The student is prevented from entering or returning to the University because of medical reasons confirmed in writing by a licensed physician.

2. The student is denied admittance or re-entry to the University or the residence halls.

3. Residence hall space is not available.

Refunds will be pro-rated on a weekly basis (a week is to consist of three days) when a student is forced to withdraw from a residence hall because of personal medical reasons confirmed in writing by a licensed physician or at the request of the University for other than disciplinary reasons.

Withdrawals for other reasons will be subject to the same 75% - 25% policy as are refunds of enrollment fees.

Housing/Room Deposit

The $100.00 Housing/Room deposit is paid only once and remains on file as long as the student maintains, by occupancy or reservation, in active status. The deposit will be refunded after the last semester the student maintains an active status, provided the following conditions are met:

1. The student officially checks out of the residence hall at the end of the appropriate semester or upon withdrawal;

2. The student turns in his/her room key to residence hall staff;

3. The assigned living space is clean;

4. There is no damage, defacement, or missing fixtures and/or furnishings;

5. There is no public area damage.

If all the above conditions are not met, there will be an appropriate deduction from the $100.00 deposit. Charges for damage, defacement or missing fixtures and/or furnishings or cleaning in excess of the breakage deposit will be assessed to the student.

APPEALS PROCEDURES FOR FEES AND REFUNDS

The President of Tennessee State University has the authority to determine the applicability of certain fees, fines, charges and refunds, and to approve exceptions in instances of unusual circumstances. A student may appeal the assessment, application, calculation or interpretation of any University action connected with fees or charges. Questions should be discussed with personnel in the Bursar's Office. A written appeal can be made to the Office of the Vice President for Academic Affairs. His/her determination may be appealed to the President of the University, whose decision will be final.

PRO-RATA REFUNDS OF FINANCIAL AID

Pro rata refunds are applicable only to students who are attending the institution for the first time. The pro-rata calculation is required when the student's withdrawal date is on or before the **60% point in time** in the period of enrollment for which the student has been charged.

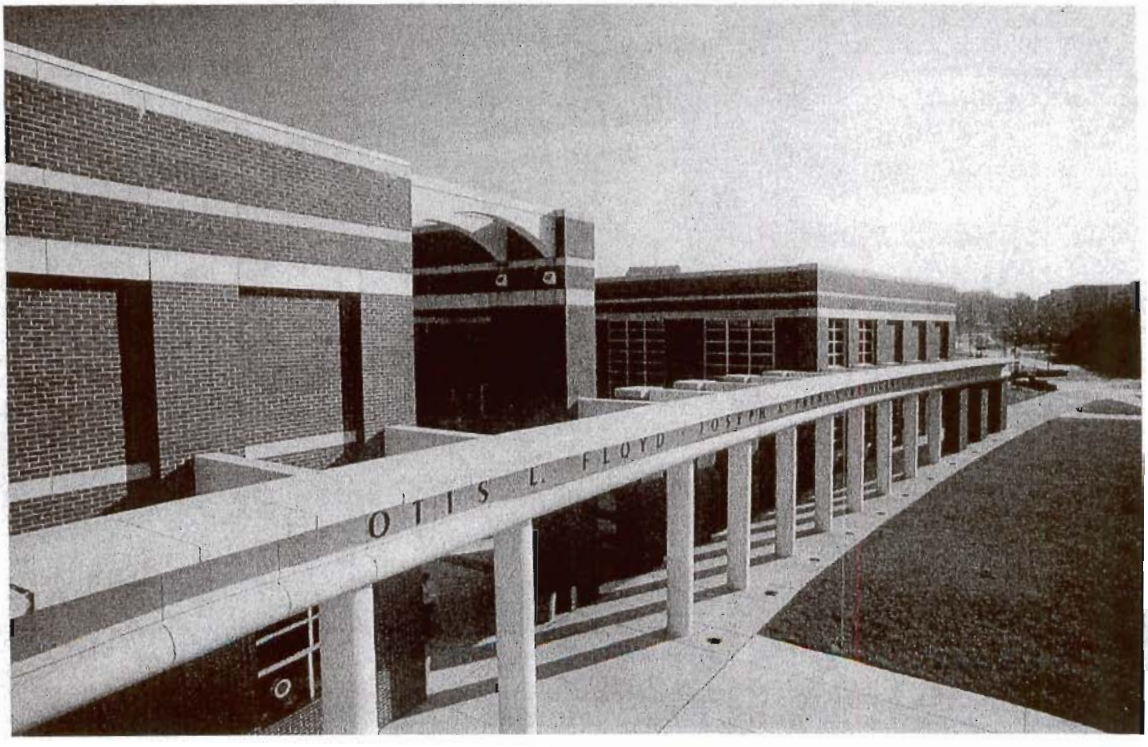
A student is considered to be attending an institution **for the first time** if the student has not previously attended at least one class at the institution. A student who previously attended, but received a 100% refund of tuition and fees (less any permitted administrative fee) under the institution's refund policy for that previous attendance, is also considered to be attending for the first time.

THE UNIVERSITY

Tennessee State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the Associate, Bachelor's, Master's, Specialist in Education, and Doctor's degrees.

Program Accreditations

Art	National Association of Schools of Art & Design
Music	National Association of Schools of Music
Social Work	The Council on Social Work Education
Business	AACSB-The International Association of Management Education
Education	National Council for Accreditation of Teacher Education (NCATE) American Psychological Association (APA)
Architectural & Mechanical Engineering **Civil & Environmental Engineering** **Electrical & Computer Engineering**	Accreditation Board for Engineering and Technology
Family & Consumer Sciences	Council for Accreditation of the American Association of Family and Consumer Services
Cardio-Respiratory Care Sciences	Commission on Accreditation of Allied Health Education Programs
Dental Hygiene	Commission on Dental Accreditation
Health Care Administration and Planning	Association of University Programs in Health Administration
Health Information Management	Commission on Accreditation of Allied Health Education Programs in collaboration with the Council on Education of the American Health Information Management Association
Medical Technology	National Accrediting Agency for Clinical Laboratory Sciences
Speech Pathology and Audiology	Council of Academic Accreditation of the American Speech-Language-Hearing Association
Nursing	National League for Nursing Accreditation Commission
Occupational Therapy	Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association



INSTITUTIONAL MEMBERSHIPS

- American Council on Education
- American Psychological Association (APA)
- AACSB - The International Association for Management Education
- American Association of Family and Consumer Sciences-Higher Education Unit
- American Association of Colleges for Teacher Education
- American Association of Colleges of Nursing
- American Association of Collegiate Registrars and Admissions Officers
- American Association of State Colleges and Universities
- Association of Administrators of Human Sciences
- Association of Colleges and Schools of Education in State Universities and Land Grant Colleges (ACSESULAC)
- Council of Colleges of Arts and Sciences
- The College Board
- Council for Counseling Psychology Training Programs (CCPTP)
- Council of Graduate Schools
- Council of Historically Black Graduate Schools
- Council of 1890 Family and Consumer Sciences
- Council of 1890 Presidents
- Council of the Great City Colleges of Education
- Nashville Area Chamber of Commerce
- National Association for Business Teacher Education
- National Association of Collegiate Directors of Athletics
- National Association for Equal Opportunity in Higher Education (NAFEO)
- National Association for Multicultural Education (NAME)
- National Association of Schools of Art and Design
- National Association of Schools of Music
- National Association of State Directors of Teacher Education and Certification (NASDTEC)
- National Association of State Universities and Land-Grant Colleges
- National Collegiate Athletic Association
- National Council for Accreditation of Teacher Education
- National University Extension Association
- Ohio Valley Conference
- Oak Ridge Associated Universities
- SCT Education Technology Association (SETA)
- Southern Business Administration Association
- Southern Regional Education Board
- Teacher Education Council of State Colleges and Universities
- Tennessee Association of Colleges for Teacher Education
- Tennessee College Association
- World Council for Curriculum and Instruction (WCCI)

Undergraduate Degree Programs

Tennessee State University is authorized to grant the following degrees:

School/College	Program	Degree(s)
Agriculture and Consumer Sciences	Agricultural Sciences	B.S.
	Family Consumer Sciences	B.S.
	Hospitality and Tourism Administration	B.S.
	Early Childhood Education	B.S.
Allied Health Professions	Cardio-Respiratory Care Sciences	B.S.
	Dental Hygiene	A.A.S., B.S.
	Health Care Administration and Planning	B.S.
	Health Information Management	B.S.
	Medical Technology	B.S.
	Occupational Therapy	B.S.
	Speech Pathology and Audiology	B.S.
Arts and Sciences	Africana Studies	B.S.
	Art	B.S.
	Arts and Sciences	B.S.
	Biology	B.S.
	Chemistry	B.S.
	Criminal Justice	B.S.
	English	B.A.
	Foreign Languages	B.A.
	History	B.A.
	Mathematics	B.S.
	Music	B.S.
	Physics	B.S.
	Political Science	B.S.
	Social Work	B.S.
	Sociology	B.S.
	Speech Communication and Theatre	B.A., B.S.
Business	Accounting	B.B.A.
	Business Administration	B.B.A.
	Economics and Finance	B.B.A.
	Business Information Systems	B.B.A.
Education	Human Performance and Sport Sciences	B.S.
	Psychology	B.S.
	Special Education	B.S.
Engineering and Technology	Aeronautical & Industrial and Technology	B.S.
	Architectural Engineering	B.S.
	Civil Engineering	B.S.
	Computer Science	B.S.
	Electrical and Computer	B.S.
	Mechanical Engineering	B.S.
Nursing	Nursing	A.A.S., B.S.N.

2001 – 2002 ACADEMIC CALENDAR

FALL SEMESTER, 2001

Aug.	1	Priority deadline for applications for Admission to the University for Fall 2001
	16-17	Faculty Institute
	20	College/School Advisement and Registration for freshmen and new students
	21-22	Registration
	23	Classes begin
	23-24	Late Registration Drop/Add
Sept.	3	Holiday
	6	Opening Convocation
Oct.	5	Applications due in major departments for students completing undergraduate and graduate degree requirements in Spring 2002
	15-19	Mid-Term Examination Week
	22	Mid-Semester grades due in the Office of Records - 12:00 Noon
	26	Last day to withdraw from courses - Office of Records
	26	Last day to withdraw from University - University Counseling Center
Nov.	22-23	Holiday
Dec.	5	Last day of classes
Dec.	6-14	Final Examinations for Fall 2001
Dec.	3	Priority deadline for applications for admission to the University for Spring 2002
	10	Faculty Conference
	18	Final grades due in the Office of Records at 12:00 Noon

SPRING SEMESTER, 2002

Jan.	2	University Re-Opens 8:00 a.m.
	4, 7	Registration
	8	Classes begin
	8-9	Late Registration Drop/Add
	15	Holiday
Feb.	8	Applications due in major department for students completing undergraduate and graduate degree requirements in Summer 2002
	25-Mar 1	Mid-Term Examination Week
Mar.	4-8	Spring Break
	11	Mid-semester grades due in the Office of Records - 12:00 Noon
	15	Last day to withdraw from courses - Office of Records
	15	Last day to withdraw from University - University Counseling Center
	29	Holiday
Apr.	1	Priority deadline for Financial Aid applications for Fall 2002
	12	Applications due in major department for students completing undergraduate and graduate degree requirements in December 2002
	25-26	Final Examinations for all students completing degree requirements in May.
	29	Grades for Spring Graduate due in the Office of Records - 12:00 Noon
May	1	Priority deadline for applications for admission to the University for Summer term
	1	Last day of classes
	2-10	Final Examinations for Spring 2002
	11	Spring Commencement
	15	Final grades due in the Office of Records - 12:00 Noon

AFTER AUGUST 1, 2001, PLEASE SEE THE TSU WEB SITE OR CONTACT THE TSU ADMISSIONS OFFICE FOR THE 2002-2003 CALENDAR. This will be the common calendar for Tennessee State University, Austin Peay State University and the Middle Tennessee State University.

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

SUMMER SESSIONS

1st Five Week Session

May	24	Registration - All Summer Sessions
	27	Classes begin
	27	Late Registration Drop/Add
June	21	Last day to withdraw from courses - Office of Records
		Last day to withdraw from University - University Counseling Center
July	3	Last day of classes (Final Examinations)
	4	Holiday

2nd Five Week Session

July		Priority Fall Orientation/Advisement/ Registration
	8	Classes begin
	8	Late Registration Drop/Add
		Priority Fall Orientation/Advisement/ Registration
	26	Last day to withdraw from courses - Office of Records
		Last day to withdraw from University - University Counseling Center
Aug.	1	Final Examinations for Summer Graduates
	6	Grades for Summer Graduates due in the Office of Records - 12:00 Noon
	9	Last day of classes (Final Examinations)
	10	Summer Commencement

10 Week Session

May	24	Registration - All Summer Sessions
	27	Classes begin
	27	Late Registration Drop/Add
July	4	Holiday
	12	Last day to withdraw from courses - Office of Records
		Last day to withdraw from University - University Counseling Center
Aug.	1	Final Examinations for Summer Graduates
	6	Grades for Summer Graduates due in the Office of Records - 12:00 Noon
	9	Last day of classes (Final Examinations)
	10	Summer Commencement

FALL SEMESTER, 2002

ACADEMIC INFORMATION

— ADMISSION TO THE UNIVERSITY

— ACADEMIC POLICIES AND REQUIREMENTS

Admission to the University

Undergraduate Admission

All inquiries about admission, applications for admission, and transcripts of credit should be addressed to the Dean of Admissions and Records, Tennessee State University, 3500 John Merritt Blvd., Nashville, TN 37209-1561.

Freshman Admission

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

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

Students born after 1956 should submit proof of measles immunization taken after January 1, 1980. This information should be submitted with the admissions application.

Beginning fall 1989, all State Board of Regents Universities require that undergraduate freshmen have the high school subject units listed below for regular admission.

Subject Area	Required Units
English	4
Visual and/or Performing Arts, including a survey course or participation in one or more of the arts (music, dance, theatre, visual arts)	1
Algebra I and II	2
Geometry or other advanced math course with geometry as a major component	1
Natural/Physical Sciences, including at least one unit, with lab, of Biology or Technology, chemistry, physics or Principles of Technology II	2
Social Studies, including world history, ancient history, modern history, world geography, European history	1
United States History	1
A single **Foreign Language**	2

In addition to these, an additional unit in the arts, in mathematics, and in foreign languages is recommended. Different requirements may exist for some freshman applicants (e.g., GED, early admission, international students, or students who graduated from high school more than five years prior to applying for college admission).

ADVANCED PLACEMENT CREDIT

The University will award advanced standing to entering freshmen based upon Advanced Placement Examination results. Scores of 3 to 5 will be awarded appropriate credit.

Official copies of the Examination scores must be submitted by the testing agency to the Office of Admissions and Records. Refer to the following chart for credits awarded:

SUBJECT	SCORE	CRS	RELATED COURSE(S)
History of Art	3,4	3	Art 1012
Biology	3	4	BIOL 1010, 1020 or 1030 w/lab
	4,5	8	BIOL 1030 & 1040 w/lab
Chemistry	3	3	CHEM 1010 w/lab
Lang & Comp.	3	3	ENGL 1010
	4,5	6	ENGL 1010 & 1020
French	3	3	FREN 1010
	4,5	6	FREN 1010 & 1020
Gov't Politics	3	3	POLI 2010
Comparative	4,5	6	POLI 2010 & 2040
European Hist	3	3	HIST Elective
	4,5	6	HIST Elective
United States	3	3	HIST 2010
	4,5	6	HIST 2010 & 2020
Calculus (ab)	3	3	MATH 1030
	4,5	6	MATH 1030 & 114
Calculus (bc)	3	3	MATH 1030 & 114
	4,5	9	MATH 1030, 114 & 1040
Theory	3,4,5	2	MUSC 1010
Listen & Lit.	3	3	MUSC 140
	4,5	5	MUSC 1010 & 140
Physics	3	3	PHYS 2010 w/lab
(B) Mechanics	4,5	6	PHYS 2010 & 2030 w/lab
	3	3	PHYS 2010 w/lab
(C) Elect/Mag.	4,5	8	PHYS 311 & 312
Language	3	3	SPAN 1010
	4,5	6	SPAN 1010 & 1020
Computer Sci	3	3	CS 121
CS (A)	3	3	CS 121
CS (AB)	4,5	6	CS 121 & 211
Economics	3	3	ECON 2010
	4,5	6	ECON 2010 & 212
Psychology	3	3	PSYC 2010
	4,5	6	PSYC 2010 & 202

First-time Freshmen General Requirements

1. All students are required to submit an application for admission and a **$15** non-refundable processing fee.
2. Any student desiring admission without conditions must have submitted an application, an application fee, and all documents (transcripts) at least 45 days prior to the semester of intent.

Regular Admission In-State

For regular admissions, an applicant must **meet** the following requirements for 2001-2003:

A. ACT Score of 19 or 900 and above on the SAT, or

B. Minimum grade point average of 2.25 on a 4.00 system

and

C. Must pass the Tennessee Proficiency Examination, and

D. Must have completed 14 High School State Board of Regents Unit requirements.

NOTE 1: ACT or SAT scores are required of all students under 21 years of age for advisement and placement purposes.

NOTE 2: An applicant over the age of 21, who fails to meet the required grade point average may be admitted by attaining the required ACT score.

NOTE 3: Residency classification for fee-paying purposes determines whether the applicant is in-state or out-of-state. The children of graduates who live out-of-state are governed by in-state admissions requirements but are required to pay out-of-state tuition.

Regular Admissions Out-of-State

For regular admissions, an applicant must **meet** the following requirements for 2001-2003.

A. ACT Score of 19 or **900** and above on the SAT, or

B. Minimum grade point average of 2.50 on a 4.00 system and

C. Must have completed 14 High School State Board of Regents Unit requirements.

D. A student 21 years of age or older who does not meet the required high school grade point average, must take the ACT/SAT.

ACT

NOTE 1: ACT or SAT scores are required of all students under 21 years of age for advisement and placement purposes.

NOTE 2: An applicant over the age of 21, who fails to meet the required grade point average may be admitted by attaining the required ACT score.

NOTE 3: Residency classification for fee-paying purposes determines whether the applicant is in-state or out-of-state. The children of graduates who live out-of-state are governed by in-state admissions requirements but are required to pay out-of-state tuition.

Admission by Exception

1. Students who have a deficiency of no more than two high school units will be granted Admission by Exception, provided they meet the following criteria:
   a. An ACT minimum composite score of 21 (or comparable SAT score of 970).
2. Students who have a deficiency of no more than two high school units but have an ACT score below 21 (or comparable SAT score) may be granted Admission by Exception upon review of the Admissions Committee, provided they meet the following criteria:
   a. An ACT minimum composite score of 19 (or comparable SAT score of 900), **and**
   b. A high school grade point average of at least 2.5

   The Admissions Committee, chaired by the Dean of Admissions, will review students on an individual basis and grant Admission by Exception based on the record and application materials of each student.

All students granted Admission by Exception must remove any deficiencies within the first 60 hours of University work.

Regulated Admission

1. Applicants may be admitted on a regulated basis who meet the following requirements:

   a. completed all State Board of Regents high school units but do not meet the required grade point average and/or test score,

   b. lacks no more than two State Board of Regents high school units but meet and/or exceed an acceptable grade point average and/or test score.

2. Applicants admitted under regulated status must complete courses specified with grades of "C" or better. Such specified courses must be completed in the first two semesters and first summer of enrollment in order for the student to be continued in the University.

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

Admission Based on GED Test

Any applicant desiring admission based on the General Education Development Test taken before 1989 must:

A. Be 18 years of age.

B. Submit a GED Report showing a composite score of 45 or above and an official High School Transcript.

C. Take the ACT/SAT. Applicants who are 21 years of age or older and meet the required GED score are exempt from taking the ACT/SAT.

D. Remove high school deficiencies within 64 hours after initial enrollment. (Applicants who received a GED in 1989 and thereafter are considered to have met all high school unit requirements except Foreign Language.)

E. GED recipients must take the COMPASS for placement purposes.

High School Deficiency Removal

The following courses/tests may be taken for deficiency removal. Any course(s) taken to remove High School deficiencies cannot be used to meet General Education Requirements.

High School	Requirements	TSU Deficiency Removal
English	4	Take COMPASS Test) and abide
Algebra I	1	Take COMPASS Test)– by
Algebra II	1	Take COMPASS Test) placement
Advanced Math	2	DSMA 099
Nat/Phy Sci.	2	BIOL 1010 & Lab, Chem 101+100 Lab CHEM 1010+1011, CHEM 020+1021, BIOL1030 & Lab, BIOL 1040 & Lab, BIOL 221 & Lab, BIOL 232 & Lab (1 or 2 courses may be needed)
U. S. History	1	History 2010
Social Studies	1	Enroll in HIST 121, HIST 122, HIST 121H, HIST 122H
For. Lang.	2	FREN 1010 & 1020, GR 1010 & 1020, SPAN 1010 & 1020 (1 or 2 courses may be needed)
Visual/ Performing Arts	1	ART 1012, ART 135, HPER 1022, THTR 1010

Must earn grade of "C" or better.

Placement

All first-time freshman students under the age of twenty-one (21) are required to submit their American College Test (ACT) or Scholastic Aptitude Test (SAT) scores as a condition for admission. ACT composite as well as Math and English sub-scores are to be used as initial screens to identify students requiring COMPASS assessment for purpose of placement. Students under 21 who are in the following categories must undergo COMPASS assessment as indicated.

1. Students under 21 whose ACT (Enhanced) composite score or SAT Equivalent is 18 or lower must complete the Reading subtest of the COMPASS.

2. Students under 21 whose ACT (Enhanced) composite score or SAT Equivalent is 19 or higher but whose ACT (Enhanced)/SAT Mathematics sub-score is 18 or lower must take the appropriate COMPASS math test as determined by the student's level or high school preparation in mathematics.

3. Students under 21 whose ACT (Enhanced) composite score or SAT Equivalent is 19 or higher but whose ACT English (Enhanced)/SAT Verbal sub-score is 18 or lower must complete the COMPASS Writing Sample.

4. Students under 21 whose ACT (Enhanced) composite score is 19 or higher but whose ACT/SAT Mathematics and English sub-scores both are 18 or below must take the COMPASS subtests in math and writing.

5. Transfer students who have not been previously assessed and who have not earned credits in college-level English composition or college-level, algebra-based mathematics must undergo COMPASS assessment in the appropriate area(s). Transfer students are not required to submit ACT/SAT scores, although they are encouraged to do so if they have valid scores.

6. Non-degree students who have not completed the first college-level course in English or mathematics must undergo COMPASS assessment in the appropriate subject area and must complete courses indicated by COMPASS placement prior to enrolling in the respective college-level English or mathematics course.

On the basis of the placement test results, students will be placed in remedial/developmental classes and/or laboratories or college-level courses. Completion of remedial and developmental courses and labs is required before students can move to degree-credit courses for which developmental courses are prerequisite. A student whose ACT/SAT composite and sub-scores in Mathematics and English are 19 or higher are exempt from the placement testing unless such testing is required to remove 1989 high school deficiencies. However, if during the first two weeks of classes, an instructor has well documented evidence that a student is deficient in one or more of the basic skills or academic competencies, the instructor may refer the student to the Director of Developmental Studies for assessment and placement, using the form provided by the Director's office. Such students shall not be allowed to continue in a college-level course for which their COMPASS assessment indicates the need for pre-requisite skills.

If placement test scores so indicate, the student may be administratively withdrawn, upon proper notification, from course(s) which require the skills in which he/she is deficient.

A student 21 years of age or older is not required to submit an ACT or SAT score as a condition for admission. But those who elect to do so may, provided the ACT scores are posted within three years of the first term of enrollment. Students with valid ACT scores will then be screened for COMPASS assessment according to the regulations applied to students under 21.

However, a student 21 years of age or older who does not submit a recent ACT composite score of 19 or above (or SAT equivalent) will be required to take the placement assessment. All other placement policies and procedures stated above for the student under 21 years of age apply to the student who is 21 or older.

Students must not be enrolled in an R/D English, mathematics, or reading course without a COMPASS pre-test score in that area. The student must meet the exit criteria of the final R/D course in the subject area and complete the final subject-area examinations to meet all requirements for that area.

Failure to abide by COMPASS placement will not be used as a basis for waiving requirements.

If there are extenuating circumstances, a student may retake the COMPASS ninety (90) days after first taking it, providing the student has taken no course work in the retest area.

Required Testing

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

Early Admission

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

1. be at least 16 years of age;
2. have completed the junior year of high school with a minimum of 14 high school units;
3. have a 3.2 grade-point average on all work taken during grades 9, 10, and 11;
4. have a minimum ACT composite score of 22;
5. be recommended for participation in the program by either the high school principal or the guidance counselor;
6. taken and passed the Tennessee Proficiency Test.

Re-Admission

1. Students who leave the University voluntarily and who do not enroll for courses during one or more regular semesters must submit an application for readmission to the university. Summer is not considered a regular semester in determining absence from the University.
2. Students who return to TSU after attending other colleges or universities must submit an application for readmission and a transcript from all institutions attended since leaving TSU. Applicants in this category need a grade point average equal to TSU's retention standards when all courses attempted at all colleges are combined.
3. Re-enrollees who wish to attend TSU after being suspended should follow items 1 and 2 above as well as the following:
   a. Students who receive their first suspension at the end of the fall semester may not register at TSU until the following Summer.
   b. Students receiving their first suspension at the end of the spring semester will not be eligible to re-enroll until the following spring semester.
   c. Students receiving their first suspension at the end of the summer session will not be eligible to re-enroll until the following spring semester.
   d. Students who attend another accredited institution during their suspension from TSU and raise their cumulative GPA to meet TSU's retention standards will be allowed to re-enroll at TSU.
4. In determining retention and re-enrollment, Summer I and Summer II grades will be calculated as one term.

Transfer Students

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

All transfer applicants must:

(1) Submit two official transcripts from each college/university attended.
(2) Submit an official **COMPASS** report, if applicable.
(3) Submit official ACT or SAT scores.
(4) Have a GPA (based on all courses attempted at Tennessee Board of Regents colleges/universities) equal to TSU's retention standards.
(5) Have a minimum 2.00 GPA, for out-of-state college/university.
(6) Take the **COMPASS** subtest in Mathematics and/or English if the ACT (Enhanced) subscore(s) in the subject(s) is not acceptable, and if college credit has not been earned in English and/or Mathematics. Transfer students with 60 or more hours of transfer credit are exempt from **COMPASS testing and University Orientation.**
(7) Students who have not had remedial and developmental courses at TBR institutions must undergo **COMPASS** assessment. However, their transfer credit may be used in determining placement.

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

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

To qualify for admission by transfer from an out-of-state college or university, a student must have, as a minimum, an overall 2.00 grade-point average. Credits earned by students who are Tennessee residents attending public colleges and universities in Tennessee will be accepted toward degree programs on the same basis as work taken on the campus of Tennessee State University.

All other students seeking advanced standing will be admitted to Tennessee State University provided they meet the minimum requirement of a 2.00 grade-point average. All transfer grades will be used in computing the average required for admission. Students transferring from a junior or community college must complete a minimum of 60 hours credit for the bachelor's degree at TSU. Furthermore, any student dismissed from a college or university for academic reasons must be eligible to re-enter that institution prior to acceptance at TSU.

Credit earned at other colleges and universities (accredited/non-accredited) will be assigned by the Office of Admissions once the student is admitted. The University does not grant upper division credit (300-400 level courses) for lower division work transferred from community or junior colleges. In addition, no upper division credit will be granted for any lower division credit transferred from any other university or college; any exceptions to this particular provision must be approved by the Office of Admissions and Records and the appropriate department head.

The Office of Admissions and Records will provide all transfer students an equivalency evaluation of all transfer credit during the first semester of enrollment at the University. 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.

Specific questions regarding transfer credit should be addressed to the Office of Admissions and Records and the appropriate department head.

Transient Students

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

Transient students who have taken the **COMPASS** at other TBR institutions must abide by test placement results.

Advanced Standing

Student who are eligible may establish advanced standing through approved examination programs and educational experiences in the armed services. Students are awarded a grade of "P" for credit received. Transcripts, military documents, and original score reports must be submitted to the Office of Admissions and Records for evaluation and review. Approved programs are:

1. College Level Examination Programs (CLEP) of the College Entrance Examination Board
2. DANTES Standardized Tests administered by Educational Testing Service
3. Advanced Placement Program of the College Entrance Examination Board
4. Military training courses in the Armed Services of the United States as recommended by the Guide to the Evaluation of Educational Experiences in the Armed Services published by the Commission on Educational Credit of the American Council on Education. For evaluation purposes:
   A. U.S. Army Veterans should present the Army/ACE Registry transcript. (ARTS);
   B. U.S. Air Force Veterans should present a Community College of the Air Force transcript.

The DD214 or other official documentation should be submitted to support request for credits via A and B above.

Adult Special Student

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

1. He or she must hold a high school diploma or the equivalent and meet the requirement for admissions.

2. He or she may complete a maximum of 36 semester hours credit at TSU in this category. After receiving 36 hours, the applicant, to continue enrolling at TSU, must apply for regular classification and must meet transfer admission requirements.

3. He or she must take the **COMPASS** sub-test in English and/or Math before enrolling in these college-level courses unless the applicant has Enhanced ACT/SAT equivalent scores of 19 or better on English and Math sub-tests. Scores may be no more than three years old.

Special Student (Audit)

Any person who is 18 years of age or older and wishes to take a course but receive no credit (audit) may do so by applying at the Admissions Office. Regular registration fees will be charged for auditing courses. Registration is on a space available basis.

60-Year/Disabled (Audit) Student

Applicants who are 60 years old or older or permanently and totally disabled (T.C.A., Section 49-3251), and domiciled in Tennessee are required to pay the **$15** application fee but are not required to pay registration fees if they audit courses. Proof of age or disability is required (proof of disability is required annually). Registration is on a space-available basis. Regular registration fees will be charged for credit courses.

65-Year/Disabled Credit Student

Persons 65 years of age or older or permanently and totally disabled persons (T.C.A., Section 49-3251) who are domiciled in Tennessee may register for classes on a space available basis for credit, paying a minimum registration fee. The cost is one-half the semester hour rate up to a maximum of $75. An application fee of **$15** is required. The applicant must be a high school graduate or the equivalent, and the applicant must submit proof of age or disability (proof of disability is required annually).

International Students

International students with superior scholastic records are considered for admission as freshmen and as transfer students. An applicant whose native language is not English is required to submit a test score of 500 as the minimum acceptance level of performance on the Test of English as a Foreign Language, (TOEFL) or 80% on The Michigan Test. Students who do not have ACT/SAT equivalent score of 19 or above and who have not had college-level English and/or Math must undergo **COMPASS** testing. Applicant must:

1. Submit requested information at least 60 days prior to the beginning of the semester of enrollment.
2. Submit official TOEFL (Test of English as a foreign language) scores.
3. Submit a Notarized Affidavit of support and bank statement. These documents must not be older than six (6) months prior to desired semester of enrollment.
4. Submit official transcripts from each educational institution and examination certificate (0 levels).
5. Proof of a current physical examination.
6. Submit official transcripts from colleges/universities attended in the United States.
7. Copies of Visa and Alien Registration card.
8. Take the ACT/SAT test.

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 **$15.**

Course Numbering System

Degree level courses are numbered from 100 to 899. Undergraduate courses are numbered from 100 to 499; courses which are primarily masters level are 500 and 600; doctoral level courses are 700 and 800. Remedial and developmental courses, numbered below 100, may not be used for degree purposes. These courses do satisfy requirements for financial aid.

Educational Consortium TSU/MTSU

Tennessee State University and Middle Tennessee State University have joined in an educational consortium to provide advantages available to undergraduate students enrolled at each institution. The procedures for TSU students seeking to register for MTSU courses are as follows:

1. Obtain advisement and approval from academic department.
2. Obtain an "Agreement for Admission and Registration" form from TSU Records Office.
3. Complete top of form.
4. Have form approved and signed by the Records Office.
5. Register at TSU for TSU courses, pay fees.
6. Present form to Admissions and Records personnel at MTSU.
7. Register for courses at MTSU and present TSU receipt, pay additional fees to MTSU, if any.

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

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

Residency Classification

The Admissions Office is charged with the determination of a student's residency status for fee-paying purposes and as the basis for some University admission requirements. Classification is determined by information submitted on the admission application and/or application for re-classification. Notification in writing is made soon after the student applies for re-classification. The deadline dates are:

Summer Session	May 1
Fall Semester	August 1
Spring Semester	December 1

Students seeking a change in residency based on the "Work Rule" must:

- Complete the Change in Residency Application.
- Submit required documentation as outlined in the Residency Application.
- Submit most recent copy or copies of check stubs.
- Have a letter of verification relative to work status (full-time/part-time) forwarded on official letter head by employer.

Students seeking a change in permanent residency must:

- Complete the Change in Residency Application.
- Submit required documentation as outlined in the Residency Application.
- Submit copy of income taxes and proof of full-time employment in TN for at least 1 year prior to enrollment

All decisions are based on regulations established by the Tennessee State Board of Regents, with the intent that all Tennessee public institutions of higher education apply uniform classification rules. Should a student be denied in-state classification, the student has the right of appeal. The appeal steps are:

1. Dean of Admissions and Records
2. Vice President for Academic Affairs
3. President of the University
4. Tennessee State Board of Regents

Information for Veterans, Dependent Children and War Orphans

Persons eligible to receive Veterans Educational benefits may obtain information and applications from the Office of Admissions and Records.

Credit by Examination

Students who have mastered knowledge and skills covered in a college level course may earn degree credit for that course through taking either standard or local examinations. Standard examinations offered are CLEP (College Level Examination Program and DANTES (Defense Activities for Non-Traditional Education Support). Local examinations are generated by faculty in the department which offers the course. Local examinations are not generated where a department has adopted use of either CLEP or DANTES. A listing of adopted standard examinations and the equivalent TSU courses follows this narrative. Standard examinations are graded by the agency which supplies the test. Local examinations are graded by TSU faculty.

Each department determines for which of its courses credit by examination is appropriate. Each department also determines if it will accept credit by examination for its majors. Because of content, performance or other requirements, not all courses readily lend themselves to the credit by examination process.

A student who wishes to earn credit by examination begin the process through discussion with his/her department head. The department head will provide written instructions on the credit by examination process for both standard and locally generated examinations. The Testing Center (963-7111) may be contacted for additional information.

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

1. Scores are equal to or greater than the required minimum score shown in the accompanying Credit by Standard Examination table.

2. CLEP and DANTES credit do not duplicate any college credit counted for admission.

Credit earned through CLEP and DANTES will be entered on the student's permanent record but will not be computed in the grade point average. A maximum of 33 semester hours may be gained through a combination of College Level Examinations, DANTES and examinations for credit. These examinations may not be taken to repeat course work or to remove a grade of "F" or "I".

Examinations for credit may not be used for:

a. research or independent study courses,
b. any course work from which the student has been exempted
c. repeating of courses
d. removal of deficiency grades
e. any course which student has attempted

The examination must be completed and the recorded results must be received by the Office of Admissions and Records according to the following schedule:

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

University Course Title and Number	Credit Hours	CLEP Subject Exam Title	Minimum Score
Accounting 211, 212	6 hr. cr.	Introductory Accounting	50
Biology 1030,1040 and Labs	6 hr. cr.	General Biology	50
Biology 1010, 1020 and Labs	6 hr. cr.	Intro to Biophysical Science	50
Business Law 323	3 hr. cr.	Business Law	51
Chemistry 1030, 1040, and Labs	8 hr. cr.	General Chemistry	50
Economics 2010	3 hr. cr.	Macroeconomics	50
Economics 212	3 hr. cr.	Microeconomics	50
English 1010	3 hr. cr.	**English** Composition with Essay	**420**
English 1020	3 hr. cr.	Freshman College Composition (B on essay)	50
English 2014, 2024	6 hr. cr.	English Literature	50
English 2010, 2020	6 hr. cr.	American Literature	50
History 2010	3 hr. cr.	American History I: Early Colonization to 1877	50
History 2020	3 hr. cr.	History of the United States II: 1865 to the Present	50
Management-Organization Theory & Behavior MG 301	3 hr. cr.	Intro. to Management	50
Marketing MK 301	3 hr. cr.	Introductory Marketing	50
Mathematics 1010	4 hr. cr.	College Algebra	55
Mathematics 1040	3 hr. cr.	College Algebra-Trigonometry	55
Mathematics 1050	3 hr. cr.	Trigonometry	55
Mathematics 1060, 1070	8 hr. cr.	Calculus w/Elementary Functions	51
Political Science 2010	3 hr. cr.	American Government	50
Psychology 2010	3 hr. cr.	General Psychology	55
Psychology 373	3 hr. cr.	Educational Psychology	50
Sociology 2010	3 hr. cr.	Introductory Sociology	50

Students may earn college credit for the following Defense Activities for Non-Traditional Education Support (DANTES) tests.

University Course Title and Number	Required University Policy	DANTES Exam Title	Minimum Score
Accounting 211	3 hrs.	Principles of Financial Accounting	50
Economics 320	3 hrs.	Money and Banking	50
Finance 330	3 hrs.	Principles of Finance	50
EC 101	3 hrs.	Introduction to Business	50
Management MG 301	3 hrs.	Organizational Behavior	50
Marketing MK 301	3 hrs.	Basic Marketing	50

University Testing Center

The Testing Center staff administers a wide range of tests, including admissions, high school equivalency, and specialty examinations. Scoring services are also available. All services provided by the Testing Center are available for TSU students, faculty, and staff, as well as for the general public.

Location: Avon Williams Campus
330 Tenth Avenue, North
Room 346
963-7111

Academic Fresh Start Admission

This program allows eligible students whose academic performance was unsatisfactory during earlier college attendance to disregard grades earned. A student who has not attended any institution of higher education for the past four years is eligible to participate in Academic Fresh Start and must declare an intent to do so at the time of making application to the University by checking "Yes" to Academic Fresh Start on his/her application. Upon acceptance, all previously earned grades must be disregarded. A student does not have the option of retaining "good" grades and disregarding "poor" grades. Past grades remain on the student's transcript, however, they will not be used in calculating the GPA.

Upon satisfactorily completing 40 semester hours at TSU, the student may petition to have all grades on all courses prior to the 40 semester hours disregarded in calculating the cumulative grade point average. A petition for approval and transcript should be sent to the dean of the school in which the student desires to major. It is the responsibility of the student to adhere to the process and must initiate this process upon successful completion of 40 semester hours.

To qualify for Academic Fresh Start, the applicant must:

1. Not have been enrolled in any institution of higher learning for the past four years.
2. Complete a regular application for admission and specifically check information pertaining to Academic Fresh Start when being admitted to the University.
3. Submit official college transcripts from all institutions attended other than Tennessee State University.
4. Not hold any college degree.

Academic Common Market

The Academic Common Market is an interstate agreement among southern states for sharing academic in common programs. Participating states are able to make arrangements for their residents who qualify for admission to enroll in specific programs in other states on an in-state tuition basis.

To participate in the Academic Common market program, students must:

1. Be accepted for admission to the University and academic programs for which your state has obtained access for its residents through the Academic Common Market.
2. Obtain certification of residency from the Common Market Coordinator in your home state. Contact the State Coordinator in your state for Certification information.
3. Make sure that the program of which you intend to enroll is offered at TSU.
4. Submit certification information and/or form to the Office of Admissions and Records prior to the last day of registration of the semester in which you intend to enroll.

Registration Procedures

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

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

A late registration period is provided for those who are unable to register during the regular registration days. However, students who register late are required to pay a late registration fee and often find it difficult to secure a satisfactory schedule of classes. The late registration fee is $25.00. No student may register late (or add) a course which has met for the equivalent of 150 minutes. If a student does register late for (or add) a course, he will be responsible for all material covered from the first class meeting and must, at the discretion of the instructor, be responsible for any make-up work or tests.

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

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

1. Freshmen and transfers must be accepted for admission prior to registration.
2. All students are expected to register at their scheduled time for registration. No one will be allowed to register earlier than the scheduled time. Each student must observe registration procedures as specified at that time. A student is not officially enrolled until all of the requirements of registration, including the payment of fees, are completed. Registration after the regular registration dates may be completed by presenting an acceptable reason for the delay and payment of a late registration fee.
3. Former students must submit a re-admission application and settle all prior accounts in the Business Office before re-enrolling.

The following must be observed during the registration period:

1. All freshmen must complete the testing program if appropriate.
2. All students must have a conference with a faculty advisor to arrange an approved schedule of classes.
3. All students must pay fees in full on the day they register. Students who do not pay will be purged.
4. All freshmen and first-time transfer students must have I.D. pictures made and automobiles registered.

Academic Policies and Requirements

Retention Standards and Academic Probation

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

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

0-14 quality hours attempted	No minimum GPA
15-29 quality hours attempted	Not less than a 1.4 cumulative average
30-50 quality hours attempted	Not less than a 1.7 cumulative average
51-67 quality hours attempted	Not less than a 1.9 cumulative average
above 67 quality hours attempted	Not less than a 2.0 cumulative average; **and** satisfactory completion of all developmental or remedial courses.

At the end of the next term of enrollment, a student on academic probation who has failed to attain either the above cumulative standard or a 2.0 GPA for that term or who has failed a developmental or remedial course for a second time will be suspended. The first suspension may be appealed. If successfully appealed, the student must either earn a semester GPA of at least 2.00 or achieve the cumulative GPA required for the number of credit hours attempted as outlined in the preceding chart. Students failing to meet one of these standards must sit out for one semester, excluding summer sessions. Students must apply for re-admission for the semester in which they plan to return to the University.

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

Auditing A Course

Students who plan to audit a course must indicate at the time of registering that they are auditing. The regular registration procedure is followed. Students are not held to attendance or evaluation requirements for the course and no credits are earned ù audits may not be used to meet degree requirements. The audit fee is the same as the credit fee.

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 credit hours per semester. One semester hour credit of required physical education (HPER 1010-1053 series, or one semester hour credit of aerospace studies at the 100 or 200 level may be added to the normal load).

Probationary Student Class Loads

A student who incurs scholastic probation in any semester (see scholarship standards) will be allowed to carry a maximum of 13 semester hours. Course credits beyond the maximum load of 13 hrs. will be dropped from the student's schedule.

Maximum Class Loads

Freshmen may not register for hours in excess of their normal course 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 course load-up to a total of 21 credit hours.

Seniors whose grade-point averages are 2.00 or above may register for as many as three credit hours in excess of their full curricular load up to a total of 21 credit hours. In all cases, the student may apply to his school dean, who may approve request for such increases in class loads. The school dean must notify the Admissions Office in writing of each case approved.

Twelve semester hours constitute full time status for undergraduate students for the Fall and Spring semesters. Course loads of 18 hours in the Fall and Spring and 15 hours in the Summer are permitted without special approval for undergraduate students in good academic standing—not on probation.

A three hour over load may be approved during the Fall and Spring for sophomores, juniors and seniors with cumulative degree averages of 3.00 and above. A three hour over load is permitted for graduating seniors (those who are certified by their advisors as prospective graduates for the current semester--not just senior classification). The maximum course load for any undergraduate student during the Fall and Spring is 21 hours, including courses being taken at TSU and any other institution.

All overloads must be approved prior to the student enrolling in the course. The maximum course load for undergraduate students for Summer, including courses taken in any inter-session (at TSU and other institutions), is 15 hours in regular sessions (6 Summer I, 6 Summer II, 3 full) combined, and 3 hours in an intersession. The three hour overload may be approved for sophomores, juniors and seniors with cumulative degree averages of 3.00 and above and for prospective Summer graduates. No student may enroll in more than 18 hours during the 2 week intersession and the 10 week regular sessions, combined.

Classification of Students

All undergraduates must be classified in one of the following categories:

Freshmen: Those who have completed less than 30 semester hours

Sophomores: Those who have completed between 30 and 59 semester hours

Juniors: Those who have completed between 60 and 89 semester hours

Seniors: Those who have completed 90 semester hours or more.

Specials: (A) Those who meet entrance requirements and who wish to pursue particular studies but not to qualify for a bachelor's degree. Such students may be admitted with the permission of the Dean of Admissions and Records. (B) Those who are 21 years of age and who have not completed four years of high school work may enroll in such courses as they are prepared to take up to a maximum of 36 semester hours.

English Proficiency Requirements

All degree-seeking students must demonstrate English Proficiency by successfully completing (i.e., with a grade of A, B, or C) English 1010 and 1020 (Freshman English). Students who earn a "D" grade in English 1010 or 1020 are required to repeat Freshman English and earn a "C" or better.

Students for whom transfer equivalence of A, B, or C in English 1010 and 1020 has been accepted by the University will be determined to have satisfied the English Proficiency requirement. A transfer student with a grade of "D" in English 1010 or 1020 must repeat Freshman English and earn the grade of "C" or better. Any transfer student for whom there is a question of English Proficiency will be required to complete a writing sample which is scored holistically. Transfer students who have not met a comparable proficiency requirement elsewhere must remove the deficiency during the first semester of residence at Tennessee State University.

Examinations

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

Class Attendance

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

All excuses for absences must be secured through the Office of the Vice President for Student Affairs. In addition, the student should inform each teacher as to the cause for 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. Registration and payment of fees are required before classes are attended.

Policy On Excessive Absences

Students are expected to attend classes regularly and on time. Instructors will keep an accurate record of class attendance. "Excessive" absence is defined as no less than one more than the number of times a class meets per week. It is the student's responsibility to withdraw from a course in which excessive absences have been incurred. A student with excessive absences may only be readmitted to class by the instructor. A student who has not been readmitted to a class by the official withdrawal date, may not be readmitted to that class and will receive a mandatory grade of F.

Academic and Classroom Conduct

1. The instructor has the primary responsibility for control over classroom behavior and maintenance of academic integrity, and can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct in violation of the general rules and regulations of the institution. Extended or permanent exclusion from the classroom or further disciplinary action can be effected only through appropriate procedures of the institution.

2. Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. In addition to the other possible disciplinary sanctions which may be imposed through the regular institutional procedures as a result of academic misconduct, the instructor has the authority to assign an "F" or a zero for the exercise or examination, or to assign an "F" in the course.

If the student believes that he or she has been erroneously accused of academic misconduct, and if his or her final grade has been lowered as a result, the student may appeal the case through the *appropriate institutional procedures* (Grade Appeal).

Grade Appeal

The University recognizes the right of a student to appeal a grade which she/he believes is incorrect and does not reflect the student's class performance. Issues related to harassment (sexual, racial, or other) should be referred to the Affirmative Action Officer.

Students who believe an incorrect grade was awarded should seek a resolution with the instructor as soon as possible. If the student is not satisfied after attempting to reconcile the matter with the instructor, the student may appeal to the head of the department. This appeal must be in writing, accompanied by any relevant supporting documents, and must be initiated within 30 calendar days of the beginning of the semester immediately following the semester in which the grade was awarded (excluding summer school).

The department head shall provide a copy of the student's letter to the instructor and request a written response from the instructor. The instructor will provide the department head with a written response within 10 working days. (Exceptions will apply when the instructor is not teaching, as in summer sessions, or when the instructor is on leave.) In instances where an instructor indicates to a student that a grade adjustment is warranted, and fails to make the adjustment within ten working days, the student should inform the instructor's department head.

If the student is not satisfied with the decision of the department head, a further written appeal may be made to the Dean of the College/School. This appeal must be made within ten calendar days of the decision of the department head. After reviewing the appeal record, the Dean must render a decision within ten days of receipt of the appeal. After which the Vice President for Academic Affairs is the next level of appeal.

If the instructor happens to be the department head or the dean, the appeal will be submitted to the next higher academic officer (that is, to the dean if the department head is the instructor or to the Vice President for Academic Affairs if the dean is the instructor). In such cases, the decision of the Vice President for Academic Affairs is final.

Grades, transcript information, drop/adds, withdrawals and other data perceived by the student to be in error must be protested by the student within thirty days. Appeals made after this time will not be reviewed.

Regulations Regarding Grades of "I"

Inasmuch as the awarding of an Incomplete is the decision of the instructor, it is the instructor's responsibility to inform the student an Incomplete was awarded and make him/her aware of what assignments must be completed to remove the "I." This is accomplished through completing an I Contract on which the requirements to be met and the date by which they are to be met are given. It is the faculty member's responsibility to submit a copy of each contract with grades for the semester. The I Contract contains instructions for its execution. Adjunct faculty should also submit a copy of the "I" contract to the department head.

Students are NOT to be instructed to re-enroll in any course or laboratory to remove an Incomplete. If the extent of the work to be done is such that the student needs to attend class, the student should be awarded an appropriate grade and it becomes the student's decision, or requirement to re-enroll in the course.

Removal of "I" grades: "Incomplete" is a temporary grade which must be removed from the undergraduate student's permanent record within one semester from the end of the term in which the "I" grade was awarded. If all requirements of a course in which the "I" was awarded are not met within one semester, the grade of "I" will be changed to "F" by the Office of Admissions and Records.

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

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

Withdrawing from a Course

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

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

If a student never attends a class officially registered for or stops attending class without officially withdrawing, that student will be assigned a final grade of "F."

After the above deadlines, the student must be assigned a grade of "F". Administrative withdrawal from the University must be documented by the student and approved by the Vice President for Student and Academic Affairs. Health problems, or other circumstances beyond the student's control may be reasons for granting withdrawal from the University.

Repeating of Courses

Students in remedial or developmental courses may repeat only those courses in which they have received IP, F, or W, or in which an "I" has turned to an "F".

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

1. For the purpose of increasing mastery in a course where such is necessary for successful performance in a subsequent course, or
2. For the purpose of increasing the quality point average,
3. No course may be repeated more than twice except upon the advice of the major advisor and with the approval of the department head and dean. If the student repeats a course more than twice, the grade in the third and subsequent attempts is used in calculating the quality point average.
4. The last grade earned will stand even if the last grade received is an "F". All repeated courses remain on the student's transcript with repeat notations.
5. Veterans receiving educational assistance benefits may not repeat courses previously passed and receive financial assistance for such.

Correspondence Courses

A student may receive credit for correspondence work earned from other institutions. The student must receive written approval from the Office of Admissions and Records, Department Head and College/School Dean in order to apply these credits to his/her degree program of studies.

Courses Taken at Other Institutions

Students who wish to take courses at other institutions while attending Tennessee State University must complete a Permission To Enroll At Another Institution Form. The courses must be approved and the form signed, in advance, by the Chairperson of the department in which the student expects a degree. The form must be submitted to the Office of Admissions and Records and validated by the Registrar. This also applies to registration in the summer at another institution. Students are to adhere to the following:

1. Must be in good academic standing (2.00 or better).
2. Must enroll in course(s) at a university/college that offers equivalent level (100, 200, 300, etc.) courses to those offered at Tennessee State University.
3. Course(s) will transfer but must be "C" or better to count toward degree requirements where applicable.

The grade and quality points for those courses will be included in the calculation of the grade point average at Tennessee State. It is the student's responsibility to request that a transcript be sent to the Office of Admissions and Records to the attention of the Registrar.

Course work in which a grade of "F" has been earned at Tennessee State University may not be repeated at non TBR institutions for the purpose of replacing the Tennessee State University grade. Approval will not be provided for repeating courses with grade of "C" or better at another institution.

Grading System

The following is a description of the criteria used in assigning letter grades.

Grades	Quality Points Per Semester Hour	Description
"A"	4.0	Excellent, work of exceptional quality which indicates the highest level of attainment in a course.
"B"	3.0	Good, work above average which indicates a high level of achievement.
"C"	2.0	Work of average quality representing substantial fulfillment of the minimum essentials of a course.
"D"	1.0	Poor, representing passing work but below the standards of graduation quality.
"EP"	0.0	Represents the successful completion of examination for credit with an equivalent grade of "C" or better.
"EF"	0.0	Represents the unsuccessful completion of examination for credit.
"F"	0.0	Failure, representing unacceptable performance in credit course.
"I"	0.0	Represents incomplete work of passing quality and is given when a student is unable to complete required course work because of documented medical reason or catastrophic events beyond the control of the student.
"IP"	0.0	An "in process" grade indicates that the student has satisfactory attendance and has shown serious commitment to study but has not yet acquired the skill level in development or remedial courses to perform successfully at the college-level. The student must re-enroll in the course in which he/she receives this grade. While it is not a failing grade, it is considered an unsuccessful attempt. This grade is used only in Developmental Studies courses.
"S"	0.0	Represents satisfactory performance in a non-credit course.
"U"	0.0	Given for unsatisfactory performance in a non-credit course.
"W"	0.0	Represents official withdrawal from a course or the University.
"AU" (Audit)	0.0	Given when the student has registered and attended a course for audit rather than for credit.
"X"	0.0	Unofficial Withdrawal — Given when the student stops attending and/or never attended a course(s) and carries the same weight as "F".

Substitution of Courses

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

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

Policy Concerning Student Access to Education Records

Definitions

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

Student. A student is any person who is or has been enrolled at Tennessee State University. An applicant who does not enroll or who is declared ineligible has no inherent right to inspect his file. Wherever "student" is used in reference to personal rights, an eligible parent of a dependent student has similar rights. This "eligible" parent is one who has satisfied Section 52 of the Internal Revenue Code of 1954 and who presents such proof to the custodian of the education records. Normally this proof will be written affirmation by the student and the parent declaring that the student is a dependent for Federal Income Tax purposes.

Directory Information. Directory information is defined as: "the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous education agency or institution attended by the student."

At the time a student registers for courses, the student may notify the Office of Admissions and Records (this must be done in writing) that directory information for that student should not be released. This notification is effective only for the one semester for which the student is then registering.

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

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

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

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

Procedures for Accessing Education Records

The student requests the custodian to allow him to inspect the education record. The student may ask for an explanation and/or a copy of the education record. (The price of copies shall not exceed the cost of duplicating the record.) After consultation with the custodian, errors may be corrected at that time by the custodian.

If there is a disagreement between the student and the custodian, after exhausting reasonable means of reconciliation with the custodian, the student may submit a request for a formal hearing. The request, and the formal challenge to the content of the records, must be presented in writing to the chairman of the University Appeals Committee. The chairman shall call a meeting of the committee or place this meeting no later than 45 days after receipt of the written appeal and challenge.

The committee will allow the student to present evidence to substantiate the appeal and shall render a written decision to the student within 45 days after the meeting.

NOTE: This procedure does not provide for a hearing to contest an academic grade.

Rights of Access Do Not Include

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

Informing Students

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

Applicable Catalog

Students are allowed to graduate under the requirements of the TSU catalog that was current when they entered, provided graduation is within eight (8) years of that entrance date **and the program of study is still active**.

Dean's List

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

Degrees With Honors

Bachelors degrees with honors are awarded *cum laude, magna cum laude* and *summa cum laude.* To be graduated *cum laude,* the student must earn a cumulative average of at least 3.25. To be graduated *magna cum laude,* the student's cumulative average must be not less than 3.50. To be graduated *summa cum laude,* the student's cumulative average must be not less than 3.75.

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 three semesters and must qualify as a suitable representative of Tennessee State University.

Candidates for honors must qualify one semester prior to graduation.

Philosophy of General Education

Persons today are faced with a demand for a wide range of skills, knowledge, and attitudes. These demands include not only a highly specialized knowledge in a particular field of endeavor, but also a broader range of competencies and appreciations. Universities have the responsibility to assist persons to develop both the specialized and general skills, knowledge, and attitudes necessary for leading a humane, responsible, and happy life.

Academic departments with their programs of majors and minors are primarily responsible for developing the highly detailed and specialized skills and knowledge called for in today's world. The general education program fosters those competencies and attitudes which are necessary to the highly educated individual regardless of his or her profession. The general education program, therefore, is not the province of an individual department or college, but is the responsibility of the University as a whole.

In a democracy persons are autonomous individuals, but they are also members of a variety of social groups and citizens of the nation and the world. They are, in addition, creatures in a universe of natural phenomena and are themselves one of the complex phenomena in that universe. Educated persons must have more than an elementary understanding of all of these dimensions of the individual and the world, even if they cannot master the knowledge of all of these dimensions. The persons most likely to function effectively and wisely in the world, and the ones most likely to understand and appreciate their own and others' full humanity, are those liberally educated individuals who have achieved the following goals:

1. **Liberal Learning.** An understanding of a variety of intellectual disciplines, including at least one in each of the families of disciplines the humanities and arts, the social sciences, and the mathematical and natural sciences.
2. **Literacy.** A command of various modes of communication, including writing, speaking, listening, and computational skills.
3. **A Tough-Minded Rationality.** Ability to define problems, construct logical arguments, and draw reasonable conclusions while at the same time maintaining sensitivity to the creative and individual nature of all thought processes.
4. **A Receptivity to Evolving Technologies.** An openness to the ever-widening variety of technologies developing world-wide and to the tools and ideas produced by these technologies.
5. **Historical Consciousness.** An awareness of the continuity of past, present, and future.
6. **An Appreciation for Cultural Diversity.** Respect-based on understanding and sensitivity-for the cultures produced by all the peoples of the world.
7. **Intellectual Integrity.** High standards of scholarship and intellectual discipline, as well as an appreciation of knowledge for its own sake.
8. **A Habit of Lifelong Learning.** Commitment to intellectual curiosity and to education in its many forms as means of pursuing both professional and personal fulfillment.
9. **Values.** An understanding and appreciation of moral and esthetic values, including how they enrich life and encourage one to live responsibly.
10. **Physical and Mental Wellness.** A knowledge of the benefits from and means of achieving physical and mental wellness.

The General Education Courses

For the Bachelor of Arts Degree

	Required Sem. Hrs.
English	6
English 1010, 1011H (3)	
English 1020, 1021 (3)	
Humanities	9
Literature	(3 hours required)
English 2010, 2011A-H (3)	
English 2020, 2021A-H (3)	
Foreign Languages	(6 to 12 hours required)
French 1010 (3)	
French 1020 (3)	
French 2010 (3)	
French 2020 (3)	
German 1010 (3)	
German 1020 (3)	
German 2010 (3)	
German 2020 (3)	
Spanish 1010 (3)	
Spanish 1020 (3)	
Spanish 2010 (3)	
Spanish 2020 (3)	
Art 1010, 1011 (3)	
Art 1012 (3)	
Music 1010, 1020 (3)	
Philosophy 2010 (3)	
Philosophy 2021 (3)	
Philosophy 2022 (3)	
Religious Studies 1010 (3), 201 (3), 210 (3), 211 (3)	
Theatre 1010 (3)	
Theatre 1020, 1021 (2)	
Mathematics	3
(Prerequisites: 2 units of high school algebra or 1 unit of algebra and 1 unit of geometry)	
MATH 1010, 1011 (3)	
MATH 1020, 1021 (3)	
MATH 1030 (3)	
MATH 1040, 1041 (3)	
MATH 1050 (3)	
MATH 1060, 1061 (4)	
MATH 1070, 1071 (4)	
Natural Sciences	6-8
Biology 1010, 1012 (3), 1011, 1013	
Biology 1020, 1022 (3), 1021, 1023	
Biology 1030, 1032 (4), 1031L, 1033	
Biology 1040, 1042 (4), 1041, 1043	
Chemistry 1010, 1012 (3); 1011 (1)	
Chemistry 1020, 1022 (3); 1021 (1)	
Chemistry 1030 (3), 1040 (3), 1031, 1041 (1)	
Physics 2010, 2020 (3), 2011, 2021 (1)	
Physics 2030, 2040 (3), 2031L, 2041L (1)	
Physical Education Activity (one course a semester)	2
HPER 1010-1044	
(or 1050 - 1053 for students with certified disabilities)	
or AERO 1010, 1020, 2010, 2020 or Music 306A	
Social Sciences	9
History 2010, 2011 (3)	
History 2020, 2021 (3)	
Social Science Elective	
Africana Studies 2010 (3)	
Anthropology 2010 (3)	
Economics 2010 (3)	
Geography 1010 (3), 1020 (3)	
Political Science 2010, 2011 (3)	
Psychology 2010 (3)	
Sociology 2010, 2020 (3)	

For the Bachelor of Science Degree

	Required Sem. Hrs.
English	6
English 1010, 1011H (3)	
English 1020, 1021 (3)	
Humanities	9
Literature	(3 hours required)
English 2010, 2011A-D, 2018 (3)	
English 2020, 2021A-D, 2028 (3)	
Foreign Languages	(6 to 12 hours required)
French 1010 (3)	
French 1020 (3)	
French 2010 (3)	
French 2020 (3)	
German 1010 (3)	
German 1020 (3)	
German 2010 (3)	
German 2020 (3)	
Spanish 1010 (3)	
Spanish 1020 (3)	
Spanish 2010 (3)	
Spanish 2020 (3)	
Art 1010, 1011 (3)	
Art 1012 (3)	
Music 1010, 1020 (3)	
Philosophy 2010 (3)	
Philosophy 2021 (3)	
Philosophy 2022 (3)	
Religious Studies 1010 (3), 2011 (3), 210 (3), 211 (3)	
Theatre 1010 (3)	
Theatre 1020, 1021 (2)	
Mathematics	3
(Prerequisites: 2 units of high school algebra or 1 unit of algebra and 1 unit of geometry)	
MATH 1010, 1011 (3)	
MATH 1020, 1021 (3)	
MATH 1030 (3)	
MATH 1040, 1041 (3)	
MATH 1050 (3)	
MATH 1060, 1061 (4)	
MATH 1070, 1071 (4)	
Natural Sciences	6-8
Biology 1010, 1012 (3), 1011, 1013	
Biology 1020, 1022 (3), 1021, 1023	
Biology 1030, 1032 (4), 1031L, 1033	
Biology 1040, 1042 (4), 1041, 1043	
Chemistry 1010, 1012 (3); 1011 (1)	
Chemistry 1020, 1022 (3); 1021 (1)	
Chemistry 1030 (3), 1040 (3), 1031, 1041 (1)	
Physics 2010, 2020 (3), 2011, 2021 (1)	
Physics 2030, 2040 (3), 2031L, 2041L (1)	
Physical Education Activity (one course a semester)	2
HPER 1010-1044	
(or 1050 - 1053 for students with certified disabilities)	
or AERO 1010, 1020, 2010, 2020 or Music 306A	
Social Sciences	9
History 2010, 2011 (3)	
History 2020, 2021 (3)	
Social Science Elective	
Africana Studies 2010 (3)	
Anthropology 2010 (3)	
Economics 2010 (3)	
Geography 1010 (3), 1020 (3)	
Political Science 2010, 2011 (3)	
Psychology 2010 (3)	
Sociology 2010, 2020 (3)	

University Requirements For A Bachelor's Degree

A bachelor's degree is conferred on students who satisfactorily complete a curriculum in one of the departments or programs. Students should consult the curriculum requirements for their specific program in the appropriate departmental section of the Catalog (consult Index). All candidates for a bachelor's degree must also satisfactorily complete each of the requirements of the University as listed below.

1. A minimum of 130 semester hours with a minimum cumulative average of "C" (2.00 quality point average). Credit hours earned in Remedial or Developmental courses are institutional credit; they are not applicable to credit hours required for baccalaureate or associate degrees.
2. A minimum of 48 semester hours at the 300 and 400 level of courses.
3. A minimum of 24 semester hours in a major with a minimum of 10 hours on the 300 and 400 level.
4. Six semester hours in English composition, ENGL 1010 and 1020. Students must earn at least a "C" in each of these courses; if they earn less than a "C" in either course, they must repeat it until they raise their grade to at least a "C." Students must satisfy this requirement in order to be admitted to the upper division or the professional component of their major.
5. Six semester hours in natural sciences with accompanying laboratories (BIOL 1010 and 1020, BIOL 1030 and 1040, CHEM 1010 and 1020, CHEM 1030 and 1040, PHYS 2010 and 2020, or PHYS 2030-2040, plus the appropriate laboratory components which must be taken with all of these classes).
6. Three semester hours in mathematics at least at the level of college algebra (MATH 1010).
7. Six semester hours of a survey of American history (HIST 2010 and 2020). One semester of Tennessee history (HIST 341) may be substituted for three of these hours.
8. Nine semester hours in humanities, including at least three semester hours in sophomore literature (any ENGL 2010 or 2020 course). The remaining seven hours may include another sophomore literature course and courses from two other humanities disciplines. The other disciplines include introductory level courses in philosophy, art appreciation, music appreciation, appreciation of drama, religious studies, or modern foreign languages. Courses in the practice of an art, such as creative writing, painting, sculpting, photography, singing, or playing a musical instrument, do not satisfy this requirement. The specific courses which satisfy the humanities requirement are listed under the preceding section on General Education Courses.
9. Three semester hours of an introductory-level social science course (ANTH 2010, ECON 2010, GEOG 1010 or 1020, POLI 2010, PSYC 2010, SOCI 2010 or AFAS 2010).
10. A course in computer literacy or a course in which computer literacy is demonstrated.
11. Two one-semester courses in Physical Education (HPER 1010-1044 OR HPER 1050-1053 for students with certified disabilities), Aerospace Studies (AERO 1010, 1020, 2010, 2020), University Marching Band (MUS 306A), or a combination thereof.
12. A Senior Project or Senior Seminar.
13. At least one academic year in residence and at least 30 semester hours of credit earned in residence with a minimum quality point average of "C" (2.00).

14. Twenty-five percent of the minimum hours required for the bachelors degree (130) must be completed at Tennessee State University and 24 of the last 30 hours must be completed in residence. Upon matriculation at the University, transfer hours must be approved in writing in advance by the department head and the dean of the school or college in which the student is earning the degree.
15. A degree seeking student may not register concurrently at Tennessee State University and at another institution and receive transfer credit for work taken at the other institution unless permission is granted in advance by the Dean of the school. This applies to correspondence, extension, electronically delivered, or evening courses as well as to regular courses in residence. In no instance can a student receive credit for more than 21 hours in a given semester.
16. All students must be admitted to the upper division or professional component of their major. This is normally done in the second semester of the sophomore year, or when approximately 60 hours of degree level credits have been accumulated. Students who change their majors must meet upper division admission requirements in effect for the new major at the time they seek admission to the upper division or professional component for the new major, as opposed to requirements in effect when they entered the University. Upper division admission requirements are specified by each department.

*Students for whom transfer equivalence of "A", "B", or "C" in ENGL 1010 and 1020 has been accepted by the University will be determined to have satisfied the English Proficiency requirement. A transfer student with a grade of "D" in either course must repeat it until a minimum grade of "C" is achieved. Any transfer student for whom there is a question in English Proficiency will be required to complete a writing sample which is scored holistically. Transfer students who have not demonstrated English Proficiency must remove the deficiency during the first semester in residence. All non-transfer students must complete the English Proficiency requirement no later than the end of the sophomore year.

**Veterans of the United States armed services 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 Records with his or her DD 214 card.

University Requirements for a Bachelor of Arts Degree

In addition to the University Requirements for a Bachelor's Degree, spelled out above, students who seek the Bachelor of Arts degree must complete 12 semester hours of a single foreign language at the college level. None of these hours can be applied toward satisfying the humanities requirement. Students who achieve advanced placement in a foreign language as a result of previous competency will have the number of hours reduced accordingly, but all candidates for the bachelor of arts must complete work through the intermediate level (courses numbered 201 and 202 or the equivalent). This requirement cannot be satisfied solely by work done at the high school level.

University Requirements for an Associate Degree

The University requirements for an associate degree are as follows:

1. Completion of at least 64 semester hours of credit. Remedial and Developmental courses may not be applied to meeting graduation requirements.
2. A minimum quality point average of "C" (2.00).
3. Completion of a minimum of 20 of the final 26 semester hours of course work in residence at TSU. Transfer hours in the final 26 hours must be approved in advance in writing by the head of the department and the dean of the school or college in which the degree will be awarded.
4. Completion of specific course requirements as outlined in the student"s Program of Study. Substitutions must be approved in advance in writing by the head of the department and the dean of the school or college in which the degree is to be awarded.

General Education Requirements for the Associate of Applied Science Degree

	Required Sem. Hrs.
English	6
English 1010 (3)	
English 1020 (3)	
Humanities	2-3
Art 1010 (2)	
French 1010 (3)	
French 1020 (3)	
German 1010 (3)	
German 1020 (3)	
Music 1010 (2)	
Philosophy 2010 (3)	
Philosophy 2020 (3)	
Philosophy 250 (3)	
Spanish 1010 (3)	
Spanish 1020 (3)	
Theatre 1010 (3)	
Theatre 1020 (2)	
Natural Sciences	12-16
Chemistry 100 & 100L (4)	
Chemistry 101 & 101L (4)	
Chemistry 250 (3)	
Biology 221 & 221L (4)	
Biology 222 & 222L (4)	
Biology 240 & 240L (4)	
Biology 241 & 241L (4)	
Social & Behavioral Sciences	3-9
Sociology 2010 (3)	
Psychology 2010 (3)	
Psychology 351 (3)	
Oral Communication	3
Physical Education	2
Activity (one course a semester)	
PE 11-53 (or 91-94 for students with certified disabilities)	

Second Associate Degree

A student must complete the curriculum prescribed for the second degree, with at least 24 semester hours in residence over and above the total number of hours completed for the first degree. The student must declare a second major and be advised by both departments.

Maximum External Credit Allowed From Various Sources for the Associate Degree Program at Tennessee State University

No more than a total of 33 semester hours of credit can be granted by a state university through any combination of external sources (Advanced Placement Program and College-Level Examination Program of the College Entrance Examination Board). Credit by examination is determined by University policy as stated in the University Catalog.

Should a student be granted the maximum total of 33 semester hours of credit through external sources, he/she must still complete all specific degree requirements as given in an outlined Program of Study in order to receive an associate degree at TSU. Students must meet the 24 semester hour residence requirement, and a minimum of 20 of the final 26 hours must be completed at Tennessee State University.

Second Bachelor's Degree

A student must complete all requirements for the first bachelor's degree before attempting to meet requirements for a second bachelor's degree. A student who holds a bachelor's degree may receive a second bachelor's degree from the University by satisfying the following requirements.

1. Meet all requirements for both degrees.
2. Complete at least 30 semester hours beyond the first bachelor's degree.
3. Attend the University for at least two semesters beyond the minimum time required for the first bachelor's degree.
4. Have a "C" (2.00) average on all work completed toward meeting the requirements for the second degree.
5. Complete application for admission to upper division in the second bachelor's degree program.

Second Major

A second major can be earned under the same degree by meeting the following requirements:

1. Meet all requirements for the major listed in the Catalog at the time of admission to the program.
2. Complete an application with the department chair of both majors requesting permission to pursue a second major.

Dual Degree Option

A student may pursue dual degree objectives (second or double major) through declaring a major in each department offering the degree sought. The student must have a major advisor assigned from both departments and must meet all requirements for both degrees. Both degrees will be posted on the student's transcript and a diploma will be issued for each degree. The dual degree objective should be declared as early as possible in the student's matriculation.

Advanced Graduate Admission for Undergraduates

An undergraduate senior student with a minimum total cumulative GPA of 3.0 who is enrolled in the last term of course work that will complete the requirements for a bachelor's degree, may request advanced graduate admission to enroll in 3 to 6 hours of graduate courses provided the total course load of graduate and undergraduate credit for the semester does not exceed twelve hours. Courses for seniors are limited to first-year graduate level courses. Graduate courses may not be used for credit toward an undergraduate degree. The Combination Senior is not considered a graduate student but may apply for admission to a graduate program upon completion of the bachelor's degree. However, advanced admission to take graduate courses does not guarantee subsequent admission to a graduate program. Courses taken for graduate credit may count toward a graduate degree when/if the student is admitted to a degree program at TSU and if approved by the program's graduate coordinator and departmental chairperson. The form for Advanced Graduate Admission and an Application to the Graduate School must be completed six weeks prior to the beginning of the semester in which advanced admission is sought.

Tennessee Board of Regents' Minimum Degree Requirements and Transferability of Courses that Fulfill Minimum Degree Requirements

All universities and community colleges in the Tennessee Board of Regents System (TBR) share a common set of Minimum Requirements for baccalaureate degrees or associate degrees designed for transfer. The Minimum Degree Requirements specify thirty-two semester credit hours in the following subject areas:

Subject Area	Semester Credit Hours Required
English Composition	6
Humanities, including at least 3 semester credit hours in literature	9
History TBR Universities require American History, except in a limited number of majors exempted from the requirement. (See specific university catalogs concerning majors that are exempt.) Community colleges may specify American History, Western Civilization, World Civilization, or World History in accordance with the requirements of institutions to which students plan to transfer. At either universities or community colleges, students may substitute 3 semester credit hours of Tennessee History for the American History required.	6
Natural/Physical Sciences and Mathematics, to include one year of science and at least one course in mathematics	9
Physical Education Activity Courses (to be taken as two one-semester credit hour courses) Institutions may substitute satisfactory participation in ROTC, marching band, or armed forces experiences for physical education activity courses.	2
Total	**32**

Every TBR institution incorporates the thirty-two semester hours listed above into its degree program requirements and accepts all courses designated as meeting these requirements at other TBR institutions. By ensuring the transferability of courses fulfilling the Minimum Degree Requirements, the TBR has eliminated unnecessary repetition of these courses by students transferring to institutions within the TBR System. Because each TBR institution has a unique mission and its own distinctive curriculum, an institution may require students to complete additional courses in the Minimum Degree subject areas and in other areas that may comprise an institutional General Education Program. Students planning to receive a bachelor of arts or associate of arts degree must demonstrate proficiency in a foreign language as prescribed in the institutional degree requirements.

Identifying Courses Satisfying the Minimum Degree Requirements

Although the courses fulfilling the minimum degree requirements may vary in actual design among institutions, many contain similar content. These courses are identified by common course rubrics (prefixes) and numbers in all TBR institutions to facilitate transferability. The actual courses designated by each institution to fulfill the Minimum Degree Requirements, including courses that may not be a part of the common course prefix and numbering pattern, are denoted in catalogs by the ◆ symbol. A complete matrix of courses that satisfy the Minimum Degree Requirements at all TBR institutions and an explanation of the common course rubric and numbering system are available on the TBR web page (www.tbr.state.tn.us).

THE DIVISION OF STUDENT AFFAIRS

Purpose

The Division of Student Affairs at Tennessee State University has three principal objectives.

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

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

Student services at Tennessee State University include the following units and organizations:

Vice President for Student Affairs
Assistant Vice President/Dean of Students
Residence Life and Associate Dean of Students
Off Campus Housing/Assistant Dean
University Counseling Center
Career Center
Cooperative Education
Floyd-Payne Campus Center
Graduate & Professional Opportunities
Health Services
Student Activities
International Student Affairs
Minority Student Affairs
Disabled Student Services
TRIO Programs
TSU Police Department

The Directors/Coordinators of these units and programs constitute the Council on Student Affairs which is administratively responsible to the Office of the Vice President for Student Affairs. The Vice President for Student Affairs reports directly to the President of the University and is vested with the authority for resolving all contested issues within the realm of student services, subject to final appeal to the President of the University. In addition to these offices and programs, there are standing committees assisting the University in policy development and administration. These include the Student-Faculty Advisory Committee, Committee on Scholarships and Awards, Financial Aid Committee and Faculty Advisory Committee on Sororities and Fraternities. The University is committed to the concept of student involvement and input in the formulation and development of University policies, programs and activities. In addition to student participation on committees at the University, there is an active Student Government Association. Other organizations specifically include the Student Union Board of Governors, Student General Assembly, Student Publications Board, Pan-Hellenic Council, Student Election Commission and many diverse and varied academic and non-academic clubs and organizations.

On-Campus Accommodations

The University provides eight residence halls/centers on campus: two for men four for women and two for co-eds. These residence halls/centers are designed to provide personal, social, and intellectual companionship for students. Each resident is held responsible for knowing and abiding by the rules and regulations for residence hall/center living. All residence halls/centers are staffed with a residence director and student residence assistants. Some residence halls/centers have an assistant residence hall director. The staff is responsible for the operation of the hall/center under the supervision of the director of residence life.

Room And Board

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

Housing Deposit

A $100.00 room reservation/housing deposit is required for all students who apply for university housing. The deposit is paid only once and remains on file as long as the student matriculates at the University. The deposit will be refunded within three (3) weeks following the last semester the student maintains an active status, provided the student officially checks out, the student turns in his/her room key, the assigned living space is clean, and there are no deductions for public area damages, defacement, or missing fixtures and/or furnishings.

The $100.00 will be forfeited if the resident fails to cancel the contract in writing with the Housing Office 14 days prior to the first official day of registration. The deposit is also forfeited if the resident fails to fulfill the contract (i.e., does not register for classes, etc.).

Food Service

The University provides food service for students. Three well-balanced meals are served each day Monday through Friday, and two meals are served on Saturday and Sunday. The University Cafeteria is located in the Otis L. Floyd-Joseph A. Payne Campus Center which seats 700 students and the Rudolph Residence Center which seats 180 students. There is a Snack Bar/Sub (Pizza Hut/Burger King/Taco Bell) on the second floor of the Campus Center.

Co-ed Residence Hall/Center

Harriett Hodgkins Hale Hall is a co-educational honors residence hall which houses upperclass men and women. It is a six-story, air conditioned facility; each room is semi-private. The hall is equipped with a card entry system, a combination barber/beauty salon, lounges, laundry room, computer lab, telephone services, an elevator, and apartments for the residence hall director and assistant director.

Harold E. Ford and John N. Ford Residential Complex is a co-educational residence center which houses upperclass men and women. The center consists of 122, two and four bedroom apartments. The apartments have either a patio or balcony. Each unit has fully furnished living, dining, and kitchen areas. The rent includes water, heating, and air with one full bath in the two bedroom units. Each student has his/her own bedroom with a personal phone line and computer data hook-up, a twin bed, desk, chair, a chest of drawers, and closet space. The complex is supervised by a director and two assistant directors. The complex includes a community center that houses the main office, computer lab, barber/beauty salon, and an exercise room. Outdoor basketball and volleyball courts are also available along with grilling areas for cook-outs. There are residential parking areas and bicycle racks. Fire safety and security measures are assured with the installation of fire alarms, a sprinkler system, and a security gate with card entry access that is monitored by the TSU Police Department.

Residence Halls For Men

Lena B. Watson Residence Hall for freshman men is a six-story, air conditioned facility with an elevator. This facility is equipped with a card entry system, a lounge, computer labs, a recreation/study area, laundry room, and telephone services, and apartments for the residence hall director and the assistant director.

Henry Allen Boyd Hall for sophomore and junior men is a seven-story, air conditioned facility equipped with an elevator. This facility is equipped with a card entry system, a lounge, recreational/study area, laundry room, computer lab, and telephone services, and apartments for the residence hall director and assistant director.

Residence Halls For Women

Merl R. Eppse Hall for upperclassmen and graduate students is a six-story, air-conditioned facility with an elevator. This facility is equipped with a card entry system, a lounge, recreation/study area, laundry room, computer lab, and telephone services and apartments for the residence hall director and graduate assistant.

Edna Rose Hankal Hall houses sophomore women. It is a three-story, air conditioned facility with an elevator and telephone services. This facility is equipped with a card entry system, a formal lounge, a beauty salon, laundry room, computer lab, and apartments for the residence hall director and graduate assistant.

Mary Wilson Hall is an air conditioned, six-story facility that houses freshmen women. This facility is equipped with card entry system, study lounges, cooking areas, computer lab, telephone services, as well as apartments for the residence hall director and two assistant directors.

Wilma Rudolph Residence Center is a six-story facility that houses upperclass women. The suite style rooms are arranged for double occupancy. This facility is equipped with a card entry system, study lounges, beauty salon, telephone services, and apartments for the residence hall director and assistant residence hall director.

Off Campus Accommodations

The University provides two apartment style living arrangements. These are co-ed apartments serving upperclassmen. They are designed to allow the student to experience some degree of independence from traditional residence hall living. This allows the student to further develop their social and communication skills, while still maintaining their privacy.

Thomas and Jones Apartment Complex consists of 21 apartments that houses 63 students. Each apartment has a living area (unfurnished), refrigerator, washer and dryer, cable and telephone service. This complex is serviced by a residence hall director that lives on site.

Court Villa Apartment Complex is an upperclass facility that consists of 66 apartments. This complex houses a maximum of 194 students. Each apartment has a fully furnished living area, dining area, refrigerator, stove, cable television, telephone service and a separate laundry facility for the complex. This complex is serviced by both an on-site residence hall director and assistant residence hall director.

UNIVERSITY COUNSELING CENTER

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

Counseling services for handicapped students are designed to assist them in functioning within the university setting and to enable their full participation in the academic, cultural and social activities at TSU. A vocational rehabilitation counselor is available to provide individualized services in the area of orientation, mobility, admissions, registration, parking, housing, and campus activities.

Location: Queen Washington Health Center
Second Floor
Main Campus
Telephone: 963-5611

NEW STUDENT ORIENTATION ACTIVITIES

The orientation activities for new students are presented in the summer (Pre-Fall Priority Orientation), and at the beginning of the Fall, Spring, and Summer Semesters. These activities help to introduce students to the University, administration, faculty, staff and other students, departmental programs of study, buildings, and general campus life.

Location: Queen Washington Health Center
Second Floor
Main Campus
Telephone: 963-5611

TRIO PROGRAMS

Educational Talent Search, Upward Bound and Student Support Services Projects at Tennessee State University are federally funded pre-college and college programs designed to provide cultural enrichment and supportive developmental services to a targeted population of students. The programs also seek to assist them in developing creative thinking, effective expression, good study habits and positive attitudes toward learning. The projects assist students in developing goals and skills necessary to enter and to achieve success in post-secondary training programs and in institutions of higher learning. Student Support Services also provides tutorial assistance to students.

Location: Frederick S. Humphries Consumer Sciences and Nursing Education Complex
Lower Level
Main Campus
Telephone: 963-7461

STUDENT ACTIVITIES

A balanced program of activities is the goal of the University, the Student Government Association, the Student Union Board of Governors, and Student Organizations. Student Activities are coordinated by the Assistant Vice President for Student Affairs and the Director of Student Activities.

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

Participation in organizations may serve to develop special talents and skills in music, dramatics, writing and religious expression or to develop an appreciation and capacity for leadership, cooperation and fellowship. In making a choice of organizations, the student should consider his/her interests, health, scholarship, finances, and home relations. Freshmen are urged to limit their participation in organizations and other extra-curricular activities during the first semester when numerous academic, social, and other adjustments have to be made.

INTERCOLLEGIATE ATHLETICS

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

The University is a member of the National Collegiate Athletic Association and the Ohio Valley Conference (OVC).

The Student Handbook

The Student Handbook is a means of facilitating communication among the members of the University. It serves as a source of information which will help the student understand his/her privileges, rights, and responsibilities pertaining to student affairs.

CAMPUS POLICE

Mission Statement

Tennessee State University Police Department is charged with the mission of protecting the students, faculty, staff and property owned, leased or operated by the University.

Responsibilities

1. Provide 24-hour police services
2. Provide a proactive environment for crime prevention
3. Promote an atmosphere conducive to learning and social diversity
4. Facilitate the community policing concept to encourage student involvement in the protection of property and life

CAREER CENTER

The Career Center provides invaluable assistance in preparing students for the world of work. The Career Center has developed a variety of programs and services to help identify and meet career and personal goals. Its professional staff's commitment ensures that students are given adequate guidance throughout their career planning and job search process. Additionally, annual development and employment opportunities include the University-Wide Career Fair, Technical Career Fair, On-Campus Recruitment/ Interviews, Freshman Orientation & Career Planning Seminars, Nashville Area College-to-Career Fair, Teacher Recruitment Fair, and Student Motivation Task Force Sessions.

The services of the Career Center are free to recruiters, students, alumni, and faculty/staff of the university. The Career Center has a fully equipped computer lab to accommodate on-line services, i.e., resume preparation, job announcements, and interviews at www.tnstate.edu/careers. The Career Center regularly disseminates significant information, job announcements, on-campus interview schedules, and seminar schedules. Annually, a calendar of events and a Career & Student Development Guide which provides information on career planning and resume writing are published.

CAREER EMPLOYMENT PROGRAM

The Career Employment and Recruitment Activities Program offers career-related programs and activities that generate career employment for graduating seniors, graduate students, and alumni. The program offers a "career networking" environment that promotes career awareness, employment opportunities, career referrals, and posts job announcements. It brings to campus many Fortune 500 company executives, and distinguished professionals visit the campus for information sessions and interviews.

The Fall Career Fairs serve as the "kick off" for the recruitment season. Leading corporations and organizations participate in both of the Career Fairs and the On-Campus Recruiting Program. Students are encouraged to register with the Career Center as soon as they return to campus in the fall in order to develop resumes early enough for participation in the Career Fairs. Typically, students who are within one semester to a year of their graduation should participate in the On-Campus Recruiting Program to enhance their career search. Through this program, graduates may gain career employment prior to graduation. Employers representing local/national business, governmental agencies, and social services will interview students during the fall/ spring semesters for career placement. Students participating in the on-campus recruiting program should attend a career workshop prior to interviewing.

More than 70 local and national school systems seeking to hire education majors attend the spring Teacher Recruitment Fair and 150 local employers participate in the spring Nashville Area College to Career Fair. Also held in the spring is the Student Motivation Task Force (SMTF), where a group of alumni/corporate executives visit the campus to interact with students, faculty, and staff by providing classroom presentations and networking opportunities.

The Career Employment Program maintains an extensive data bank of job announcements, referrals, postings, and can be accessed on-line at www.tnstate.edu/careers, sidebar resume/registration, sidebar JobDirect, and other links.

CAREER COUNSELING & ORIENTATION PROGRAM

The Career Counseling and Orientation Program offers group and individual counseling in the career planning process. Career planning workshops/seminars are conducted weekly and at other announced times to assist students in securing career positions and employment while matriculating. Students may register with the Career Center by attending a career planning seminar and completing ***CareerConnections*** at www.tnstate.edu/careers, sidebar Resume/Registration. Before registering on line, students must provide the Center with their name and social security number. From individual and group counseling and seminars/workshops, the following critical information and skills are acquired:

1. Resume preparation and development
2. Interview skill development
3. Job search strategies
4. Career Center's resource utilization (computer lab, web links, job announcements, resource library, on campus recruiters, interview schedules, staff assistance, etc.)
5. Alumni and relational networking
6. Fortune 500 corporate and professional presentations, information sessions, and interviews

The Career Center also offers DISCOVER, a computerized career/decision-making program designed to match students' interests, aptitudes and skills with available careers.

STUDENT EMPLOYMENT/INTERNSHIP PROGRAM (OFF CAMPUS)

The Student Employment/Internship Program (Off-Campus) which is also known as Job Location & Development (JLD) provides for every student who desires to work, an opportunity to gain employment and valuable work experience (primarily career related). The program is designed to provide off-campus part-time, full-time, summer employment, and internship opportunities for all students enrolled at TSU. The need to work to cover college expenses is a necessity for many college students and serves as an excellent experiential (career/discipline related) work opportunity.

STUDENT EMPLOYMENT PROGRAM (ON CAMPUS)

The Student Employment Program (On Campus) is a part of the **Federal Work Study Program (FWS)** which includes **the Community Learning Service (CLS), and Academic Work Scholarship (AWS)** that provides on-campus part-time employment and for off-campus community service agencies to currently enrolled eligible students. Eligibility for these federally funded, needs-based programs (FWS and CLS) is determined by the Financial Aid Office. These programs are designed to assist students in meeting educational expenses through part-time employment during the academic year and/or summer.

Placements for the FWS are coordinated by the Career Center. Students are required to attend a placement session where they are given information on general work ethics and job expectations. Students are required to fill out direct deposit, W4, I-9 and work assignment notice forms before they are assigned a placement.

Cooperative Education

Cooperative Education at TSU is dedicated to the philosophy that gainful employment in the student's chosen field before graduation affords the student a number of opportunities not otherwise available to apply methods and principles learned in the classroom to actual work situations and problems; to enhance academic motivation; to help defray the cost of education; to assist in career selection; to improve job preparation and accelerate professional maturity; and to develop better opportunities for employment upon graduation.

To enroll in the program, a student must:

1. have a TSU grade point average of 2.50 or better (undergraduate).
2. have completed at least two semesters of college work.
3. be a degree seeking student at TSU in good standing (not on probation or under suspension).
4. be willing to work a minimum of two work periods.

Cooperative Education offers supervised programs of learning experiences undertaken by students in a governmental, business, or industry setting. Work assignment objectives or learning plans are reviewed and approved by faculty. Student activity and progress are monitored, evaluated and graded by an assigned faculty member. Students can participate in the **Alternate Plan** - minimum of two co-op work semesters with a school semester in between or **Parallel Plan** - maximum 20 hours of co-op work per week with 12 hours of academic study per semester.

Cooperative Education is open to sophomores and juniors who are full-time students, possess the minimum 2.50 GPA, and have completed the required prerequisites for their major field of study. Travel will be necessary because over 95% of co-op work opportunities are out of the Middle Tennessee area.

Three to six hours of academic credit is awarded for each Cooperative Education work experience. Students must register through the Cooperative Education office for the appropriate co-op course prior to beginning any co-op work term.

The Office of Cooperative Education Office is located in the Floyd-Payne Campus Center, Suite 306, phone (615) 963-7481.

GRADUATE & PROFESSIONAL OPPORTUNITIES

The Office of Graduate & Professional Opportunities which was established as a Presidential Initiative in August 1995, seeks to prepare, motivate, and support students who plan to pursue graduate and professional studies upon graduating from the University. The office targets students during their freshman year and tracks them throughout their matriculation. It is designed to equip students with the tools necessary to make informed decisions about opportunities for educational advancement. The office supports students through a variety of services and activities, including its annual Graduate & Professional School Fair; Graduate School Workshops, Personal Statement Workshops; Campus Visitation Programs; Standardized Tests Preparation Programs; sponsoring informational forums in law, medicine, business, and graduate studies; and providing academic counseling to interested students and alumni. The office also houses a reference center on graduate and professional degree programs and maintains an active web site (http://www.tnstate.edu/gpo). The program functions as a departmental unit within the Division of Student Affairs and works closely with various departments at the university. For more information please call 963-5176 or visit the office in the Floyd-Payne Campus Center.

Tennessee Pre-Professional Fellowship Program

The Tennessee Pre-Professional Fellowship Program (TPFP) is a state-supported, summer enrichment program for African-American residents of Tennessee who wish to pursue a career in law, dentistry, medicine, pharmacy, or veterinary medicine. The program is designed to increase the number of African-American residents of Tennessee who pursue professional degrees in the state. The program has three primary components: Associates, Scholars I, and Scholars II. The Associate Program will pay for students who have completed their freshman or sophomore year to take up to eight credit hours at any University of Tennessee or Tennessee Board of Regents two-year or four-year institution during the summer session. All associates in the program are responsible for paying the technology and activity fees and are required to have a cumulative GPA of 3.00. The Scholars I and II components are for junior and senior-level students who are interested in pre-health science and pre-law. For the scholars segment, the TPFP provides a summer enrichment program. The cost for the program is underwritten by the state of Tennessee. In order to participate as a Scholars I student, you must have completed your junior year of college. In order to participate as a Scholars II student, you must have completed your senior year of college and have been formally admitted to a law, medical, dental, pharmacy, or veterinary school. The Pre-Law Scholars I and II Programs are housed at the University of Memphis. The Pre-Health Science Scholars I Program is housed at East Tennessee State University and the Pre-Health Science Scholars II Program is housed at the University of Tennessee, Memphis. For more information please call 963-5176 or visit the program in the Floyd-Payne Campus Center. You may also visit the program's web site (http://www.tnstate.edu/tpfp).

MINORITY STUDENT AFFAIRS

The Office of Minority Student Affairs' overall purpose is to provide programs and services for the Caucasian student at Tennessee State University. The goal of these programs and services is to promote the academic and personal growth and development of the minority student. Furthermore, these programs and services are reflective of the development and demographic profiles of the student population and responsive to the special needs of individuals. The Office of Minority Student Affairs is the liaison for the minority student to University departments. The Office is committed to helping the University become sensitive to the needs of the minority population.

To accomplish the overall purpose, the Office of Minority Student Affairs goals encompass the following:

- access the needs of minority students in selected areas, set priorities among those needs, and respond to the extent that the numbers of students, facilities and resources permit;
- orient minority students to the culture of the institution;
- assist minority students to determine and assess their educational goals and academic skills;
- coordinate services to help minority students achieve educational goals and attain or refine academic skills necessary to perform adequately in the classroom;
- promote the intellectual, career, social, and moral development of the students;
- promote and deepen majority students' understanding of minority students' culture and heritages;
- provide training in leadership skills and other personal and social skills for minority students;
- offer or identify appropriate minority mentors and role models;
- provide educational efforts for both majority and minority students that focus on: an appreciation of aesthetic and cultural diversity; self-assessment of cultural awareness and possible prejudices; and changing prejudicial attitudes of behaviors.

POLICY ON ID CARDS

The T.S.U. Identification Card is your official University identification throughout your entire enrollment. This card is your means of identification for library privileges, athletic events and any other University functions or services that you may be entitled to receive as a University student. This card is permanent and is to be carried at all times; it is to be presented to secure services and to authenticate privileges at any University facility. There will be a non-refundable fee of $10.00 charged for lost, stolen or mutilated cards. The fee should be paid at the Cashier's Office and your receipt should be taken to the ID station. Lending this card to anyone or failure to present it when requested by University officials is a violation of University regulations and subjects the holder to disciplinary action.

INTERNATIONAL STUDENT AFFAIRS

The International Student Affairs program at Tennessee State University provides technical assistance to all foreign students in connection with their status in the United States and their needed communication with the United States Immigration Service and their various Embassies. The program also provides planned programming and special events that make use of the strengths and skills that this population of students brings to the University and the surrounding community. Students are assisted with all official communications to their respective home governments, including clearance for foreign currency exchange. In addition, foreign students may utilize the advisor function of the program to assist them in their cultural assimilation into the lifestyle they experience in the United States and to assist them with other needs they may have specific to their status.

STUDENT HEALTH SERVICES

The Student Health Service is maintained to safeguard the health of students. The University provides these services through the Queen Washington Health Center. Services are available from 8 a.m. to 4:30 p.m. Monday through Friday. Services include first aid, emergency services, counseling on health problems, referrals, and the communication of pertinent information to consulting physicians, hospitals, clinics and other agencies.

Clinics are held daily, Monday through Friday, by a physician who examines, administers or prescribes treatment and medication. No charges are made for first aid and drugs used in simple treatment. Students suffering from complex medical/surgical problems are hospitalized at local hospitals of their choice (at their own expense). The University accepts no responsibility for any student requiring hospitalization. Therefore, students are strongly encouraged to enroll in the student health insurance program. Insurance enrollment information is located in the Student Health Center and Student Affairs Offices.

DISABLED STUDENT SERVICES

The Office of Disabled Student Services seeks to coordinate university-wide services available to students with disabilities. Services range from providing physical accommodations on campus to helping students with documented learning disabilities succeed in classroom activities. Additionally, the office attempts to improve the understanding level of and support from faculty, staff, and the entire campus community.

FINANCIAL AID

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

All students who wish to be considered for federal financial aid are required to complete the Free Application for Federal Student Aid. This application is available in the high school guidance counselor offices, the Student Financial Aid Office at the university or online at www.fafsa.ed.gov. To be eligible for Title IV Programs a student must:

- meet program eligibility requirements.
- be enrolled or accepted for enrollment in a degree seeking program on at least a half time basis.
- comply with selective service and anti-drug requirements.
- not be in default on a loan or owe a repayment to a Federal Title IV Program.

Sources of Federal Aid

Federal Work Study Program - Provides part-time employment on campus.

Federal Supplemental Educational Opportunity Grant Program - Provides grants which are federally funded.

Federal Perkins Loan Program - Provides low interest loans to eligible students.

Federal Pell Grant Program - Provides entitlement grants to eligible students.

Federal Direct Student Loan Program - Provides low interest loans from the federal Department of Education.

Tennessee Student Assistance Award - Provides grants to assist undergraduate Tennessee students in financing a post-secondary education. Must complete the Free Application for Federal Student Aid.

Parents Loan for Undergraduate Students (PLUS) - Provides loans to parents of undergraduate dependent students directly from banks, credit unions, savings and loan associations or other financial institutions.

Scholarships

Minority Grant Program - Provides grants to eligible Caucasian undergraduate students who have a 2.50 GPA on a 4 point scale and a 19 ACT score and who are residents of Tennessee.

Academic Work Scholarship Program - Provides employment of an educational nature and is awarded to Tennessee high school students who graduate in the top quartile of their graduating class and have a minimum ACT of 19 or equivalent SAT. The award is renewable if the student maintains a 2.90 GPA or above.

Presidential Scholarship - Provides scholarships which cover full maintenance fees plus room and board to Black Tennessee high school graduates who have a minimum ACT of 21 or equivalent SAT and a 3.00 GPA on a 4 point scale; preference may be given to students with the highest GPA or test score. The award may be renewed if the student maintains a GPA of 3.0 or above.

Departmental and University Scholarships Program - Provides scholarships from business and industry through the different departments of the University. The scholarship program is administered through the scholarship committees.

Teacher Loan/Scholarship Program - Provides loans/scholarships to eligible residents of Tennessee.

(**NOTE**: Scholarships/Grants: The Internal Revenue Service Publication 520 states that:

- you must be a candidate for a degree or your scholarship is taxable.
- only amounts for tuition, fees, books, supplies and equipment are not taxable. Amounts for other expenses, such as room, board and travel are taxable.)

Standard of Satisfactory Progress for Financial Aid

In an effort to comply with the "Code of Federal Regulations," the University has developed the following Standard of Satisfactory Progress for students (graduate and undergraduate) to maintain or re-establish eligibility to receive Title IV student financial aid funds. The effective date of this regulation was January 1, 1984.

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

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

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

A student who earns the minimum number of hours but whose GPA is less than the expected minimum by not more than .2 of a point will be placed on satisfactory progress probation. Also a student who earns the minimum GPA but who fails to obtain the minimum expected number of hours by not more than two semester hours will be placed on satisfactory progress probation and will be considered to be maintaining satisfactory progress. In each of these two categories the student will be given one full-time academic year to meet the stated cumulative GPA and hours as shown in the progression chart.

If this failure occurred because of a mitigating circumstance, the student may appeal to the Satisfactory Progress Committee to continue to receive financial aid. If the committee determines such student had a mitigating circumstance, he/she will be considered to be making satisfactory progress. During that year he/she must raise his/her GPA and total hours earned to the required level as shown in the chart.

Special Services students will be required to meet the same requirements as other students; however, their GPA will be determined based on the agreement between the University and the U.S. Department of Education.

Even though all students will be given one academic year (fall, spring, and summer semesters) to comply with or achieve the satisfactory progress standard, their progress will be measured at the end of the spring and/or summer semesters to get students who enter the University at different times on the same full-time measuring schedule. A student who attends the fall and spring semesters and is not in compliance with the policy at 3/4-time the end of the spring semester may use summer school to achieve compliance. If such student does not attend summer/school, he/she will be considered to have used a full academic year's eligibility (three semesters); such student will not be eligible for Title IV aid for the upcoming fall semester.

A student who has used more than five and one-half increments but less than six will be allowed to receive aid for the next semester. The maximum time given a full-time undergraduate student to complete a four year course of study is six years; for a three-quarter time student, nine years; for a one-half time student, 12 years with a minimum 2.00 average on a 4.00 scale. Eligible students who matriculate at less than a one-half time level will be treated in accordance with their level of matriculation.

Most departments at the University require the completion of 130 semester hours for a student to graduate (see chart). An eligible student who matriculates at less than a one-half time level will be treated according to his/her matriculation level. However, for Pell Grant recipients, the maximum years may be five.

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

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

A student who is administratively withdrawn from the University, with appropriate documentation, for reasons not related to misconduct, or who has to withdraw for medical reasons relating to him/herself, spouse or a family member, will not be charged for using a semester's eligibility. Therefore, the semester will not count toward the six years maximum, even though it will be counted by the computer. The semester(s) for which the student was withdrawn will be added to the six year maximum, if the student has not received his/her bachelor's degree.

If a student matriculates for six years and has not completed his/her course of study and failure to complete his/her course of study was caused by the University (example: changing requirements or recruiting students into another program which may be critical to the University), such student will be given a reasonable amount of additional time to complete the new course of study.

Most departments at the University require the completion of at least 30 semester hours to receive a master's degree, 30 semester hours to receive a specialist degree and at least 72 semester hours to receive a doctoral degree. A full-time graduate student will be expected to progress toward the specialist degree and doctoral degree at the same rate as required for the master's degree.

All graduate students are expected to maintain a minimum GPA of 3.00. When a student has completed nine or more graduate hours with a GPA less than 3.00, he/she will be given probationary status but will remain eligible to receive Title IV aid. Probationary status must be removed by raising his/her cumulative GPA to 3.0, or better during the next nine hours of graduate work to maintain eligibility.

SATISFACTORY PROGRESS FOR FINANCIAL AID ELIGIBILITY

UNDERGRADUATE

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

GRADUATE

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

CHILD CARE CENTERS

The Department of Family and Consumer Sciences operates two centers: the Early Learning Center on the Main Campus and the Child Care Center on the Avon Williams Campus.

The Child Care Center provides convenient, dependable and professional child care for students, staff and faculty while attending classes on the Avon Williams (downtown) Campus and the main campus, when feasible. The program currently operates during the evening hours, Monday through Thursday. Children three years of age and older are eligible for enrollment.

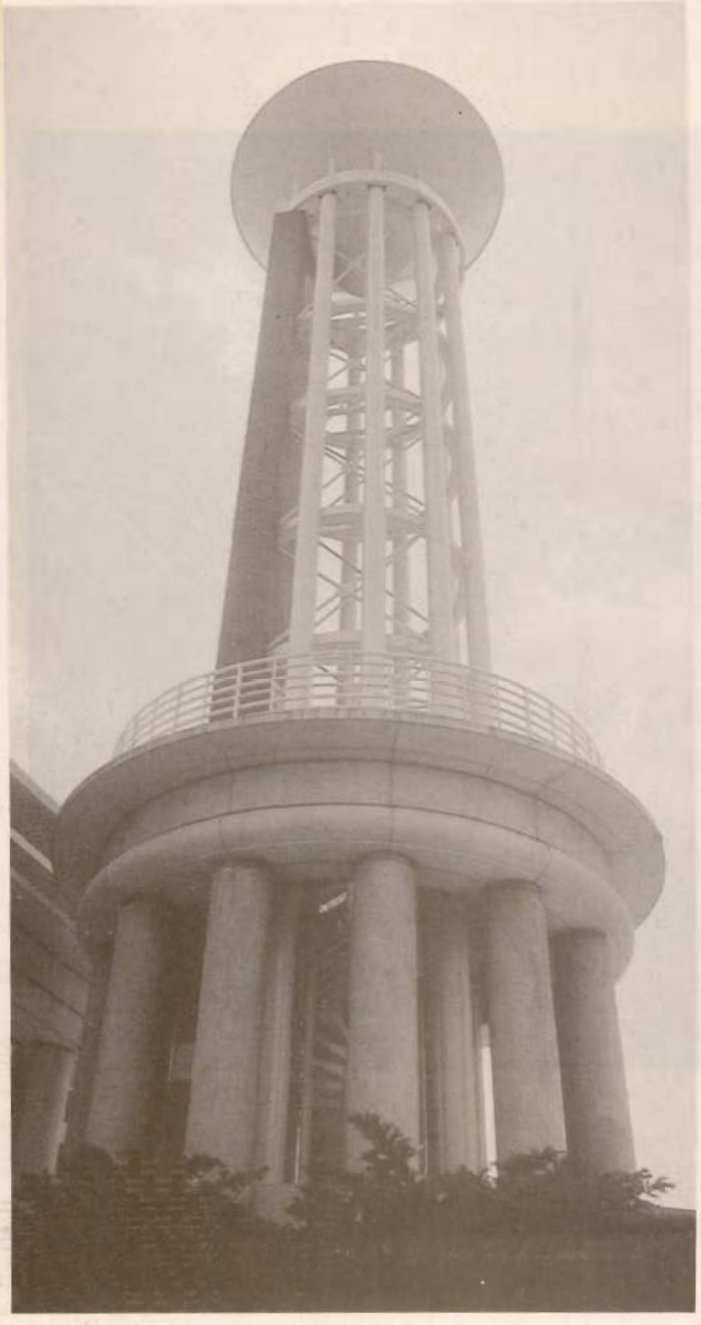
There is a non-refundable registration fee of $5 for first-time enrollment. The fee is per hour, per child, with a $.50 reduction per hour for the second and third child. Parents are billed monthly.

The Early Learning Center, located in the Frederick S. Humphries Consumer Sciences and Nursing Education Complex, is based upon a strong commitment to quality education for children and for the University students it serves. The philosophy of the program is derived from a combination of the major theories of child development: Jean Piaget for cognitive development; Erik Erikson and Burton White for social-emotional development. The program is based on the assumption that preparation for intelligent and independent thought begins in the preschool years, and practice in productive thinking is necessary for that to occur.

The program is also based upon the assumption that children are unique individuals developing in stages at different rates. The Center on the main campus is open Monday-Friday, during the school sessions/semesters. Four methods of fee payments are available.

For information about the programs, call 963-5601 (both centers) Department of Family and Consumer Sciences or 963-7286 (Avon Williams Campus Child Care Center) or 963-5591 (Early Learning Center Main Campus).

ACADEMIC COLLEGES, SCHOOLS AND PROGRAMS



This section includes information on the following:

- COLLEGE OF ARTS AND SCIENCES
- COLLEGE OF BUSINESS
- COLLEGE OF EDUCATION
- COLLEGE OF ENGINEERING AND TECHNOLOGY
- SCHOOL OF AGRICULTURE AND CONSUMER SCIENCES
- SCHOOL OF ALLIED HEALTH PROFESSIONS
- SCHOOL OF NURSING
- AEROSPACE STUDIES
- THE SCHOOL OF GRADUATE STUDIES
- ACADEMIC ENRICHMENT, ADVISEMENT, AND ORIENTATION
- UNIVERSITY HONORS PROGRAM
- CENTER OF EXCELLENCE FOR RESEARCH AND POLICY ON BASIC SKILLS
- CENTER FOR EXCELLENCE INFORMATION SYSTEMS, ENGINEERING AND MANAGEMENT
- CENTER FOR EXTENDED EDUCATION
- ACADEMIC INTERVENTION CENTER
- OFFICE OF SPONSORED RESEARCH

ACADEMIC ABBREVIATIONS

AC	Accounting
AE	Architectural Engineering
AERO	Aerospace
AFAS	Africana Studies
AGSC	Agricultural Science
AHP	Allied Health Professions
AIT	Aeronautical and Industrial Technology
ANTH	Anthropology
ART	Art
ASOR	Arts and Sciences Orientation
BE	Business Education
BIS	Business Information Systems
BIO	Biology, Botany, Microbiology, Science and Zoology
BL	Business Law
CCS	Cardio-Respiratory Care Sciences
CE	Civil Engineering
CHEM	Chemistry
CJ	Criminal Justice
CLT	Clothing and Textiles
COOP	Cooperative
CS	Computer Science
DH	Dental Hygiene
DIGN	Design
DSEN	Developmental Studies English
DSMA	Developmental Studies Mathematics
DSRD	Developmental Studies Reading
DSSK	Developmental Studies Study Skills
EC	Economics
ECCD	Early Childhood, Child Development
EDAD	Educational Administration
EDCI	Education, Curriculum and Instruction
EDRD	Education Reading
EDSE	Education, Special Education
EE	Electrical Engineering
ENG	English
ENGR	Engineering
FCS	Family and Consumer Sciences
FDS	Foods
FN	Finance
FR	French
GEOG	Geography
GER	German
HCA	Health Care Administration and Planning
HEA	Health
HIM	Health Information Management
HIST	History
HMGT	Home Management
HP	Honors Program
HPER	Health, Physical Education, and Recreation
HTA	Hospitality Tourism Administration
JOUR	Journalism
MATH	Mathematics
ME	Mechanical Engineering
MFL	Modern Foreign Languages
MG	Management
MIS	Management Information Systems
MK	Marketing
MSVU	Military Science, Vanderbilt University
MT	Medical Technology
MUS	Music
NTR	Nutrition
NURS	Nursing
OR	Orientation
OT	Occupational Therapy
PA	Public Administration
PE	Physical Education
PHIL	Philosophy
PHY	Physics
PISI	Political Science
PSY	Psychology
PT	Physical Therapy
QM	Quantitative Methods
RE	Real Estate
REC	Recreation
RSEN	Remedial Studies English
RSMA	Remedial Studies Mathematics
RSRD	Remedial Studies Reading
RS	Religious Studies
RTV	Radio and Television
SOC	Sociology
SPCH	Speech
SPN	Spanish
SPTH	Speech Pathology and Audiology
STAT	Statistics
SW	Social Work
THEA	Theatre

THE COLLEGE OF ARTS AND SCIENCES

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General Statement: The College of Arts and Sciences provides a basic undergraduate education for those students planning (1) to continue in graduate study, (2) to enter the professions, or (3) to engage in other gainful occupations and vocations.

The arts and sciences address the whole person. They should stir the mind and vivify the spirit. By inducing habits of logical and dispassionate thought and by promoting the development of creative energies, the Arts and Sciences faculty aims to guide students to enrich their lives and enhance their vocational skills. In keeping with the aims of the University, the purpose of the College of Arts and Sciences is twofold: liberal and technical. The curricula and programs of the College aid students to develop skills in solving problems, communicating, and working in cooperation with others that are essential in all walks of life. Encouraging students to be lifelong learners and self-motivated individuals are also important aims of the College.

Evening Studies Program

In addition to offering traditional degrees through its eleven departments and Interdisciplinary Degree program, the College offers an Evening Studies Program designed to meet the educational and retraining needs of the working adult. It encourages non-traditional students and senior citizens to seek renewed acquaintance with the various disciplines represented in the arts and sciences. Thus, students may pursue a degree or simply take courses of interest. The Evening Studies Program offers only the B.S. degree in Arts and Sciences (the interdisciplinary degree).

The College also offers a significant number of general education classes in the evening at off-campus sites through the Center for Extended Education and Public Service. In addition, the College offers a growing number of courses through alternative means of delivery, such as videotape, compressed video, and the internet.

Accreditation

Individual academic programs in the College of Arts and Sciences are accredited by the national, regional, and state agencies which accredit programs. The Art program is accredited by the National Association of Schools of Art and Design (NASAD), the Music program is accredited by the National Association of Schools of Music (NASM), and the program in Social Work is accredited by the Council on Social Work Education (CSWE). All teacher certification programs in the College are accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) extends national accreditation to the entire teacher certification program of the University.

Teacher Education

The College of Arts and Sciences offers Teacher Certification curricula in the following endorsement areas: Art, Biological Sciences, Chemistry, Elementary Education (with concentrations in language arts and social studies, science and mathematics, and child development and learning), English, Government, History, Mathematics, Modern Foreign Languages (with a concentration in either French or Spanish), Music, Speech Communication, and Theatre.

All students who seek certification in any of these programs must be formally admitted through the College of Education, usually in the sophomore year. Admission requires a 2.75 cumulative grade point average and a passing score on the Pre-Professional Skills Test (PPST) or the Computer-Based Academics Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, a 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT). For a complete list of admission and retention requirements in the Teacher Certification Program, see pages ___ of the Catalog. Admission is a prerequisite for upper-level certification courses. Students interested in certification should consult the teacher certification advisor in the program of their choice.

General Education Core Requirements: Students in Arts and Sciences must satisfy all of the general education requirements spelled out on pages ___ in the Catalog. Individual departments may insist that their students fulfill these requirements in particular ways, such as by specifying which courses may be used to satisfy the literature, social science, natural science, or humanities requirements. Students should consult the departments' requirements in their program descriptions in this section of the Catalog.

In addition to the core education requirements for all students in the University, the College of Arts and Sciences requires that all of its students complete Computer Science 121 or the equivalent, Speech 220 or 230 or the equivalent, and Arts and Sciences Orientation (ASOR) 100 or the equivalent as part of their general education. Teacher certification students should take EDCI 101 in place of ASOR 100.

Admission to Upper Division of Programs: Student majors in all Arts and Sciences programs must be formally admitted to the upper-division components of their programs of study. Students must apply for this status through their department or program, and the department or program must give official admission to its upper division: students must initiate the process, and admission is not automatic. (Students who have completed 70 semester hours before the beginning of the spring, 1999, semester are exempt from the formal admission requirement.)

For full admission to the upper division of a program, students must have achieved at least a grade point average of 2.0 on all college-level work. Some programs require a higher average; see individual programs in the Arts and Sciences portion of the Catalog, and consult departmental forms. Students must also have completed the following requirements:

1. Completed all remedial-developmental requirements.
2. Removed all high school deficiencies.
3. Completed all general education requirements, including
   a. an acceptable orientation course
   b. six (6) semester hours of English composition (ENGL 1010, 1020), with a minimum grade of C in all courses
   c. six (6) semester hours of sophomore literature
   d. six (6) semester hours of American history (HIST 2010, 2020)
   e. a college-level mathematics course (MATH 1010 or above)
   f. two (2) semesters of science, including the laboratories accompanying the lectures
   g. an acceptable social science course beside HIST 2010, 2020
   h. two (2) humanities courses from two different disciplines
   i. a course in computer literacy or more advanced computer science
   j. a course in oral communication (ordinarily SPCH 220 or 230)
   k. two (2) semesters of physical education activity (HPER 1010-1053), marching band (MUSC 2010), and/or AERO 1010, 1020, 2010, 2020.

4. Completed the Rising Junior Examination administered by the University.

Some departments and programs may specify additional general education courses or introductory courses in the major discipline before students are admitted into the upper division of the degree program., For these other requirements, students should see statements in individual departments and programs in the Arts and Sciences portion of the Catalog, and should consult advisors.

For students seeking teacher certification, the requirements for admission are those for the Teacher Education Program, spelled out on pages ___ of the Catalog.

Students may seek a temporary status of tentative admission to begin work on the upper division of their major in the same semester they are completing their general education and other introductory courses. Students must be enrolled in all remaining remedial-developmental, high school deficiency, and general education courses before tentative admission is granted. Tentative admission is valid only for the semester for which it is issued. Students who seek a second semester of tentative admission must re-apply for tentative status and will have their total course load restricted in that semester.

The College wants to assist students toward completing degree requirements as quickly as possible. It recognizes that it can best achieve this goal by seeing that students proceed toward the degree in a logical fashion, so that they first remove all deficiencies that prevent them from taking college-level courses, and then meet general education requirements and lower-level requirements in their major programs before embarking on their upper-division programs.

Graduation Requirements: As well as satisfying the University requirements for graduation, all graduates of the College must earn at least a C in all courses which are used to satisfy the program requirements in the major (as opposed to the general education requirements and electives). Required courses in the major program in which less than a C is earned must be repeated until the minimum grade is earned. As part of University requirements, all students must earn at least a C in Freshman English (ENGL 1010 and 1020).

All graduates of Tennessee Board of Regents institutions are required to take an examination or examinations in the academic year in which they graduate to measure the effectiveness of their core curriculum and/or their major program. At the present time, all students are required to take the ACT-COMP examination to evaluate the core curriculum (or general education program). Students should register for this test through their departments in the academic year in which they graduate. The test is a graduation requirement, and failure to take it will delay a student's graduation. Foreign-born students whose first language is not English are exempt from the test, but they must present documentation to support their claim to exemption.

To minimize the likelihood that last-minute problems will delay students' graduation, they should thoroughly familiarize themselves with all departmental, College, and University degree requirements, and stay in frequent contact with their advisors. The College requires that students fill out a Senior Standing Form and an application for graduation with their advisors at least one semester before the semester of anticipated graduation, to determine what remains of their requirements. The deadline for filing this application is posted in departmental areas. Students should look for notice of this deadline and must meet the deadline. They must also take the initiative for informing their department of their intent to graduate. At the time of applying for graduation, students must either have expunged all Incomplete grades from their record or submit a copy of a signed agreement with the instructor of any class in which an Incomplete is outstanding; this agreement must specify the date by which the Incomplete will be removed. If students do not graduate in the semester for which they apply, they must subsequently re-file for graduation.

Orientation Classes

The Freshman Orientation classes for Arts and Sciences majors are taught under the ASOR designation. These courses are designed to orient all new students—both freshmen and transfers—to the University, its major policies and regulations, degree requirements, career opportunities, study skills, and campus facilities. Special programs and speakers are also offered during orientation sessions. The Arts and Sciences orientation program offers three courses, which should be chosen by students on the basis of their own majors. **Students who intend to become license to teach should take EDCI 101 for their orientation, rather than any of the courses listed below.**

ASOR 100A Orientation for Science Majors (1). A required orientation and advisement class for new students in the sciences, including biology, chemistry, computer science, mathematics, pre-medicine, pre-pharmacy, and physics. The course focuses on topics related to the sciences.

ASOR 100B Orientation for Social Science Majors (1). A required orientation and advisement class for new students in the social sciences, including Africana studies, communications, criminal justice, history, political science, social work, and sociology. The course focuses on topics related to the social sciences.

ASOR 100C Orientation for Humanities Majors (1). A required orientation and advisement class for new students in the arts and humanities, including art, English, foreign languages, interdisciplinary studies, music, and theatre. The course focuses on topics related to the humanities.

Minor in Liberal Arts and Business

The Liberal Arts and Business is a minor available to all Arts and Sciences majors. It is designed to supplement a liberal arts education with courses that emphasize technical skills, including accounting, basic computing, economics, management, and business writing. The minor curriculum provides the student with a minimal background to seek business and corporate opportunities.

The student may major in any area or seek any degree within the College of Arts and Sciences and take the minor (21-27 semester hours). In addition to the required curriculum for the minor, certain elective courses are suggested to broaden the major's background in liberal arts and business. Technical courses coupled with a "generalist" education give a strong, broad background for the liberal arts and sciences student to enter various training programs and careers, including ones in industry and business.

Required Courses		**18 semester hours**
AC 211 or 212	Principles of Accounting I or II	3
EC 211	Economic Principles I	3
MG 301	Management and Organization Behavior	3
CS 215	Computer Programming—BASIC	3
BL 300	Legal Environment of Business	3
MG 403 or BISE 430	Human Resources Management or Administrative Office Management	3

Elective Courses		**3-9 semester hours**
BISE 315	Business Communication	3
HIST 369	Economic History of the United States	3
PHIL 335	Business Ethics	3
BISE 121	Microcomputer Keyboarding	3

Arts and Sciences
(Interdisciplinary Studies)

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Telephone 615-963-5755

General Statement: The Arts and Sciences (Interdisciplinary Studies) degree program is a cross-disciplinary program which concentrates upper-level studies in one of the three families of disciplines: the arts and humanities, the social sciences, or the sciences and mathematics. The program exposes the student to the knowledge and methodologies of two specific fields of study within a given family of disciplines.

The degree, which is the Bachelor of Science in Arts and Sciences, permits students to develop a personalized program of study in consultation with their advisor. Students have a primary discipline of 15 semester hours, strengthening it with 8 hours from a related discipline. For example, a student interested in the humanities may have concentrations in any two of the following disciplines: art, English, French, music, philosophy, religious studies, Spanish, and theatre. A student in the social sciences may concentrate in any two of these disciplines: Africana studies, anthropology, criminal justice, economics, geography, history, political science, psychology, social work, sociology, and speech. A student in the sciences may choose any two of biology, chemistry, computer science, mathematics, and physics.

A student may be allowed another combination of disciplines, provided he or she makes a reasonable case for it. This combination must be approved in advance by the Coordinator and the Dean's office.

The degree is especially useful for some preprofessional curricula, such as pre-law, pre-pharmacy, pre-medicine, and pre-dentistry, since it allows the student to construct more easily a degree program from the required courses in various disciplines.

The coordinator of Interdisciplinary Studies is the advisor for all students in the program, except for those who are seeking certification in Elementary Education.

Program Requirements **32 Semester Hours**
For Bachelor of Science
Arts and Sciences (Interdisciplinary Degree)

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENG 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
HUMANITIES	Courses from 2 humanities disciplines (Courses in the practice of an art—such as painting, sculpture, photography, singing, or playing an instrument—do not satisfy this requirement.)	6
MATH 1010, 1020, or 1010, 1030, or 1040, 1050, or 1060, 1070	College Algebra I, II College Algebra I, Basic Calculus Precalculus Mathematics I, II Calculus and Analytic Geometry, Calculus II	6-8
BIOL 1030, 1031, 1040, 1041 or 221, 221L, 222, 222L	General Biology I, II and Labs Human Anatomy and Physiology I, II and Labs	8
CHEM 1010, 1011, 1020, 1021 or 1030, 1031, 1040, 1041	General Chemistry I, II and Labs General Chemistry I, II and Labs	6-8
or BIOL 1010, 1011, 1020, 1021	Intro to Biophysical Science I, II and Labs	
or PHY 211, 211L, 212, 212L	College Physics I, II and Labs	
CS 121	Introduction to Computing	3
SOCIAL SCIENCES	Six hours in any of the following: anthropology, geography, political science, psychology, sociology, economics, except courses specifically designed for teacher certification.	6
SPCH 220 or 230	Public Speaking or Business and Professional Speech Communication	3
HPER 1010-1053, AERO, or MUSC 2010	Physical Education Activity (2 semesters required)	2
ASOR 100A, B, or C	Orientation	1

Upper-division Admission

For admission in the upper-division program of the Interdisciplinary Studies major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of 2.0 on college-level course work, and completed the Rising Junior Examination.

Major Core: A minimum of 32 upper-level (300- and 400-level) hours must be completed in Arts and Sciences. For this purpose Economics, Computer Science, and Psychology are treated as Arts and Sciences disciplines, although they are administered through other colleges in the University. Students must earn at least a C in all 32 of these hours.

(a) Twenty-three upper-level hours must be completed in one of the three broad areas or families of disciplines: the arts and humanities, the social sciences, and the sciences and mathematics. Fifteen of these hours must be in a single discipline and eight must be in a second discipline from the same family.

(b) Nine additional upper-level hours must be completed in arts and sciences disciplines or in Economics, Computer Science, and Psychology.

Bachelor of Science Degree in Arts and Sciences

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010, 1040, OR 1070	3	MATH 1010, 1040, 1050, OR 1070	3
PHYSICAL SCIENCE	3 or 4	PHYSICAL SCIENCE	3 OR 4
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
CS 121	3	HUMANITIES	3
ASOR 100C	1		
	17 OR 18		16 - 17

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 2010	3	ENGL 2020	3
BIOL 1030-1031 OR 221-221L	4	BIOL 1040-1041/222-222L	4
SOCIAL SCIENCE	3	SOCIAL SCIENCE	3
SPCH 220 OR 230	3	ELECTIVES, ANY LEVEL	6
HUMANITIES	3		
	16		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
1ST DISCIPLINE, 300/400	6	1ST DISCIPLINE, 300/400	3
2ND DISCIPLINE, 300/400	3	2ND DISCIPLINE, 300/400	3
ELECTIVE, 300/400	3	ELECTIVE, 300/400	3
ARTS AND SCIENCES ELECTIVES, ANY LEVEL	6	ARTS AND SCIENCES ELECTIVES, ANY LEVEL	6
	18		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
1ST DISCIPLINE, 300/400	3	1ST DISCIPLINE, 300/400	3
2ND DISCIPLINE, 300/400	2	ELECTIVE, 300/400	10
ELECTIVE, 300/400 ARTS AND SCIENCES	3	ANY SCHOOL OR COLLEGE ELECTIVE, ANY LEVEL	4
ELECTIVES, 300/400 ANY SCHOOL OR COLLEGE	6		
ELECTIVE, ANY LEVEL	3		
	17		17

Arts and Sciences

Interdisciplinary Studies
Certification in Elementary Education
Grades K-8, 1-8

William Cumming, M.A., Coordinator
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General Statement: The University's teacher certification program in Elementary Education is located in the Interdisciplinary Studies Program of the College of Arts and Sciences, in recognition of the fact that the modern teacher should be broadly educated with a firm foundation in the liberal arts. The teacher must have, not only a knowledge of a variety of subject matter, but also an understanding of the psychology and the cultures of the students he or she will teach. America is an increasingly diverse society: it is estimated that by the year 2050 more than half of the school-age children will be of non-European descent.

The Elementary Education program offers a choice of three concentrations for its students, depending on the subjects they wish to teach and the grade levels at which they wish to teach. Licensure for given grade levels means that the Tennessee Department of Education certifies that the individual is qualified to teach at those levels and thus is eligible to be hired by public school systems in the state. An endorsement for given grade levels means that the student is especially well prepared for those grades, but is also eligible to teach at whatever levels he or she is licensed.

Students at Tennessee State University have the following options: 1) concentration in language arts and social studies, with licensure for grades 1-8 and endorsement for grades 5-8; 2) concentration in science and mathematics, with licensure for grades 1-8 and endorsement for grades 5-8; 3) concentration in child development and learning, with licensure for grades K-8 and endorsement for grades K-4. The specific requirements for these options are listed below.

The coordinator of the Elementary Education program is the advisor of students seeking certification in Elementary Education. Moreover, once a student has been formally accepted into the program through the College of Education, he or she will be assigned an additional advisor within the College of Education for the professional core.

Program Requirements
For Bachelor of Science
Arts and Sciences
Certification in Elementary Education

All candidates for certification in elementary education will complete a minimum of 135 or 136 semester hours, depending on their area of concentration, to receive the B.S. degree in Arts and Sciences. These hours include a general education core (60 hours), a major concentration of content and knowledge courses (36 hours), and a professional education core (38 hours), including one semester of student teaching in primary and middle schools (12 hours). To be eligible for admission to any certification program in the University, students must have at least a 2.75 cumulative quality point average at the time of application and must earn acceptable scores on the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessment Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST. Students must also make a written application through the College of Education before being formally admitted to the program, usually during the sophomore year. For a complete statement of admission and retention requirements in the Teacher Education Program, see pages 000-000.

Accreditation: The teacher certification program in Elementary Education, with all three of its concentrations, is accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

Specific course requirements in general education, the professional education curriculum, and the three concentrations follow.

General Education Core **65 Semester Hours**

The general education liberal arts component is designed to foster the intellectual development of the whole person and give him or her the foundation of a broad college education.

Required General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010 or 2020	Sophomore Literature I or II	3
HIST 121 or 122	World History I or II	3
HIST 2010 or 2020	American History I or II	3
HIST 241	History of Tennessee	3
MATH 1010, 1020	College Algebra I, II	6
BIOL 1010, 1011, 1020, 1021	Introduction to Biophysical Science I, II and laboratories	6
MUSC 1010	Music Appreciation	3
ART 1010	Art Appreciation	3
SOCI 2010	Introduction to Sociology	3
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
GEOG 1010 or 1020	World Regional Geography I or II	3
PSY 242	Human Growth and Learning	3
HEA 151	Health and Wellness	3
HEA 306	First Aid and Cardio-Pulmonary Resuscitation	3
HPER 1010-1053	Physical Education Activity (2 semesters required)	2
PE 310	Play and Lead-up Games	2
EDCI 101	Orientation	1
		60

Professional Education **38 Semester Hours**

Professional education course work and related field and laboratory experiences are required to give the prospective elementary school teacher the knowledge, skills, and practical experience needed for a successful career. Students must be officially admitted to the Teacher Education Program before they can register for any of these courses, with the exception of EDCI 201.

EDAD 301	School Organization, Management, and Community Relations (formerly EDCI 301)	2
EDAD 400	Professional Rights and Responsibilities (formerly EDCI 400)	3
EDCI 201	History and Foundations of Education	3
EDCI 387	Curriculum Development	3
EDCI 390A	Methods of Elementary Teaching: Humanities and Social Sciences	3
EDCI 390B	Methods of Elementary Teaching: Sciences	3
EDCI 470B	Educational Seminar Elementary	3
EDCI 472M	Enhanced Student Teaching in the Elementary School	12
EDRD 424	Teaching Reading in the Elementary School	3
EDSE 333	Education of Exceptional Children	3
		38

Content and Knowledge in Arts and Sciences **36 Hours**

The student must complete a major of 30 or 31 upper-level semester hours in the arts and sciences and related fields. The student must choose from three concentrations which combine courses from across two or more broad disciplines of the arts and sciences and/or related fields. Students must earn at least a C in all of these courses; if they earn less than a C in any course, they must repeat it until they earn at least a C. The concentrations are as follows:

Language Arts and Social Studies **36 Semester Hours**
Licensure for Grades 1-8, Endorsement for Grades 5-8

BIO 301, 301L or 413	Earth and Space Science and Laboratory or Contemporary Problems in Ecology I	3
ECCD 361	Early Childhood Curriculum	3
EDCI 490	Multicultural Education	3
ENG 372	Adolescent Literature	3
ENG 373	Children's Literature	3
ENG 300 or 413	Advanced Composition or Advanced English Grammar	3
GEOG 430	Social Geography	3
HIST 491 or 492	Afro-American History	3
MATH 211	Structure of the Number System	3
PSY 312	Measurement and Evaluation for the Classroom In Public Schools	3
PSY 374	Classroom Management	3
SPCH 449	Speech and Theatre for Children	3
		36

Science and Mathematics **36 Semester Hours**
Licensure for Grades 1-8, Endorsement for Grades 5-8

BIO 301	Earth and Space Science	3
BIO 413, 414	Contemporary Problems in Ecology I, II	6
ENG 372 or 373	Adolescent Literature or Children's Literature	3
ECCD 361	Early Childhood Curriculum I	3
EDCI 490	Multicultural Education	3
HIST 491 or 492	Afro-American History	3
MATH 211	Structure of the Number System	3
PHIL 250	Logic and Critical Thinking	3
PSY 312	Measurement and Evaluation for the Classroom in Public Schools	3
PSY 374	Classroom Management	3
STAT 291	Introduction to Probability and Statistics	3
		36

Child Growth and Development **36 Semester Hours**
Licensure for Grades K-8, Endorsement for Grades K-4

ECCD 201	Principles and Concepts of Child Development	3
ECCD 332	Creative Arts for Young Children	3
ECCD 361	Early Childhood Curriculum I	3
EDCI 490	Multicultural Education	3
ENG 373	Children's Literature	3
HIST 491 or 492	Afro-American History	3
PSY 2010	General Psychology	3
PSY 312	Measurement and Evaluation for the Classroom in Public Schools	3
PSY 315 or 424	Principles of Learning or Behavior Modification	3
SOC 360	The Family	3
SPCH 449	Speech and Theatre for Children	3
SPTH 305 or 310	Voice and Diction or Introduction to Human Communication Disorders	3
		36

Each teacher candidate, regardless of concentration, must complete EDCI 472M, Enhanced Student Teaching in the Elementary School (12 hours). The student teaching experience includes an entire semester of teaching divided between primary and middle grades. Teacher candidates seeking to focus on early grades have field experiences in kindergarten in addition to elementary school and middle school.

The awarded diploma reads: "Bachelor of Science in Arts and Sciences." The teaching license reads "Elementary Education (K-8 or 1-8)." To receive the K-8 licensure, the student must complete the requirements specified for K-4 endorsement.

Concentration in Language Arts and Social Studies Licensure for Grades 1-8, Endorsement for Grades 5-8

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010 or 2020	3	CS 121	3
MATH 1010	3	MATH 1020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
SPCH 220	3	ART 1010	3
EDCI 101	1	GEOG 1010 OR 1020	3
HPER, 2-DIGIT	1		
	17		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 2010 OR 2020	3	MATH 211	3
HIST 121 OR 122	3	HEA 306	3
HEA 151	3	SOCI 2010	3
PSY 242	3	MUSC 1010	2
EDCI 201	3	HIST 241	3
HPER, 2-DIGIT	1	HPER 310	2
	16		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 372	3	ENG 373	3
SPCH 449	3	EDCI 490	3
GEOG 430	3	HIST 491 OR 492	3
EDAD 301	2	EDCI 387	3
EDSE 333	3	PSY 312	3
ECCD 361	3	PSY 374	3
	17		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 300 OR 413	3	EDCI 470B	3
BIO 301, 301L OR BIO 413	3	EDCI 472M	12
EDCI 390A	3		
EDCI 390B	3		
EDAD 400	3		
EDRD 424	3		
	18		15

Concentration in Science and Mathematics Licensure for Grades 1-8, Endorsement for Grades 5-8

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010 OR 2020	3	CS 121	3
MATH 1010	3	MATH 1020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
SPCH 220	3	ART 1010	3
EDCI 101	1	GEOG 1010 OR 1010	3
HPER, 2-DIGIT	1		
	17		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 2010 OR 2020	3	MATH 211	3
HIST 121 OR 122	3	PSY 242	3
STAT 291	3	SOCI 2010	3
EDCI 201	3	PE 310	2
BIO 301, 301L	3	MUSC 1010	3
HEA 151	3	PHIL 250	3
		HPER, 2-DIGIT	1
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 413	3	BIO 414	3
HIST 491 OR 492	3	HIST 241	3
ECCD 361	3	HEA 306	3
EDAD 301	2	PSY 312	3
EDCI 490	3	EDCI 387	3
EDSE 333	3	PSY 374	3
	17		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 372 OR 373	3	EDCI 470B	3
EDCI 390A	3	EDCI 472M	12
EDCI 390B	3		
EDAD 400	3		
EDRD 424	3		
	15		15

Concentration in Child Growth and Development Licensure for Grades K-8, Endorsement for Grades K-4

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010 OR 2020	3	CS 121	3
MATH 1010	3	MATH 1020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
SPCH 220	3	GEOG 1010 OR 1020	3
EDCI 101	1	ART 1010	3
HPER, 2-DIGIT	1		
	17		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 121 OR 122	3	ENGL 2010 OR 2020	3
MUSC 1010	3	HIST 241	3
ECCD 201	3	SOCI 2010	3
HEA 151	3	ECCD 332	3
EDCI 201	3	PSY 242	3
PSYC 2010	3	HPER, 2-DIGIT	1
	18		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 373	3	SOC 360	3
SPCH 449	3	HEA 306	3
SPTH 310 OR 305	3	PSY 312	3
EDAD 301	2	PSY 315 OR 424	3
PE 310	2	EDCI 387	3
EDSE 333	3	EDCI 490	3
	16		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 491 OR 492	3	EDCI 470B	3
EDCI 390A	3	EDCI 472M	12
EDCI 390B	3		
EDAD 400	3		
EDRD 424	3		
ECCD 361	3		
	18		15

Department of Africana Studies

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General Statement: The curriculum of the Department of Africana Studies is based on an African paradigm. It is rooted in global African canons and epistemologies. Slavery and colonization compartmentalized the African world into the African continent and her Diaspora (cultural and historical descendants of Africa living outside of Africa). The curriculum seeks to restore the cultural, economic, political, social, and spiritual links between Africa and her Diaspora.

The primary goal of the Department is the practical education of students in the cultures, historiography, knowledge, and skills of the global African experience. Once students acquire the practical and theoretical knowledge of Africa and her Diaspora, they will be able to concurrently pursue lucrative career paths and work for the development of African peoples at the levels of culture, families, institutions, and organizations.

The core curriculum is interdisciplinary and is based on the African cultural, historical, and social paradigm. It is premised on the canons, epistemology, and general knowledge that are essential for successful matriculation in the field of Africana Studies. Students must study an African language, African and African-American history, and the psychological impact of slavery and colonization on the contemporary ideologies and mentalities of African peoples. Senior seminar is the capstone course designed to integrate and synthesize information, knowledge, and skills that students have acquired in lower-division courses. Students must successfully complete a community internship to apply and test the concrete and practical dimensions of their knowledge base. As an extension of the capstone experience, students are required to study research methods and write a senior project. Finally, students must understand the synergy between theoretical knowledge and praxis.

As a consequence of majoring in Africana Studies, students should attain both academic excellence and social responsibility.

Career Opportunities: Africana Studies prepares students for advanced studies in graduate and professional schools. It further prepares them for career opportunities in business, education, international affairs, law, the humanities, the behavioral and social sciences, and work in developing communities and nations.

Departmental Requirements For Bachelor of Science Africana Studies — **45 semester hours**

The Department of Africana Studies offers a major in Africana Studies leading to the degree of Bachelor of Science. Students must complete a minimum of 130 semester hours in order to receive a B.S. degree. Fifty-six of these hours must be in the general education core shown below. Thirty-six of these hours must be in the major core outlined below.

The Africana Studies curriculum is African-centered in nature, interdisciplinary in structure, and Pan-African (international) in scope.

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2013, 2023	Black Arts and Literature I, II	6
HIST 2010, 2020	American History I, II	6
ECON 2010	Principles of Economics I	3
MATH 1010	College Algebra I	3
BIOL 1030,1040, 1031, 1041 or	General Biology I, II or	8
CHEM 1010, 1020, 1011, 1021 or PHY 211, 212, 211L, 212L	General Chemistry I, II or College Physics I, II	
PHIL 250	Logic and Critical Thinking	3
ART 1010 or MUSC 1010	Art Appreciation or Music Appreciation	3
SPCH 220 or SPCH 230	Public Speaking or Business and Professional Speech Communication	3
CS 121	Introduction to Computing	3
FR or SPN 200-400	French or Spanish, at least through intermediate level	6
HEA 151	Health and Wellness	3
HPER 1010-1053 or AERO or MUSC 2010	Physical Education Activity (2 semesters required)	2
ASOR 100B	Orientation for Social Science Majors	1

Upper-division Admission

Before students are admitted to the upper division of the degree program, they must have completed all of the above general education courses, in addition to AFAS 2010 and two semesters of a single African language (Arabic, Kiswahili, or Yoruba). They must have earned at least a C in ENGL 1010 and 1020, AFAS 2010, and the African language classes. They must also have removed all high school deficiencies, passed all required remedial/developmental courses, completed the Rising Junior Examination, and earned a cumulative grade point average of at least 2.0 on college-level course work.

Major Core

AFAS 101-102, 103-104, or 105-106	African Languages I, II	6
AFAS 2010	Introduction to Africana Studies	3
AFAS 310	Psychological Impact of Slavery and Colonization	3
AFAS 390 or 395	Black Nationalism or The Great Debate	3
AFAS 392 or PISI 492	African Societies and Modernization or Black Politics	3
AFAS 440	Senior Seminar	3
AFAS 450 W	Research Methods	3
AFAS 451	Africana Studies Internship	3
AFAS 490	Senior Project	3
HIST 485 or 486	History of Africa	3
HIST 491 or 492	African-American History	3

Double Major in Africana Studies: Students can concurrently pursue a major in Africana Studies and a second major. Double major combinations can be Africana Studies and a business discipline, computer science, pre-law, pre-medicine, psychology, history, or political science.

Bachelor of Science Degree in Africana Studies

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
AFAS 2010	3	MATH 1010	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
*FREN/SPAN 2010 OR HIGHER	3	FREN/SPAN 2020 OR HIGHER	3
ART 1010 OR MUSC 1010	3	HEA 151	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
ASOR 100B	1		
	17		16

*Students not prepared for the intermediate level of the foreign language must begin at the level for which they are prepared, but they must complete the language through the intermediate level.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
AFAS 101, 103, OR 105	3	AFAS 102, 104, OR 106	3
ENGL 2013	3	ENGL 2023	3
BIO/CHEM/PHY	4	BIO/CHEM/PHY	4
PHIL 250	3	ELECTIVE OR MINOR	3
CS 121	3	ECON 2010	3
SPCH 220 OR 230	3		
	19		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
AFAS 310	3	AFAS 390 OR 395	3
AFAS 392 OR PISI 492	3	ELECTIVES	12
AFAS ELECTIVES	6	AFAS 450 W	3
ELECTIVE	3		
	15		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
AFAS 440	3	AFAS 451	3
AFAS 490	3	HIST 485 OR 486	3
HIST 491 OR 492 300/400 LEVEL	3	ELECTIVES, 300/400 LEVEL	9
ELECTIVES	6		
AFAS ELECTIVE	3		
	18		15

Course Descriptions

AFAS 101, 102 Beginning Arabic I, II (3, 3). Introduction to a language widely spoken in North Africa and the Middle East. Students are guided through the process of acquisition following an oral approach that stresses classroom participation in a cooperative atmosphere. The aim is to help students gain threshold oral fluency in the language and the ability to read simple text. Laboratory work is an integral part of the course.

AFAS 103, 104 Beginning Kiswahili I, II (3, 3). Introduction to a language widely spoken in East Africa and parts of Central Southern Africa. Students are guided through the process of acquisition following an oral approach that stresses classroom participation in a cooperative atmosphere. The aim is to help students gain threshold oral fluency in the language and the ability to read simple text. Laboratory work is an integral part of the course.

AFAS 105, 106 Beginning Yoruba I, II (3, 3). Introduction to a West African language spoken in Nigeria and other parts of Africa. Students are guided through the process of acquisition following an oral approach that stresses classroom participation in a cooperative atmosphere. The aim is to help students gain threshold oral fluency in the language and the ability to read simple text. Laboratory work is an integral part of the course.

AFAS 2010, Introduction to Africana Studies (3). A course which defines the subject matter, concepts, principles, scope, and goals of Africana Studies. Reflecting the interdisciplinary nature of Africana Studies, this course is a survey of the African world community, from the perspectives of the humanities and social sciences, science and technology, and the expressive arts. Course may be used to satisfy the University's social science requirement. Required of all Africana Studies majors.

AFAS 300 African Male: Identity, Culture, and Expressions (3). Analysis of the situation of African males in the United States, Africa, the Caribbean, and South America. Particular attention is given to "rites of passage" and males' socialization from birth to manhood in these societies.

AFAS 305 African Female: Identity, Socialization, and Status (3). A comparative study of the traditions, continuity, and changes affecting girls and women of African descent in the U.S., Africa, the Caribbean, and South America. Course uses both literary works and social science studies to explore the portrayals of and historical contexts for the lives of females of African descent, focusing on concepts of girlhood, social status, and sexuality, as well as on discrimination experienced by these women.

AFAS 310 Psychological Impact of Slavery and Colonization (3). Critical examination of slavery and colonization on the minds and institutions of Africans throughout the world. Required of all Africana Studies majors.

AFAS 360 African Extended Family (3). Study in the extended family as a cultural form of social and political organization in Africa. Since the first form of the traditional family in Africa was the extended family, emphasis is placed on the values of communalism, collective work, cooperative economics, and community self-reliance. Attention is given to the family as the basic unit of social organization in African cultures.

AFAS 362 The African-American Family (3). An examination of the dynamics of the African-American family. The course studies the institution of marriage, customs, male/female relationships, and value orientation. Special attention is given to both the nuclear family and the extended family in the African-American community.

AFAS 365 The African-American Community (3). An examination of the dynamics of the African-American community. Attention is given to phenomena such as the family, religious institutions, political organizations, human rights organizations, economics, health care education, and social problems such as violence, drugs, and dysfunctional families.

AFAS 385 Caribbean Societies and Modernization (3). An examination of the historical significance of the Caribbean in the trans-Atlantic slave trade, and the connections between Africans born in the United States and Africans born in the Caribbean. Course also examines the nation-building efforts of these countries and development problems created by the world political economy in their domestic and foreign policies.

AFAS 390 Black Nationalism (3). A survey of the various Black Nationalist and Pan-African movements that emerged between 1850 and the present. Special attention is given to the movements of Martin Delaney, Edward Blyden, Marcus Garvey, the Nation of Islam, and other contemporary groups. Either this course or AFAS 395 is required of all Africana Studies majors.

AFAS 392 African Societies and Modernization (3). A study of traditional African societies, the constraints of colonization on their development, and the transformation of the traditional societies through the processes of industrialization and modernization. Either this course or PISI 492 (Black Politics) is required of all Africana Studies majors.

AFAS 395 The Great Debate: Martin Luther King, Jr., and Malcolm X (3). A critical examination of the philosophies of Dr. Martin Luther King, Jr., El-Hajj Malik El-Shabazz (Malcolm X), and a synthesis of these two perspectives. The climax of the course is a debate in which the students argue important issues from these three perspectives. Traditional African ceremonies and cultural vignettes are an integral part of this debate. Either this course or AFAS 390 is required of all Africana Studies majors.

AFAS 400 Political Economy of African Nations (3). Concentration on the culture, human resources, natural resources, and political structures of African nations. Attention is given to the constraints of the world political economy on education, housing, transportation, medical and health care, food production, and industrial and technological development of African nations. Prerequisite: admission to upper level.

AFAS 407 Political Economy of the African-American Community (3). An examination of the unequal distribution of incomes, occupations, and education in the African-American community. Particular attention is given to poverty and unemployment rates, and how these variables have impact on the socio-economic status of African-Americans. Attention is also given to professionals and the dynamics of African-American businesses. Prerequisite: admission to upper level.

AFAS 410 Mentorship in Africana Studies (3). Mentorship with professor in a well defined area of practice, such as assisting in the teaching of a specific course, a research project, or a community development project. May be repeated once for credit. Prerequisites: admission to upper level and permission of instructor.

AFAS 420 Media, Social Change, and Mass Empowerment (3). An examination of how the mass media are used as agents of oppression in world African communities. This analysis is followed by an exploration of the media's potential to serve as an instrument of humane social change and mass empowerment. Prerequisites: AFAS 2010 and admission to upper level.

AFAS 432 Spiritual Empowerment and Transformation (3). An introduction to the spiritual core of African cosmology and civilization. Exploration of selected classical and contemporary African spiritual paradigms and their potential to empower and transform. Prerequisite: admission to upper level.

AFAS 440 Senior Seminar (3). As the capstone course in the department, a culmination of the knowledge, practical experiences, and solutions that students have acquired as a result of their matriculation in the curriculum. Prerequisite: admission to upper level. Required of all Africana Studies majors.

AFAS 445A Classical African Civilizations (3). An advanced seminar to explore in depth some aspect of ancient civilizations of Africa. It concentrates on such topics as cosmology and primordial philosophy. Particular attention is given to Kemetic astronomy, mathematics, the solar calendar, and the writing system.

AFAS 445B Advertising and Marketing in African Communities (3). Emphasis on the principles and practices of African-centered advertising and marketing. Course focuses on market analysis and the design and implementation of culturally appropriate advertising and marketing strategies in African communities. The course may operaate as an advertising and marketing firm, working with real clients in the African community. Course is taught from a liberal arts perspective.

AFAS 445C Business Opportunities in Africa (3). Students learn how to assess business opportunities in Africa. Emphasis is on meeting real needs of African people and on socially responsible business practices. Course includes an examination of cultural paradigms that undergird entrepreneneurial philosophy and practice in Africa. Students draft comprehensive business opportunity reports. Course is taught from a liberal arts perspective.

AFAS 445H Honors Great Debate (3). Course examines the thoughts of Martin Luther King, Jr., and Malik El-Shabazz (Malcolm X). Students study how the teachings of the Prophet Muhammad (pbuh), Mohandas K. Gandhi, Henry David Thoreau, and Marcus Garbey influenced the epistemologies and paradigms of King and El-Shabazz. Enrollment is restricted to students in the University Honors Program.

AFAS 450W Research Methods in Africana Studies (3). Consideration of the methods of documenting and representing reality, including issues of cultural and political paradigms, aesthetics, and ethics. Both quantitative and qualitative designs are examined. A writing-intensive course. Prerequisites: AFAS 2010 and admission to upper level. Required of all Africana Studies majors.

AFAS 451 Africana Studies Internship (3-6). A practicum experience in which students are given the opportunity to apply the knowledge gained from course work in Africana Studies. Students are placed in agencies that are addressing concerns, issues, and problems in the African community. Empirical data from this experience are used for writing the senior project. Course may be repeated once for a maximum total of six hours of credit. Prerequisites: admission to upper level and permission of Department head.

AFAS 460 Independent Studies and Research (3-6). Course designed to allow students to work independently or in groups on significant topics and projects not covered in other courses. Students carry out their work through a preceptorial arrangement with instructor. May be repeated once for a maximum total of six hours of credit. Prerequisites: admission to upper level and permission of instructor.

AFAS 490 Senior Project: Theory, Practice, and Solutions (3). A scholarly and scientific project in which students bring to bear the knowledge and skills they have acquired in the Africana Studies major. Prerequisites: admission to upper level and AFAS 450 and 451. Required of all Africana Studies majors.

Department of Art

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Telephone 615-963-5921

Faculty: H. Beasley, T. Jones, N. Lovelace, J. McKinney, P. Zeppelin.

General Statement: The Art curriculum (1) prepares students for advanced graduate study in a studio discipline of interest or education; (2) prepares and strengthens students' skills for professional work in the arts; (3) prepares students as graphic designers/commercial artists; and (4) provides students with a foundation in art history and criticism.

Accreditation: The Art program is accredited by the National Association of Schools of Art and Design (NASAD), the national accrediting agency in the field. The teacher certification program in Art is accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

Departmental Requirements For Bachelor of Science Art — **64 or 72 Semester Hours**

The Department of Art offers a major in Art leading to the degree of Bachelor of Science with concentrations in Studio Art and Art Education.

The minimum number of semester hours required for the Bachelor of Science degree in Art Education is 139, while the minimum in the Studio Art concentration is 135 The minimum number of hours required in Art courses for certification in Art is 64, while in the Studio Art concentration it is 72.

Students who wish the Bachelor of Science Degree with licensure (teacher certification) to teach Art in grades K-12 must seek formal admission to the program through the College of Education, usually in the sophomore year. They must have a 2.75 cumulative quality point average at time of application for admission and they must pass the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. For a full statement of admission and retention requirements in the Teacher Education Program, see pages 000-000. Students are required to do enhanced student teaching with placement in both elementary and secondary schools. Satisfactory completion of the program results in licensure for teaching grades K-12 in Tennessee public schools.

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENG 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
MATH 1010	College Algebra I	3
BIOL 101, 101L, 102, 102L	Introduction to Biophysical Science I, II and labs	6
SOCI 2010	Introduction to Sociology	3
SPCH 220	Public Speaking	3
MUSC 1010	Music Appreciation	3
PHIL 2010	Introduction to Philosophy: Moral Issues	3
CS 121	Introduction to Computing	3
HPER 1010-1053, MUSC 2010, or AERO	Physical Education Activity (2 semesters required)	2
ASOR 100C	Orientation for Humanities Majors (Teacher certification students should take EDCI 101.)	1

Upper-division Admission

For admission into the upper-division program of the Art major, students must complete all of the requirements listed above under General Education Core. They must also have earned a minimum grade of C in ART 103, 121, 122, 132, and 221. In addition, they must have removed all high school deficiencies, passed all remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination.

Major Core: Art majors must earn at least a C in the following courses, as well as in the other courses used to satisfy Departmental requirements. If majors earn less than a C, they must repeat the course until they raise the grade to at least a C.

ART 103	Freshman Seminar	1
ART 121	Fundamentals of Drawing	3
ART 122	Figure Drawing	3
ART 132	Design	3
ART 221	Introductory Painting	3
ART 301	Ceramics I	3
ART 331	Art History I	3
ART 341	Sculpture I	3
ART 350	Printmaking I	3
ART 449	Portfolio Seminar	1
ART 450	Senior Project	3

Additional Art courses are required, depending on the degree program one pursues. For these courses, see the following four-year plans. Majors must also earn at least a C in these Art courses which are used to satisfy requirements for the major. Students can count no more than 21 hours of Individual Problems courses (ART 400A, B, C; 401A, B, C; 402A, B, C) toward meeting requirements in the Art major.

Bachelor of Science Degree in Art Concentration in Studio Art

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 103	1	ART 122	3
ART 121	3	ART 132	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
CS 121	3	MATH 1010	3
ASOR 100C	1	MUSC 1010	3
PE, AERO, OR MUSC 2010	1	PE, AERO, OR MUSC 2010	1
	15		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 210	3	ART 220	3
ART 221	3	ART 302	3
ART 301	3	ENGL 2020	3
ENGL 2010	3	BIOL 1020, 1021	3
BIOL 1010, 1011	3	PHIL 2010	3
SOCI 2010	3	SPCH 220	3
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 321 OR 333	3	ART 326	3
ART 331	3	ART 342	3
ART 341	3	ART 351	3
ART 350	3	ART 449	1
ART ELECTIVE*	3	ART HISTORY ELECTIVES	6
		ART ELECTIVE*	3
	15		19

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 450	3	ART 449	1
ART ELECTIVE*	3	ART ELECTIVES, 300/400	6
ART ELECTIVES, 300/400	6	ART ELECTIVE	3
ART HISTORY ELECTIVE, 300/400 LEVEL	3	ART ELECTIVES*	6
	15		16

*These courses should be in the student's declared studio concentration.

Bachelor of Science Degree in Art With Teacher Certification Licensure for Grades K-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 103	1	ART 122	3
ART 121	3	ART 132	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
CS 121	3	MATH 1010	3
SPCH 220	3	PE, AERO, OR MUSC 2010	1
EDCI 101	1		
	17		16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 221	3	ART ELECTIVE*	3
ENG 2010	3	ENG 212	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
SOCI 2010	3	ART HISTORY ELECTIVE	3
MUSC 1010	3	PHIL 201	3
EDCI 201	3	PSY 242	3
PE, AERO, OR MUSC 2010	1		
	19		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 301	3	ART 360	3
ART 331	3	ART 371	3
ART 341	3	ART 449	1
ART 350	3	ART HISTORY ELECTIVE	3
EDAD 301 (FORMERLY EDCI 301)	2	EDAD 400 (FORMERLY EDCI 400)	3
PSY 312	3	EDCI 387	3
EDCI 419	1	HEA 151	3
	17		20

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 450	3	ART 472	12
ART ELECTIVES*	6	EDCI 470A	3
ART HISTORY ELECTIVE, 300/400 LEVEL	3		
EDRD 491	3		
EDSE 333	3		
	18		15

*These courses should be in the student's declared studio concentration.

Course Descriptions

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 103 Freshman Seminar (1). Introduction to major disciplines in art and practical aspects of a career in art. Course covers such topics as art as a calling, building a resume and a portfolio, the job market, art awards, internships, grants, and graduate school. Required of all Art majors in the first semester of their enrollment in the University.

ART 110 Introductory Studio Course I (3). Two-dimensional design and color theory, interpretative drawing, object and figure, three-dimensional design.

ART 120 Introductory Studio Course II (3). Two-dimensional design and color theory, interpretative drawing, object and figure, three-dimensional design.

ART 121 Fundamentals of Drawing I (3). An introduction to various tools, techniques, and materials of basic drawing. The course studies perspective and the function of the visual elements of compositions.

ART 122 Figure Drawing II (3). An exploration of formal and expressive potentials of the figure, with traditional and experimental approaches to drawing. Prerequisite: ART 121.

ART 131 Design (3). Study of principles of decorative design, giving opportunity for creative experiment with materials, structural form, and surface decoration.

ART 132 Design (3). A contemporary approach to basic visual elements of design as they are related to two- and three-dimensional problems. Problem-stating and problem-solving are a vital part of the organization of three-dimensional form, with emphasis on individual creative expression in design theory and innovation in the use of materials and techniques. Lettering techniques are included insofar as they are related to design.

ART 1010 Art Appreciation (3). A course for all students interested in understanding the visual arts in everyday experiences. The course surveys the visual arts, including fundamental and historical distinctions between Eastern and Western art forms. Course may be used toward satisfying the University's humanities requirement.

ART 1011 Honors Art Appreciation (3). A comprehensive survey of the art of prehistoric Egypt, Greece, Rome, and Romanesque periods. Emphasis is on comparing these periods historically and stylistically. Course may be used toward satisfying the University's humanities requirement. Enrollment restricted to members of University Honors Program.

ART 1012 Art History and Appreciation (3). A course designed to expand aesthetic awareness and understanding of visual arts, with traditional focus on the history of art and the impact the artist has on society. This course may be used to remove high school deficiency in the visual and performing arts; if it is used for this purpose, it does not yield credit toward the college degree.

ART 201 African-American Art (3). A general historical survey of African-American artists, art, and artifacts.

ART 210 Drawing and Pictorial Design I (3). Composition stressing figure and environmental situation. Prerequisites: ART 110 and 220, or 121 and 122, or 132.

ART 220 Drawing and Pictorial Design II (3). Composition stressing figure and environmental situation. Prerequisites: ART 110 and 120, or 121, 122, 132, and 210.

ART 221 Introductory Painting I (3). The nature of modern techniques and their versatility in the use of oil and acrylic. Prerequisites: ART 110 and 120, or 121 and 122, or 132.

ART 231 Introductory Painting II (3). A study of modern painting techniques and their versatility in the use of oil and acrylic media, exploring the fundamentals of formal, aesthetic, and expressive elements of painting.

ART 241 Crafts (3). An introduction to the processes and materials available to the artist-craftsman in design, including two- and three-dimensional art forms in clay, fibers, and metals. Emphasis is on the development of functional/non-functional forms, as well as artistic expression.

ART 251 Lettering and Layout I (3). Technique of letter indication, finished lettering, letter design, typography and film lettering, usage, and adaptation of lettering skills to practical problems. Prerequisite: ART 110 or 132.

ART 252 Lettering and Layout II (3). Preparation of composites, with emphasis on skills and taste in design. Basics are stressed, such as composition and perspective. Prerequisites: ART 110-120 or 121-122-132.

ART 253 Illustration (3). Study of pictorial design as used by the graphic designer/commercial artist. All media including photography are covered.

ART 300 Aesthetics (3). Problems in philosophy of art and art criticism; aesthetic experience; truth and art; aesthetic value.

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). Experiences in designing, forming, decorating, firing, and glazing functional and non-functional forms with emphasis on wheel-throwing techniques. Prerequisite: ART 301.

ART 303 Jewelry and Metalsmithing I (3). An introduction to basic metal working and jewelry techniques: stone setting, pearl setting, piercing and sawing, annealing, chasing and repousse, mechanisms for movement (jump rings and rivets), polishing and finishing techniques for wire and sheet metal. Students must buy their own metal, stones, and findings, with price depending on students' own design. Prerequisites: ART 121, 122, and 132, or permission of instructor.

ART 304 Jewelry and Metalsmithing II (3). Advanced metal working and jewelry techniques: centrifugal lost wax casting, bezel stone setting, soldering pin stems, ring sizing and construction, advanced chasing and repousse, designing, multiple grade soldering on the same piece, advanced mechanisms for movement. Students must buy their own metal, stones, and findings, with price depending on students' own design. Prerequisite: minimum grade of B in ART 303, or permission of instructor.

ART 306 Illustration (3). The art of illustration, its history, methods, tools, and techniques. Course includes a study of pictorial design as used by the graphic designer/commercial artist. All media including photography are covered.

ART 310 Advanced Drawing and Pictorial Design I (3). Advanced composition, stressing figure. Prerequisites: ART 210-220 or permission of the instructor.

ART 311 Graphic Design (3). Emphasis on creative advertising and problem-solving within an area of printed materials. Prerequisites: ART 251-252.

ART 312 Production (3). Technology and skills necessary to the designer/commercial artist. Course includes printed technology preparation of finished art suitable for reproduction. Prerequisites: ART 251-252.

ART 313 Advanced Illustration (3). Study of advanced pictorial concepts, methods, and techniques. Prerequisite: ART 253.

ART 320 Advanced Drawing and Pictorial Design II (3). Advanced composition, stressing figure. Prerequisite: ART 310 or permission of instructor.

ART 321 Intermediate Oil Painting I (3). Advanced composition stressing figure. Prerequisite: ART 221 or permission of instructor.

ART 322 Intermediate Painting II (3). Advanced development in various painting media and techniques, with emphasis on oils and acrylic. Individuals are encouraged to select their own subjects. Prerequisite: ART 221 or permission of instructor.

ART 323 Advanced Oil Painting (3). Advanced study and original projects in oil.

ART 326 Photography (3). The fundamentals of photographic process, including the proper use and maintenance of the camera, photographic enlarger, and related equipment.

ART 327 Basic Photography (3). Advanced studies in black-and-white photography.

ART 330 Watercolor Painting (3). Composition in transparent and opaque watercolor.

ART 331 Art History I (3). An introductory survey of the development of the visual arts from pre-historic through early medieval times.

ART 332 Art History II (3). An introductory survey of the development of the visual arts from Romanesque art through baroque in France and England.

ART 333 Watercolor Painting I (3). Compositions in transparent and opaque watercolor. Prerequisites: ART 110-120 or 121-122-132 or permission of instructor.

ART 334 Watercolor Painting II (3). Advanced composition in transparent and opaque watercolor. Prerequisite: ART 221 or 333.

ART 341 Sculpture I (3). Introduction to sculptural concepts, processes, tools, and methods of designing for various sculptural media. Concentration is on wood and its direct sculptural processes. Course includes an introduction to other media and the use of maquettes to determine the scale and measurements of the final work.

ART 342 Sculpture II (3). Introduction to modeling the figure in clay and wax, casting metals, techniques of constructive and cold joint fabrication, large scale sculptural repousse, and kinetic mechanisms for metal and other media. Prerequisite: ART 341.

ART 349 Intermediate Printmaking III (3). In-depth work in any chosen medium, including combinations of media. Prerequisite: ART 353 or permission of instructor.

ART 350 Printmaking 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-drypoint), engraving, planographic (lithography), relief(block-shuts), stencil (serigraphy), and calligraphy.

ART 351 Printmaking II (3). A beginning printmaking course with emphasis on lithography, photo-silkscreening, photo-etching, and calligraphy. Work completed in this course may qualify as part of senior exhibition. Prerequisite: ART 350.

ART 352 Intermediate Printmaking I (3). In-depth work in any chosen medium, including combinations of media. Prerequisites: ART 350 and 351.

ART 353 Intermediate Printmaking II (3). In-depth work in any chosen medium, including combinations of media. Prerequisite: ART 352 or permission of instructor.

ART 360 Public School Art (3). A survey of various education theories and problems encountered on the elementary and secondary levels. Course includes observation and participation in clinical and field-based experiences. Required of all students seeking certification in Art. Prerequisite: official admission to the Teacher Education Program.

ART 371 Art Education Methods (3). A course designed to give students experience and understanding in methods, materials, and media as they relate to the art program in grades K-12. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in Art. Prerequisite: official admission to the Teacher Education Program.

ART 372 History of Twentieth-Century Painting (3). The art of Europe and America.

ART 373 History of Modern Sculpture (3). Sculpture in Europe and America during the nineteenth and twentieth centuries.

ART 375 History of Classical Art (3). The art of ancient Greece and Rome.

ART 381 History of American Art (3). Art from the colonial period to the present day.

ART 392 History of Baroque Art (3). Art of the seventeenth and eighteenth centuries in Italy, France, Germany, England, and the Low Countries.

ART 400, A, B, C Individual Problems (3-3-3-3). Upper-level students only. Art students can count no more than 21 hours of courses in Individual Problems (ART 400, 401, 402 series) toward the major in Art.

ART 401, A, B, C Individual Problems (3-3-3-3). Upper-level students only. Art students can count no more than 21 hours of courses in Individual Problems (ART 400, 401, 402 series) toward the major in Art.

ART 402, A, B, C Individual Problems (3-3-3-3). Upper-level students only. Art students can count no more than 21 hours of courses in Individual Problems (ART 400, 401, 402 series) toward the major in Art.

ART 409 Ceramics III (3). Advanced problems in sculptural and functional ceramics, utilizing both throwing and hand-building techniques, glazing, and fixing projects.

ART 411 Three-Dimensional Design (3). Display-design package, design point of purchase, advanced concepts. Prerequisite: ART 311.

ART 412 Advanced Graphic Design (3). Primarily planned to coordinate graphics projects. Prerequisites: ART 311, 411.

ART 415 Sculpture III (3). Advanced application of techniques learned in ART 341 and 342. Prerequisites: ART 341 and 342.

ART 417 Advanced Photography (3). Emphasis on individual approaches to the photographic process. Prerequisite: ART 327.

ART 421 Advanced Oil and Acrylic Painting I (3). Advanced study and original projects in oil or acrylics. Prerequisites: ART 321 and 322, or permission of instructor.

ART 422 Advanced Oil and Acrylic Painting II (3). Advanced study in oil and acrylics. Prerequisite: ART 421.

ART 431 Watercolor III (3). Advanced composition in transparent and opaque watercolors. Prerequisite: ART 333 and 334, or permission of instructor.

ART 434 Art History III (3). A course dealing with special topics in the development of the visual arts from neo-classicism through the twentieth century.

ART 440 Introduction to Desktop Publishing (3). Pagemaker basics, screen , menus, palettes, and other tools used together to create, modify, close, and open publications.

ART 449 Portfolio Seminar (1). Development of a resume, business card, portfolio, graduate school application, personal artistic statement, and interviewing techniques. Students must provide twenty slides of their best work as part of their final grade. Students must earn at least a C in the course to be eligible for the senior review and for graduation. Required of all Art majors in junior or senior year.

ART 450 Senior Project (3). Project designed to give senior Art majors the opportunity to select and develop creative and written research related to art. The project is done under the supervision of the student's advisor and the Department Head. Required of all Art majors.

ART 451 Three-Dimensional Design (3). Advanced concepts of display-design packages.

ART 452 Advanced Printmaking I (3). An advanced printmaking course with emphasis on in-depth, individual approaches in various printmaking processes. Prerequisite: ART 349 or permission of instructor.

ART 453 Advanced Printmaking II (3). An advanced printmaking course on in-depth, individual approaches in various printmaking processes. Prerequisite: ART 453 or permission of instructor.

ART 454 African-American Art I (3). A survey of African-American art, beginning with study of African roots and influences in the Americas and Caribbean Islands and the emergence of the black artist in the United States through the nineteenth century.

ART 455 African-American Art II (3). A survey of developments in African-American art in the twentieth century.

ART 472 Enhanced Student Teaching in Elementary and Secondary School (12). A semester-long experience of supervised practice teaching, appropriately divided between elementary and secondary levels. Required of all students seeking certification in the teaching of Art. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently.

Department of Biological Sciences

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General Statement: The curriculum of the Department of Biological Sciences is designed to fulfill the preprofessional requirements of degrees leading to careers in medical, dental, environmental, marine, and biological sciences. Training in biology prepares students for careers in teaching, government, and private industry. State and federal agencies in agriculture, health, human services, environmental protection, and similar areas seek out students with good backgrounds in biology. New areas of biotechnology and genetic engineering have been added to opportunities in more traditional fields of research in marine biology, limnology, pharmacy, medicine, pathology, forestry, and horticulture. The degree programs in biology provide a liberal education directed toward an appreciation of the complexity and beauty of nature.

The Department also offers the M.S. degree in Biology and the Ph.D. degree in Biological Science. For information about these programs, see the Graduate Catalog.

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENG 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
MATH 1050 or higher	Precalculus Mathematics II (Cellular and molecular biology students must take 1060.) (Students will have to pass MATH 1040 or lower MATH if they are unprepared for MATH 1050 or 1060.)	3
CHEM 1010, 1011, 1020, 1021	General Chemistry I, II and labs (minimum grades of C)	8
CHEM 211, 211L 212, 212L	Organic Chemistry and labs (minimum grades of C) (formerly CHEM 311, 311L, 312, 312L)	8
BIO 1030, 1031, 1040, 1041	General Biology and labs (minimum grades of C)	8
BIO 211, 211L,	Cell Biology and lab (minimum grade of C)	4
BIO 212, 212L	Principles of Genetics and lab (minimum grade of C)	4
PHY 211, 211L, 212, 212L	College Physics and labs (minimum grades of C)	8
Social Science	3-hour course	3
Humanities	2 courses from different disciplines	6
SPCH 220 or 230	Public Speaking or Business and Professional Speech Communication	3
CS 121	Introduction to Computing	3
ASOR 100A	Orientation for Science Majors (Teacher certification students should take EDCI 101.)	1
HPER 1010-1053, AERO, or MUSC 2010	Physical Education Activity (two semesters)	2

Upper-division Admission

For admission into the upper division of programs of the Biology major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level coursework, and completed the Rising Junior Examination.

Upper-division Curricula

The undergraduate curricula for majors result in the Bachelor of Science degree. Students may select one of three curricula under the guidance of a major advisor. The programs are: 1)General Biology, which is recommended for preprofessional students; 2) Cellular and Molecular Biology, which is recommended for students who wish to pursue graduate training and/or careers in these fields; and 3) Teacher Certification in Biological Sciences, which leads to endorsement in biology and general science for teaching grades 7 - 12. No grade of less than "C" in any Biology course will be accepted as credit toward meeting Departmental requirements.

The Teacher Education Program is designed for students pursuing a teaching career in secondary education with a major in Biology. The program goals are directed toward the application of biology to the development of competencies in reading, writing, speaking, listening, mathematics, reasoning, studying, and computer competency. The

overall curriculum provides for the improvement of knowledge and skills in English, the arts, mathematics, natural sciences, and social studies. A total of 140 semester hours is required in the teacher preparation program (64 semester hours in general studies, 40 semester hours in major and core related courses, and 36 semester hours in the professional education core, including enhanced student teaching and the accompanying seminar). Enhanced student teaching requires an eight-week placement in secondary school and a seven-week placement in middle school. A foreign language is not a requirement for the teacher education curriculum, although it is required in all other degree programs in the Department.

Students seeking teacher certification in Biology must be officially admitted to the certification program by applying through the College of Education, usually in the sophomore year. Admission to this program requires a cumulative quality point average of 2.75 and a passing score on the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. To be eligible for upper-level certification courses, a student must be officially admitted to the Teacher Education Program. For a complete list of admission and retention requirements in the Program, see the College of Eduction section, Teacher Education Admission and Requirements.

A major in Biology with emphasis in General Biology or Cellular and Molecular Biology requires 133 semester hours, of which 45 must be in biological course work. One year of college-level German, French, or Spanish must be included. Seniors who have demonstrated high achievements in their major courses are encouraged to take Biology 419, an honors research program. This course offers an opportunity to gain experience in research under the direction of the Departmental faculty.

An undergraduate minor in the Department consists of a minimum of 24 semester hours, 16 of which should be taken in sequence in Biology 1030-1031, 1040-1041; 211-211L (Cell Biology); and 212-212L (Genetics). General Chemistry 1010 and 1020, with laboratories, are required as supporting related courses and must precede BIO 211. The remaining eight hours of the minor must be on the 300 or 400 level and may be elected in the minor area desired by the student.

Accreditation: The teacher certification program in Biology is accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

Bachelor of Science Degree in Biology General Biology Emphasis

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIOL 1030, 1031	4	BIOL 1040, 1041	4
CHEM 1010, 1011	4	CHEM 1020, 1021	4
ENGL 1010	3	ENGL 1020	3
HUMANITIES	3	*MATH 1040 OR HIGHER	3
ASOR 100A	1	CS 121	3
PE, AERO, OR MUSC 2010	1	PE, AERO, OR MUSC 2010	1
	16		18

*Students will have to take MATH 1040 or lower if they are unprepared for these courses.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 211, 211L	4	BIO 212, 212L	4
CHEM 211, 211L (FORMERLY CHEM 311, 311L)	4	CHEM 212, 212L (FORMERLY CHEM 312, 312L)	4
ENGL 2010	3	ENGL 2020	3
HIST 2010	3	HIST 2020	3
SPCH 220 OR 230	3	HUMANITIES	3
	17		17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PHYSIOLOGY ELECTIVE (BIO 321-321L, 340-340L, OR 430-430L)	4	BIO 412, 412L	4
		CHEM 341, 341L	4
		NON-BIO ELECTIVE	3
BIO ELECTIVE, 300/400	4	PHY 212, 212 L	4
PHY 211, 211L	4	FR, GER, OR SPN	3
FR, GER, OR SPN	3		
PSYC 2010	3		
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 417	1	BIO 418	1
BIO 311 OR PSY 311	3	BIO ELECTIVES, 300/400	8
BIO ELECTIVES, 300/400	4	ELECTIVES, 300/400 LEVEL	6
ELECTIVES, 300/400 LEVEL	3		
SOC ELECTIVE, 300/400	3		
	14		15

Bachelor of Science Degree in Biology Cellular and Molecular Biology Emphasis

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIOL 1030, 1031	4	BIOL 1040, 1041	4
CHEM 1010, 1011	4	CHEM 1020, 1021	4
ENGL 1010	3	ENGL 1020	3
HUMANITIES	3	*MATH 1060	3
ASOR 100A	1	CS 121	3
PE, AERO, OR MUSC 2010	1	PE, AERO, OR MUSC 2010	1
	16		18

*Students will have to take MATH 1040 and 1050 if they are unprepared for 1060.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 211, 211L	4	BIO 212, 211L	4
CHEM 211, 211L (FORMERLY CHEM 311, 311L)	4	CHEM 212, 212L (FORMERLY CHEM 312, 312L)	4
ENGL 2010	3	ENGL 2020	3
HIST 2010	3	HIST 2020	3
SPCH 220 or 230	3	HUMANITIES	3
	17		17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PHYSIOLOGY ELECTIVE (BIO 321-321L, 340-340L, OR 430-430L)	4	BIO 412, 412L	4
		SOC ELECTIVE, 300/400	3
		CHEM 342, 342L	4
CHEM 341, 341L	4	PHY 212, 212L	4
PHY 211, 211L	4	FR, GER, OR SPN	3
FR, GER, OR SPN	3		
PSYC 2010	3		
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 417	1	BIO 418	1
BIO 311 OR PSY 311	3	BIO ELECTIVES, 300/400	8
BIO ELECTIVES, 300/400	4	NON-BIO ELECT., 300/400	6
NON-BIO ELECT., ANY LEVEL	3		
NON-BIO ELECT., 300/400	3		
	14		15

Bachelor of Science Degree in Biology With Teacher Certification Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIOL 1030, 1031	4	BIOL 1040, 1041	4
CHEM 1010, 1011	4	CHEM 1020, 1021	4
ENGL 1010	3	ENGL 1020	3
MUSC 1010	3	CS 121	3
HEA 151	3	*MATH 1041 OR HIGHER	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
EDCI 101	1		
	19		18

*Students will have to take MATH 1040 or lower if they are unprepared for 1050.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 211, 211L	4	BIO 212, 212L	4
CHEM 211, 211L (FORMERLY CHEM 311, 311L)	4	CHEM 212, 212L (FORMERLY CHEM 312, 312L)	4
ENGL 2010	3	ENGL 2020	3
HIST 2010	3	HIST 2020	3
PSY 242	3	EDCI 201	3
	17		17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 430, 430L	4	BIO 412, 412L	4
SPCH 220 OR 230	3	BIO 301	3
ART 1010	3	SOCI 2010	3
PHY 211, 211L	4	PHY 212, 212L	4
EDAD 301 (FORMERLY EDCI 301)	2	EDCI 387	3
PSY 312	3		
	19		17

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 371	3	BIO 472S	12
BIO 417 OR 418	1	EDCI 470A	3
BIO ELECTIVE, 300/400	4		
EDAD 400 (FORMERLY EDCI 400)	3		
EDCI 419	1		
EDRD 491	3		
EDSE 333	3		
	18		15

Course Descriptions

For all classes that have laboratory components, students must register for the laboratory in the same semester that they register for the lecture class.

BIOL 1010, 1011 and 1020, 1021 Introduction to Biophysical Sciences I, II and Laboratory (3, 3). An interdisciplinary course involving the principles of mathematics, chemistry, physics, biology, and earth and space science. The objective of the course is to integrate the areas as they are related to living organisms. Two lecture periods and one laboratory (2 hours) per week. (Formerly SCI 121, 122)

BIOL 1012, 1013 and 1022, 1023 Honors Introduction to Biophysical Sciences and Laboratory (3, 3). Honors version of BIOL 1010, 1011, 1020, 1021. Courses limited to students in University Honors Program.

BIOL 1030, 1031 and 1040, 1041 General Biology I, II and Laboratory (4, 4). Structure, function, and life characteristics of organisms.

BIOL 1032, 1033 and 1042, 1043 Honors General Biology I, II and Laboratory (4, 4). Honors version of BIOL 1030, 1031, 1040, 1041. Courses limited to students in University Honors Program.

BIO 211, 211L Cell Biology and Laboratory (4). Structure and function of cells and their components. Prerequisites: BIOL 1030, 1031, 1040, 1041. (Formerly BIO 411, 411L).

BIO 212, 212L Principles of Genetics and Laboratory (4). An introduction to genetics, including classical and modern approaches, the laws of heredity, role of heredity in developmental physiology, and the relation between heredity and evolution. Prerequisites: BIO 1030, 1031, 1040, 1041. (Formerly BIO 310, 310L)

BIO 221, 221L and 222, 222L Human Anatomy and Physiology and Laboratory (4, 4). The fundamentals of the structure, function, and organization of the organ systems of man. These courses should be taken in sequence. (Formerly ZOO 201, 202)

BIO 240, 240L General Bacteriology and Laboratory (4). Identification, culture, sterilization, and disinfectant procedures employed in studying certain microorganisms. Open to majors in Home Economics, HPER, and Nursing. Prerequisites: BIOL 1030, 1031 or CHEM 1010, 1011, 1020, 1021. (Formerly MCB 250)

BIO 301, 301L Earth and Space Science and Laboratory (3). An integrated study of earth and space sciences, including a study of the shape, structure, composition, motions, and atmosphere of the earth. Topics include an examination of the effect of weathering and erosion on the lithosphere and concerns for our environment. Consideration is given to space exploration, including stars, space, and time. Two lecture periods and one two-hour laboratory per week. (Formerly SCI 381)

BIO 311 Biometrics (3). An introduction to the methods of statistics that are of particular interest to biologists for experimental design and interpretation. Prerequisites: MATH 1040, BIOL 1030, 1031, 1040, 1041, 232, 232L, or their equivalents. (Formerly BIO 380)

BIO 318A, B, C Cooperative Education (3, 3, 3). Course generated by student and faculty coordinator of cooperative education. Scope of subject matter is determined by students and faculty coordinator. Prerequisites: Completion of all sophomore-level Biology degree requirements and permission of faculty coordinator.

BIO 321, 321L Mammalian Physiology and Laboratory (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: BIOL 1030, 1031, 1040, 1041 and CHEM 1010, 1011, 1020, 1021, or equivalents. (Formerly ZOO 340)

BIO 324, 324L Comparative Anatomy and Laboratory (4). The comparative anatomy and evolution of the organ system of chordate animals. Prerequisites: BIOL 1030, 1031, 1040, 1041L. (Formerly ZOO 330)

BIO 330, 330L Plant Morphology and Laboratory (4). Consideration of the structure, embryology, and phylogeny of higher vascular plants. Prerequisites: BIOL 1030, 1031, 1040, 1041, 212, 212L, 411, 411L. (Formerly BOT 320)

BIO 332, 332L General Botany and Laboratory (4). The anatomy, physiology, and taxonomy of plants. Prerequisites: BIO 211, 211L, 212, 212L. (Formerly BIO 232, 232L)

BIO 340, 340L Introduction to Microbial Physiology and Laboratory (4). Salient features in the physiology of microorganisms. Selected examples of the metabolism of carbohydrates, lipids, and nitrogen-containing compounds are considered as a basis for further understanding of biologic phenomena. Prerequisites: BIO 341, 341L or CHEM 211, 211L concurrently. (Formerly MCB 310)

BIO 341, 341L Principles of General Bacteriology and Laboratory (4). The isolation, identification, culture, nutrition, sterilization, and chemotherapeutic procedures employed in studying bacteria. Prerequisites: BIO 211, 211L, 212, 212L; CHEM 1010, 1011, 1020, 1021. (Formerly BIO 241, 241L)

BIO 371 Methods of Teaching Biology (3). A course designed to explore methods and techniques for teaching biology in the secondary school. It offers opportunities for locating sources of biological materials, supplies, and equipment for the biology laboratory and gives guidance in the selection of books, journals, and other printed materials that support academic programs in secondary school biology. A field component of at least 24 hours of varied clinical experiences, classroom observation, active participation, and other related activities in clinical and/or in school settings is required. Required of all Biology majors seeking secondary certification in Biology. Prerequisite: official admission to the Teacher Education Program.

BIO 410 Special Topics (3). Student- and faculty-generated course. Scope of subject matter is determined by students and instructor. Prerequisites: 12 hours of upper-level Biology or permission of instructor. (Elective) (Formerly BIO 440)

BIO 411, 411L Molecular Genetics and Laboratory (4). An introduction to molecular genetics in mocroorganisms, plants, and animals. Emphasis is placed on biotechnical advances and the methods and techniques used in these systems. Prerequisites: BIO 211, 211L, 212, 212L.

BIO 412, 412L Principles of Ecology and Laboratory (4). Fundamental ecological principles with special reference to levels of organization, population and community properties, structural adaptation, functional adjustments, and other factors affecting the distribution of organisms. Prerequisites: BIOL 1030, 1031, 1040, 1041, 212, 212L, 411, 411L. (Formerly BIO 480)

BIO 413, 414 Contemporary Problems in Ecology I, II (3, 3). A study of some of the contemporary problems constituting the environmental crisis, the hazards comprising such problems, and the complexity affecting their resolutions. (Elective) (Formerly SCI 481, 482)

BIO 415, 415L Microtechnique and Laboratory (4). Methods of microscopic study of tissues. Prerequisites: BIOL 1030, 1031, 1040, 1041, 212, 212L and CHEM 1010, 1011, 1020, 1021.

BIO 416 Evolution (3). A study of current evolutionary theory, including systematics, with an examination of macroevolutionary patterns and microevolutionary processes. Prerequisites: BIOL 1030, 1031, 1040, 1041.

BIO 417, 418 Senior Seminar (1, 1). Current problems in biology. A minimum of one semester required of all seniors in the Department. Meets one hour per week. (Formerly BIO 491, 492)

BIO 419 Junior Honors Research (3). Open to juniors and seniors of outstanding attainment who have demonstrated high achievements in their major field. It offers opportunity to do individual research under the direction of a member of the Departmental faculty. (Elective) (Formerly BIO 460)

BIO 420, 420L Invertebrate Zoology and Laboratory (4). Study of the morphology, physiology, taxonomy, and life histories of the invertebrates. Emphasis is placed on the systemic developments of invertebrate types. Prerequisites: BIOL 1030, 1031, 1040, 1041, 212, 212L. (Elective) (Formerly ZOO 400)

BIO 421, 421L Embryology and Laboratory (4). A general consideration of gametogenesis, fertilization, cleavage in animals and the early development of echinoderms, protochordates, and selected vertebrates, with emphasis on early development of the chick. Prerequisites: BIO 324 and 324L are strongly recommended. (Formerly ZOO 430)

BIO 422, 422L Endocrinology and Laboratory (4). The function of vertebrate hormones, with emphasis on those concerned in the physiology of reproduction. Topics include techniques used in small animal surgery in endocrine research. Prerequisites: BIO 421, 421L. (Elective) (Formerly ZOO 460)

BIO 423, 423L Histology and Laboratory (4). Study of animal tissues. Prerequisites: Biology 1030, 1031, 1040, 1041, 212, 212L, 411 and 411L. (Elective) (Formerly ZOO 450)

BIO 424, 424L Introduction to Parasitology and Laboratory (4). Animal parasites and their methods of entering the body of man and mammals. The several types of host-parasite relationships are surveyed, with emphasis on the effects of parasites on or within the hosts, immunogenic responses by the host to parasitism, and a history of the discipline. Prerequisites: BIOL 1030, 1031, 1040, 1041, 212, 212L. (Elective) (Formerly ZOO 440)

BIO 426, 426L Field Zoology and Laboratory (4). Study of selected groups of animals. Methods of collecting, classifying, and preserving are emphasized. Prerequisites: BIOL 1030, 1031, 1040, 1041, 212, 212L. (Elective) (Formerly ZOO 410)

BIO 427, 427L and 428, 428L Physiology and Pathophysiology I, II and Laboratory (4, 4). A closely integrated series of lectures and laboratory demonstrations which emphasize human physiology and pathophysiology. Physiology of the nervous system, blood circulation, respiration, and special senses is considered, as is the basic and applied physiology of the digestive, excretory, and endocrine systems. Mechanisms of integrating various systems are emphasized. Must be taken in sequence. Prerequisites: BIOL 1030, 1031, 1040, 1041 or BIO 221, 221L, 222, 222L and CHEM 211, 211L. (Formerly ZOO 470-471)

BIO 427A, 427K Physiology and Pathophysiology and Laboratory (4). An accelerated one-semester series of lectures and laboratory demonstrations which emphasize human physiology and pathophysiology. Immune response, gastrointestinal, cardiovascular, electrolytic, respiratory, renal, neurological, endocrinal, reproductive, and musculoskeletal disorders are considered. Both courses are required of Nursing majors. Prerequisites: BIOL 1030, 1031, 1040, 1041 or 221, 221L, 222, 222L and CHEM 211, 211L.

BIO 430, 430L Introduction to Plant Physiology and Laboratory (4). Consideration of the functions of digestion, nutrition, growth, photosynthesis, respiration, translocation, photoperiodism, plant hormones, transpiration, and water relations as occurring in typical green plants. Prerequisites: BIO 332, 332L and CHEM 1010, 1011, 1020, 1021. (Formerly BOT 420)

BIO 432, 432L Field Botany and Laboratory (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: BIO 332, 332L. (Elective) (Formerly BOT 460)

BIO 440, 440L Pathogenic Microorganisms and Laboratory (4). Survey of the important features of host-parasite interaction. Characteristics of the organisms, host hypersensitivity, and natural and acquired immunity are considered as contributing factors toward this interaction. Modern preventive methods are emphasized. Prerequisites: BIO 341, 341L. (Formerly MCB 410)

BIO 441, 441L Immunology and Serology and Laboratory (4). Theories of immunity and training in serological methods and procedures for immunization. Prerequisites: BIO 341, 341L. (Elective) (Formerly MCB 420)

BIO 442, 442L Virology and Laboratory (4). Survey of bacterial, plant, and animal viruses with emphasis on their infectious cycles. Prerequisites: BIO 341, 341L. (Elective) (Formerly MCB 430)

BIO 472S Student Teaching (12). A semester-long experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in the teaching of biology. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently.

MARC Program

The following courses are offered through the MARC (Minority Access to Research Careers) Honors Program. Enrollment is restricted to MARC participants, or by permission of the Director.

BIO 392 Scientific Communication (4). Course designed to improve written, oral, and quantitative skills necessary to enhance career development in the sciences.

BIO 490, 490L Cell Physiology and Laboratory (4). Introduction to the interrelationships of biological, physical, and chemical aspects of the cell. Prerequisites: BIOL 1030, 1031, 1040, 11041, CHEM 1010, 1011, 1020, 1021.

BIO 491 Modern Scientific Methods (3). Use and applications of modern laboratory equipment and techniques. Prerequisites: BIO 490, 490L.

BIO 492 Honors Undergraduate Research (4). Intramural and extramural biomedical research experiences.

BIO 493 Current Biomedical Topics (0). Training in critical analysis and oral presentations of current journal publications in selected biomedical fields. Ethical issues, including plagiarism, falsification, fabrication, and misconduct in research are discussed. All MARC trainees must register in this course each semester.

BIO 494, 495 MARC Seminar Series II, III (1, 1). Exposure to current presentations by eminent scientists in biomedical research.

Natural Science Courses Offered by Gulf Coast Research Laboratory

By affiliation agreement negotiated annually with the Gulf Coast Research Laboratory in Ocean Springs, Mississippi, the following courses may be taken for resident credit by TSU students:

BSC 437	Coastal Vegetation (3)
BSC 438	Salt Marsh Plant Ecology (4)
MAR 482	Coastal Marine Geology (3)
BSC 490	Marine Microbiology (5)
BSC 492	Special Problems in Marine Science (TBA)
MAR 491	Special Topics in Marine Science (TBA)
SEC 435	Marine Science for Elementary Teachers (3)
MAR 457	Marine Science for Teachers
MAR 300	Oceanography
MAR 301	Marine Biology (5)
MAR 403	Marine Invertebrate Zoology
MAR 408	Marine Ichthyology (6)
BSC 424	Parasites of Marine Animals (6)
BSC 449	Marine Fisheries Management (4)
BSC 439	Marine Ecology (5)
BSC 448	Fauna and Faunistic Ecology of Tidal Marshes, Beaches, and Sea Grass Beds (4)
BSC 468	Comparative Histology of Marine Organisms (1-6)

Complete course descriptions and registration forms for courses offered at the Gulf Coast Research Laboratory may be obtained by contacting the Head of the Department of Biological Sciences.

Department of Chemistry

Carlos W. Lee, Ph.D., Head
201 Chemistry Building
Telephone 615-963-5321
FAX 615-963-5326

Faculty: W. Boadi, S. Brown, F. Chen, P. Iyere, M. Karim, Y. Lin, C. Okoro, K. Vercruysse, M. Whalen, G. Zimmerman.

General Statement: The purpose of the Department of Chemistry is the advancement, interpretation, dissemination, and preservation of chemical concepts and knowledge. Chemistry itself is the science of the nature, composition, and property of material substances, as well as their transformations and interactions. It is thus basic to natural phenomena and modern technology alike. Chemistry is traditionally divided into five major parts: organic chemistry, inorganic chemistry, analytical chemistry, biochemistry, and physical chemistry.

The principal objectives of the Department of Chemistry are (1) to instruct students in the basic principles and techniques of the various branches of chemistry, (2) to educate students and the general public in the importance of chemistry to the quality of the environment and everyday living, and (3) to engage in research and publication of new scientific information.

The Chemistry Department offers undergraduate programs earning B.S. degrees and a graduate program earning an M.S. degree. Six different undergraduate curricula are available to students according to their individual interests. For details of the M.S. in Chemistry, see the Graduate Catalog.

No grade of less than a "C" in any Chemistry course will be accepted as credit toward meeting Departmental requirements.

Accreditation: The teacher certification program in Chemistry is accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

Departmental Requirements For Bachelor of Science Chemistry — **35-53 Semester Hours**

Requirements for a Minor — **20 or More Semester Hours**

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENG 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
MATH 1040, 1050	Precalculus Mathematics I, II (Professional Chemistry concentration and Pre-Professional/Biochemistry concentration require 1060, 1070.) (Students will have to begin with lower-level MATH if they are unprepared for the above courses.)	6
BIOL 1030, 1031, 1040, 1041	General Biology I, II and labs (not required in Professional Chemistry concentration)	8
Humanities	2 courses from 2 different disciplines (All concentrations except Teacher Certification require PHIL 250.)	6
Social Science	One three-hour course	3
SPCH 220	Public Speaking	3
ASOR 100A	Orientation for Science Majors (Teacher certification students should take EDCI 101.)	1
HPER 1010-1053, AERO, or MUSC 2010	Physical Education Activity (two semesters required)	2

Upper-division Admission

For admission into the upper-division programs of the Chemistry major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level coursework, and completed the Rising Junior Examination. In addition, they must have earned a grade of C or better in CHEM 1010 or 1012, 1011 or 121K, 1020 or 1022, 1021 or 122K, 210, 210L, 211 or 211H, 211L or 211K, 212 or 212H, and 212L or 212K.

Curriculum 1-Professional Chemistry Curriculum 53 Hours

This program requires 130 hours for graduation and is designed for students pursuing professional chemists' career opportunities in industry or government laboratories, and for those students desiring to pursue advanced studies in graduate school.

A minimum of 53 semester hours in Chemistry is required, 33 of which must be in 300- or 400-level courses. The required courses are 1012, 121K, 1022, 122K, 210, 210L, 211H, 211K, 212H, 212K, 321, 321L, 322, 322L, 341, 410, 420, 420L, 421, 432, 432L, 450A, 450B, 491, and 492, plus one additional course to be chosen from CHEM 400, 460, and 483. CHEM 460 is strongly recommended. This curriculum is based upon recommendations by the American Chemical Society.

Curriculum 2-Biochemistry Concentration **49 Hours**

This program requires 133 hours for graduation and is designed for students pursuing a professional career in medicine, dentistry, pharmacy, or veterinary medicine. Students following this curriculum will receive a minor in Biology.

A minimum of 49 semester hours in Chemistry is required, 25 of which must be in 300- and 400-level courses. The required courses are: 1012, 121K, 1022, 122K, 210, 210L, 211H, 211K, 212H, 212K, 300, 331, 332, 341, 341L, 342, 342L, 410, 450A, 450B, 470, 470L, 491, and 492.

Curriculum 3-Chemistry Concentration **35 Hours**

This program of study requires 130 hours for graduation and is designed to train students for career objectives other than professional chemist, graduate school, professional school, or teacher certification. This program gives students more flexibility with regard to individualized course selection which prepares students for careers as laboratory technicians, research technicians, or positions in chemical sales, process control, chemical editing-writing, and patent law. The minor in this concentration is selected by the student according to his or her career goals and is monitored carefully by an advisor.

This degree requires 35 hours of Chemistry with 15 hours of 300- and 400-level courses, and is designed for students whose career objectives are in fields where chemistry has indirect applications. The required courses are: 1010, 1011, 1020, 1021, 210, 210L, 211, 211L, 212, 212L, 300, 331, 331L, 332, 332L, 410, 491, and 492.

Curriculum 4-Major in Chemistry with Teacher Certification, Licensure for Grades 7-12 **35 Hours**

All candidates for certification in secondary education must complete a minimum of 143 semester hours, which includes a general education core (70 hours), a professional education core (36 hours, including a 12-hour course in enhanced student teaching), and a major concentration of content and knowledge courses (35 hours). The required courses in Chemistry are 1010, 1011, 1020, 1021, 210, 210L, 211, 211L, 212, 212L, 331, 331L, 332, 332L, 341, 341L, 450A, and 491. Successful completion of this program provides one with a license to teach Chemistry in grades 7-12 in Tennessee public schools.

Students seeking the Bachelor of Science Degree with licensure must make written application for admission to the Teacher Education Program in the College of Education, usually during the sophomore year. They must have a 2.75 cumulative quality point average at time of application and must pass the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematical portions of the SAT are exempt from the PPST and the CBT. Enhanced student teaching requires placement of eight weeks at the secondary level and seven weeks at the middle school level. For a complete list of requirements for admission to and retention in the Teacher Education Program, see pages 000-000.

Curriculum 5-Cooperative Program In Pharmacy Concentration

A program of study in pharmacy is offered at Tennessee State University in cooperation with Howard University's College of Pharmacy and Pharmacal Sciences. The curriculum consists of joint programs between the two institutions and qualifies students for the bachelor's degree.

The first three years of this curriculum consist of the basic required courses for a Biochemical concentration and the pre-pharmacy requirements for Howard University. Required Chemistry courses are: 1012, 121K, 1022, 122K, 210, 210L, 211H, 211K, 212H, 212K, 331, 331L, 332, 332L, 491, and 492. Students must complete all TSU requirements in the program, including the general education requirements, before matriculating at Howard.

The fourth year of the cooperative program is offered to those students who are admitted to Howard University. Upon successful completion of the first year curriculum in the College of Pharmacy and Pharmacal Sciences of Howard University, the student makes application to Tennessee State University for the B.S. degree. Upon joint recommendation of Howard University and Tennessee State University the student becomes a candidate for the B.S. degree. The degree is awarded by Tennessee State University.

Curriculum 6-Degree in Chemistry While Earning Advanced Degree at Another Institution

Besides the special program in pharmacy with Howard University, Chemistry majors are sometimes admitted to dental, medical, or pharmacy school before completing their undergraduate degrees, thus shortening the time required to earn the advanced degree. TSU and the Department of Chemistry desire to cooperate with students who pursue such a path, and they are willing to allow such students to use their advanced work at the other institution to complete undergraduate degree requirements at TSU. These students must complete all of TSU's requirements—the general education requirements, the requirements for total number of hours, and the requirements for the Chemistry major. Before embarking on such a course, students must declare in writing to their Department their intent to do so, and they must file a study plan showing that they will have completed all TSU requirements except for elective courses and acknowledging the number of hours remaining. The plan must be approved in writing by both the head of the Department of Chemistry and the Dean of Arts and Sciences before students begin study at the other institution. Students cannot apply for the degree from TSU until they have applied for the advanced degree at the other institution. In most cases the students would follow the four-year program spelled out below for the cooperative program with Howard University; departures from that program must be agreed to in advance by the Department head.

Bachelor of Science Degree in Chemistry

Curriculum 1-Professional Chemistry Curriculum

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 1012, 121K	4	CHEM 1022, 122K	4
ENGL 1010	3	ENGL 1020	3
*MATH 1060	4	MATH 1070	4
PHIL 250	3	HUMANITIES	3
ASOR 100A	1	SPCH 220	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	16		18

*Students will have to begin with lower-level MATH if they are unprepared for this course.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 210, 210L (FORMERLY CHEM 310, 310L)	4	CHEM 212H, 212K (FORMERLY CHEM 312, 312L)	4
CHEM 211H, 211K (FORMERLY CHEM 311, 311L)	4	ENGL 2020	3
ENGL 2010	3	HIST 2020	3
HIST 2010	3	MATH 263	3
PHY 221, 221L	4	PHY 222, 222L	4
	18		17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 321, 321L	4	CHEM 322, 322L	4
CHEM 420, 420L	4	CHEM 410	2
MATH/SCIENCE ELECTIVE, 300-400 LEVEL	3	CHEM 421	3
		MATH/SCIENCE ELECTIVE, 300-400 LEVEL	3
SOCIAL SCIENCE	3		
ELECTIVE, 300/400 LEVEL	3	ELECTIVE, 300/400 LEVEL	3
		ELECTIVE, ANY LEVEL	3
	17		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 341	3	CHEM 432, 432L	4
CHEM 450A	2	CHEM 450B	2
CHEM 491	1	CHEM 492	1
ELECTIVE, 300-400 LEVEL	3	CHEM ELECTIVE, 300-400	3
ELECTIVES, ANY LEVEL	4	ELECTIVE, ANY LEVEL	3
	13		13

Bachelor of Science Degree in Chemistry

Curriculum 2-Professional Biochemistry Concentration

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 1012, 121K	4	CHEM 1022, 122K	4
ENGL 1010	3	ENGL 1020	3
BIO 1030, 1031	4	BIOL 1040, 1041	4
*MATH 1060	4	MATH 1070	4
ASOR 100A	1	HPER, AERO, OR MUSC 2010	1
HPER, AERO, OR MUSC 2010	1		
	17		16

*Students will have to begin with lower-level MATH if they are unprepared for this course.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 210, 210L (FORMERLY CHEM 310, 310L)	4	CHEM 212H, 212K (FORMERLY CHEM 312, 312L)	4
CHEM 211H, 211K (FORMERLY CHEM 311, 311L)	4	ENGL 2020	3
PHIL 250	3	HIST 2020	3
ENG 2010	3	HUMANITIES	3
HIST 2010	3	SOCIAL SCIENCE	3
	17		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 331	3	CHEM 332	3
CHEM 341, 341L	4	CHEM 342, 342L	4
BIO 211, 211L	4	CHEM 410	2
PHY 211, 211L	4	BIO 212, 212L	4
SPCH 220	3	PHY 212, 212L	4
	18		17

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 300	3	CHEM 450B	2
CHEM 450A	2	CHEM 492	1
CHEM 470, 470L	4	BIO ELECTIVE, 300-400	4
CHEM 491	1	ELECTIVES, 300-400 LEVEL	8
BIO ELECTIVE, 300-400	4		
ELECTIVE, 300/400 LEVEL	3		
	17		15

Bachelor of Science Degree in Chemistry

Curriculum 3-Chemistry Concentration

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 1010, 1011	4	CHEM 1020, 1021	4
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
*MATH 1040	3	MATH 1050	3
ASOR 100A	1	PHIL 250	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	15		17

*Students will have to begin with lower-level MATH if they are unprepared for this course.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 210, 210L (FORMERLY CHEM 310, 310L)	4	CHEM 212, 212L (FORMERLY CHEM 312, 312L)	4
CHEM 211, 211L (FORMERLY CHEM 311, 311L)	4	HUMANITIES	3
SPCH 220	3	ENGL 2020	3
ENGL 2010	3	BIOL 1040, 1041	4
BIOL 1030, 1031	4	ELECTIVE, ANY LEVEL	3
	18		17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 331, 331L	4	CHEM 332, 332L	4
PHY 211, 211L	4	PHY 212, 212L	4
SOCIAL SCIENCE	3	CHEM 410	2
ELECTIVES, 300/400 LEVEL	6	ELECTIVES, 300/400 LEVEL	6
	17		16

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 300	3	CHEM 492	1
CHEM 491	1	ELECTIVES, 300/400 LEVEL	15
ELECTIVES, 300/400 LEVEL	6		
ELECTIVES, ANY LEVEL	4		
	14		16

Bachelor of Science Degree in Chemistry

Curriculum 4-Major in Chemistry with Teacher Certification, Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 1010, 1020	4	CHEM 1020, 1021	4
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
*MATH 1060	4	HEA 151	3
MUSC 1010	3	ART 1010	3
EDCI 101	1	SPCH 220	3
	18		19

*Students will have to begin with lower-level MATH if they are unprepared for this course.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 210, 210L (FORMERLY CHEM 310, 310L)	4	CHEM 212, 212L (FORMERLY CHEM 312, 312L)	4
CHEM 211, 211L (FORMERLY CHEM 311, 311L)	4	SOCI 2010	3
ENGL 2010	3	EDCI 201	3
PHY 211, 211L	4	ENGL 2020	3
PSY 242	3	PHY 212, 212L	4
		HPER, AERO, OR MUSC 2010	1
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 331, 331L	4	CHEM 341, 341L	4
ASTR 110	4	CHEM 332, 332L	4
BIOL 1030, 1031	4	BIO 1040 1041	4
BIO 301, 301L	4	HPER	1
EDAD 301 (FORMERLY EDCI 301)	2	EDCI 387	3
		CS 121	3
	18		19

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 371	3	CHEM 472S	12
CHEM 450A	2	EDCI 470A	3
CHEM 491	1		
EDAD 400 (FORMERLY EDCI 400)	2		
EDCI 419	1		
EDRD 491	3		
EDSE 333	3		
PSY 312	3		
	18		15

Bachelor of Science Degree in Chemistry

Curriculum 5-Cooperative Program In Pharmacy Concentration

Suggested Three-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 1010, 121K	4	CHEM 1022, 122K	4
ENGL 1010	3	ENGL 1020	3
*MATH 1050	3	MATH 1060	4
BIO 1030, 1031	4	BIO 1040, 1041	4
ASOR 100A	1	PHIL 250	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	16		19

*Students will have to begin with lower-level MATH if they are unprepared for this course.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 210, 212L (FORMERLY CHEM 310, 310L)	4	CHEM 212H, 212K (FORMERLY CHEM 312, 312L)	4
CHEM 2llH, 211K (FORMERLY CHEM 311, 311L)	4	ENGL 2020	3
ENGL 2010	3	HIST 2020	3
HIST 2010	3	SOCIAL SCIENCE	6
SPCH 220	3		
HUMANITIES	3		
	20		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 331, 331L	4	CHEM 332, 332L	4
CHEM 491	1	CHEM 410	2
PHY 211, 211L	4	CHEM 492	1
BIO 211, 211L	4	PHY 212, 212L	4
BIO 221, 221L	4	SOC ELECTIVES	6
	17		17

All of these courses must be completed before the student begins work at Howard University.

Course Descriptions

CHEM 100 (3) and 100L (1) Basic Chemistry and Laboratory. A study of the fundamentals of chemistry. Topics include the metric system, atomic theory, inorganic nomenclature, chemical stoichiometry, properties of gases, liquids and solutions, and acid/base chemistry. Laboratory component emphasizes basic qualitative and quantitative measurements and data interpretation. Three lectures and one three-hour laboratory per week. Offered in fall and spring.

CHEM 101 (3) and 101L (1) Fundamentals of Organic and Biological Chemistry. A study of the fundamentals of organic chemistry, biochemistry and evironmental chemistry. Topics include the nature of organic compounds, and the chemistry and metabolism of biochemical macromolecules and current environmental issues. Laboratory emphasizes principles learned in lecture. Three lectures and one three-hour laboratory per week. Prerequisites: high school chemistry or CHEM 100/100L and two years of high school algebra or MATH 1010. Offered in fall and spring.

CHEM 1010 (3) and 1011 (1) General Chemistry I and Laboratory. A comprehensive study of chemical principles designed for students pursuing a career in chemistry or other scientific areas. Topics include the metric system and scientific notation, structure of matter, nomenclature, composition and reaction stoichiometry, types of chemical reactions, atomic structure, chemical bonding, gases and the kinetic molecular theory, liquids, solids,and thermodynamics. Laboratory complements lecture topics and emphasizes qualitative and quantitative measurements and data interpretation. Prerequisites: high school chemistry or CHEM 100, 100L, and two years high school algebra or MATH 1010. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 1012 (3) and 1022 (1) Honors General Chemistry I and Laboratory. For Chemistry majors and University Honors Program students only. Topics covered are similar to CHEM 1010, 1011, but the depth of understanding expected is greater. Prerequisites: high school chemistry or CHEM 100, 100L, and two years high school algebra or MATH 1010. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 1020 (3) and 1021 (1) General Chemistry II and Laboratory. A continuation of CHEM 1010, 1011. Topics include solutions, acid/base reactions, chemical thermodynamics, chemical kinetics, gaseous equilibria, acid/base and solubility equilibria, electrochemistry, nuclear chemistry, and descriptive organic and inorganic chemistry. Laboratory complements lecture topics and emphasizes qualitative and quantitative measurements, and data interpretation and manipulation. Prerequisites: CHEM 1010, 1011. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 1022 (3) and 122K (1) Honors General Chemistry II and Laboratory. A continuation of CHEM 1012, 1022. Topics covered are similar to CHEM 1020, 1021, but the depth of understanding expected is greater. Prerequisites: CHEM 1012, 1022. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 1030 (3) and 1031 (1) General Chemistry for Non-Science Majors I and Laboratory. A course for non-science majors that focuses on the application of chemistry to society. Topics such as air and water pollution, ozone depletion, global warming, energy, acid rain, and other current environmental issues will be surveyed and implications for personal and societal decisions explored. Laboratory component focuses on the principles learned in lecture. Three lectures and one three-hour laboratory per week. Offered in fall and spring.

CHEM 1040(3) and 1041 (1) General Chemistry for Non-Science Majors II and Laboratory. A continuation of CHEM 1030, 1031. Prerequisites: CHEM 1030, 1031. Three lectures and one three-hour laboratory per week. Offered in fall and spring.

CHEM 151 (4) and 151L (1) General Chemistry and Laboratory for Engineers. A comprehensive study of chemical principles designed for students pursuing a career in engineering. Topics include atomic and molecular structure, chemical stoichiometry, gas laws, liquids, solids, solutions, kinetics, chemical equilibria, thermodynamics, and electrochemistry. Laboratory complements lecture topics and emphasizes qualitative and quantitative analysis procedures. Prerequisites: high school chemistry or CHEM 100, 100L, and two years high school algebra or MATH 1010. Four lectures and one three-hour laboratory per week. Offered in fall and spring.

CHEM 151H (3) Honors General Chemistry for Engineers. Honors Program version of CHEM 151. Students must also register for CHEM 151L, which is the laboratory component of the course. Prerequisite: membership in University Honors Program. Offered only in fall.

CHEM 210 (3) and 210L (1) Introduction to Analytical Chemistry and Laboratory. Quantitative methods of chemical analysis. Topics include data manipulation, error analysis and statistical methods; chemical equilibria; acid/base, complexometric and precipitation titrimetry; spectrometric methods; chemical separations and chromatography; analytical glassware, equipment, and instrumentation; and use of computer spreadsheet programs. Laboratory component directly parallels lecture topics. Prerequisites: CHEM 1020, 1021, or CHEM 1022, 122K. Three lectures and one three-hour laboratory per week. Formerly CHEM 310, 310L. Required of all Chemistry majors. Offered in fall and spring.

CHEM 211 (3) and 211L (1) Organic Chemistry I and Laboratory. A systematic study of the physical and chemical properties of hydrocarbons and their derivatives. Topics include chemical bonding, structural formula and physical properties, nomenclature, stereochemistry, synthesis and reactions of alkanes, alkenes, alkynes, alkyl halides, and alcohols. Reaction mechanism is emphasized. Laboratory component focuses on reaction set-ups, recrystallization, melting point, distillation, extraction, chromatography, and reactions. Prerequisites: CHEM 1020, 1021, or CHEM 1022, 122K. Three lectures and one three-hour laboratory per week. Formerly CHEM 311, 311L. CHEM 211, 211L is required of all Chemistry majors. Offered in fall, spring, and summer.

CHEM 211H (3) and 211K (1) Honors Organic Chemistry I and Laboratory. For Chemistry majors and University Honors Program students only. Topics are similar to CHEM 211, 211L, but covered in greater detail. Prerequisites: CHEM 1022, 122K. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 212 (3) and 212L (1) Organic Chemistry II and Laboratory. A continuation of CHEM 211, 211L. Emphasis is on the synthesis, reactions, and spectroscopic identification of aromatic compounds, carbonyl compounds, and amines. Reaction mechanism is strongly emphasized. Laboratory component exposes students to multi-step synthesis, and spectroscopic and chromatographic characterization of reaction products. Prerequisites: CHEM 211, 211L. Three lectures and one three-hour laboratory per week. Formerly CHEM 312, 312L. CHEM 212, 212L is required of all Chemistry majors. Offered in fall, spring, and summer.

CHEM 212H (3) and 212K (1) Honors Organic Chemistry II and Laboratory. A continuation of 211H, 211K. Topics covered are similar to CHEM 212, 212L, but covered in greater detail. Prerequisites: CHEM 211H, 211K. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 250 (3) Introduction to Pharmacology. An introductory study of mechanisms, dosages, and side effects of pharmacological classes of medication. Three lectures per week. Offered only in fall.

CHEM 300 (3) Introduction to Inorganic Chemistry. An introduction to descriptive inorganic chemistry. Emphasis is on periodicity in structure and reactivity. Topics include bonding, boron chemistry, catalysis, coordination compounds and reaction mechanisms, electronic spectroscopy, and bioinorganic chemistry. Prerequisites: CHEM 1020, 1021 or 1022, 122K. Offered only in the fall.

CHEM 318A, B, C (3, 3, 3) Cooperative Education I, II, III. Supervised and approved program of learning experiences undertaken by students in governmental, business, or industrial setting. Formal proposals, project objectives, or learning plans are reviewed and approved by faculty. Student activities and progress are monitored, evaluated, and graded by a full-time faculty member. Prerequisite: permission of Department Head. Offered in fall, spring, and summer.

CHEM 320 (3) and 320L (1) Physiological Biochemistry and Laboratory. The fundamentals of human physiological chemistry. Required of majors in foods and nutrition. Prerequisites: CHEM 360, 360L. Not available for students having credit for CHEM 470. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 321 (3) and 321L (1) Physical Chemistry I and Laboratory. Topics covered include the laws of thermodynamics and their application to physical processes and chemical systems, ideal and real gases, single and multi-component phase equilibrium, solutions of non-electrolytes and electrolytes, and electrochemistry. Laboratory component emphasizes the material covered in lecture. Prerequisites: MATH 1070 CHEM 210, 210L, and either CHEM 212, 212L or CHEM 212H, 212K. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 322 (3) and 322L (1) Physical Chemistry II and Laboratory. A continuation of CHEM 321, 321L. Topics include kinetic molecular theory, transport processes, reaction kinetics, quantum mechanics, atomic structure, molecular electronic structure, spectroscopy, and photochemistry. Prerequisites: CHEM 321, 321L. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 331 (3) and 331L (1) Fundamentals of Physical Chemistry I and Laboratory. A non-calculus survey of physical chemistry. Topics include states of matter and the properties of gases; the laws of thermodynamics; phase equilibria; chemical equilibrium; and electrochemistry. Prerequisites: CHEM 210, 210L, 212, 212L, MATH 1050. Not available to students having credit for CHEM 321, 321L. Students interested in attending graduate school should enroll in CHEM 321, 321L. Laboratory component emphasizes the material covered in lecture. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 332 (3) and 332L (1) Fundamentals of Physical Chemistry II and Laboratory. A continuation of CHEM 331, 331L. Topics include the rates of reactions and processes; atomic structure; chemical bonding; intermolecular forces; and molecular spectroscopy. Prerequisites: CHEM 331, 331L. Not available to students having credit for CHEM 322, 322L. Students interested in attending graduate school should enroll in CHEM 322, 322L. Laboratory component emphasizes the material covered in lecture. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 341 (3) and 341L (1) General Biochemistry I and Laboratory. A study of the chemical and physical properties and biological functions of proteins, carbohydrates, lipids, and nucleic acids. Topics include cell membranes, enzyme kinetics and mechanisms, replication, transcription, and translation. Prerequisites: CHEM 211, 211L. Laboratory component emphasizes ionization of acids and bases, pH and buffers, important biochemical techniques, and the chemistry of the major classes of biological compounds. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 342 (3) and 342L (1) General Biochemistry II and Laboratory. A continuation of CHEM 341, 341L. Study of the major catabolic and anabolic pathways, including their chemical reactions, energetics, and regulation. Additional topics include hormones, vitamins, and biochemical function of various organs. Prerequisites: CHEM 341, 341L. Laboratory emphasizes biochemical and molecular techniques associated with the study of metabolism. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 360 (3) and 360L (1) Organic Chemistry and Organic Survey Laboratory. Study of important classes of organic compounds. Emphasis is placed upon the study of hydrocarbons and their principal derivatives: carbohydrates, proteins, fats, oils, vitamins, and dyes. Designed for majors in Agriculture, Home Economics, and Allied Health. Prerequisites: CHEM 1020, 1021. Not available for students having credit for CHEM 211, 212. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 371 (3) Methods of Teaching High School Chemistry. A course in the methods of teaching chemistry in the secondary school. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all Chemistry majors in the Teacher Education Program. Prerequisite: official admission to the Teacher Education Program. Offered on demand.

CHEM 400 (3) Special Topic. Student- or faculty-generated course, with scope of subject matter to be determined by students and instructor. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 410 (2) Scientific Communications. A focus on writing, oral, and library skills involving scientific information. Writing skills include the preparation of laboratory notebooks, term papers, and research papers. Oral skills concentrate on presentations of scientific results. Library skills include on-line and library literature search for chemical information. Prerequisites: CHEM 210, 210L, or 212, 212L. Two one-hour lectures per week. Offered only in spring.

CHEM 420 (3) and 420L (1) Inorganic Chemistry I and Laboratory. Topics include atomic and molecular structure, quantum mechanics, atomic and group theory, solid state chemistry, acid/base and oxidation/reduction chemistry, and the chemistry of metal complexes. Laboratory provides experience in the synthesis and characterization of inorganic compounds. Prerequisites: CHEM 212, 212L. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 421 (3) Inorganic Chemistry II. A continuation of CHEM 420. Course provides a systematic survey of the descriptive chemistry of the elements, building on the theories presented in CHEM 420. Prerequisites: CHEM 420, 420L. Offered only in spring.

CHEM 432 (3) and 432L (1) Instrumental Analysis and Laboratory. Principles and applications of analytical instrumentation, including electrometric, spectrometric, and chromatographic principles. Prerequisites: CHEM 210, 210L, 322, 322L. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 440 (3) Organic Reaction Mechanisms. A selective treatment of theoretical and mechanistic aspects of organic chemistry. Course includes an introduction to molecular orbital theory and its application to bonding. Aromatic, pericyclic elimination, and addition reactions are throughly treated. Emphais is on reaction mechanism. Prerequisites: CHEM 212, 212L, 322, 322L. Three lectures per week. Offered only in fall.

CHEM 450A, 450B (2, 2) Senior Project I, II. A special laboratory investigation carried out under the direction of the instructor. Emphasis is on scientific research and report writing. Must be taken in sequence. Students are expected to spend at least ten hours per week on their research project(s). Prerequisites: CHEM 322, 322L or 332, 332L. Corequisites: CHEM 491, 492. CHEM 450A offered only in fall, 450B only in spring.

CHEM 460 (3) Spectroscopic Methods in Chemistry. Various spectroscopic methods in chemistry, concentrating on the practical aspect of using spectroscopic techniques to solve structural problems. Techniques include ultraviolet spectroscopy, infrared spectroscopy, nuclear magnetic resonance (NMR) spectroscopy, including ATwo Dimensional@ (2-D) NMR in solving problems, mass spectroscopy (MS), and x-ray crystallography. Prerequisites: CHEM 212, 212L, 322, 322L. Three lectures per week. Offered only in fall.

CHEM 461, 462 (3, 3) and 462L (1) Introduction to Polymer Chemistry I, II and Laboratory. Organic chemical reactions leading to high polymers, physical properties and physical behavior of polymers, polymer processing, and end uses. Prerequisites: CHEM 212, 212L, or permission of instructor. Three lectures and one three-hour laboratory per week. CHEM 461 offered only in fall, 462 and 462L only in spring.

CHEM 470 (3) and 470L (1) Biochemical Analysis and Laboratory. Designed to familiarize the student with the principles and practices involved in the analysis of biological and biochemical materials. Topics include separation systems, molecular spectroscopy, radioactivity, ionic strength, and analysis of macromolecules. Laboratory component emphasizes the topics covered in the lectures. Prerequisites: CHEM 210, 210L, 332, 332L, 342, 342L. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 472S (12) Student Teaching in Chemistry. A semester-long experience of supervised practice teaching appropriately divided between middle and secondary schools. Required of all students seeking certification in teaching Chemistry. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently. Offered on demand.

CHEM 483 (3) Advanced Physical Chemistry. A systematic survey of classical transport processes, kinetic molecular theory, statistical mechanics, and absolute reaction rate theory. Prerequisites: CHEM 322, 322L. Offered only in spring.

CHEM 491, 492 (1, 1) Seminar. Required of all senior Chemistry majors. Must be taken in sequence. Prerequisites: CHEM 322, 322L or 332, 332L. CHEM 491 offered only in fall, 492 only in spring.

Department of Communications

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General Statement: The Department of Communications offers programs leading to the Bachelor of Arts and the Bachelor of Science degrees with a major in Speech Communication and Theatre. Within the major, the program also offers concentrations in Speech Communication, in Theatre, and in Mass Communication (radio, television, and journalism). A minor in Speech Communication and Theatre is also offered.

The programs for the Bachelor of Science and the Bachelor of Arts degrees require a minimum of 130 semester hours with 48 of these being on the 300 and 400 levels. The Bachelor of Science degree with teacher certification requires, in addition to the general education core, additional courses in the professional education core.

The Department offers teacher certification both in Speech Communication and in Theatre. The certification program in Speech Communication yields licensure to teach in grades 7-12 in Tennessee public schools, and the certification program in Theatre yields licensure to teach in grades K-12 in Tennessee public schools. Students who are interested in acquiring teacher certification must apply in writing to the College of Education, usually in the sophomore year. They must have a 2.75 cumulative quality point average at the time of application and must pass the Praxis I Test, formerly the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the Praxis I / PPST and the CBT. Formal admission to the Teacher Education Program is a prerequisite to upper-level certification courses. Students are required to complete the twelve-semester-hour enhanced student teaching course, which includes a seven-week placement in middle school and an eight-week placement in secondary school. Students must pass the Praxis II before beginning student teaching. For a complete list of requirements for admission to and retention in the Teacher Education Program, see pages ___.

Majors in the Department of Communications are encouraged to pursue a second major or a minor in such fields as English, Business, History, Political Science, Modern Foreign Languages, Sociology, and Reading Education.

Students receiving D or F grades in courses used to satisfy requirements for the major must repeat those courses to obtain a C or better. In addition, students seeking certification in Teacher Education are required to maintain an average of 2.75 in the major courses.

The Department encourages participation in national professional organizations, with chapters of Theta Alpha Phi National Dramatic

Honors Fraternity, Pi Kappa Delta National Forensics Fraternity, the National Association of Black Journalists, and the Society of Professional Journalists.

Accreditation: The teacher certification programs in Speech Communication and in Theatre are accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

Departmental Requirements 45 Semester Hours
For Bachelor of Arts
And Bachelor of Science
Speech Communication and Theatre

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
BIOL 1010, 1011, 1020, 1021	Introduction to Biophysical Science I, II and labs	6
MATH 1010	College Algebra I	3
POLI 2010	American National Government	3
ART 1010 or MUSC 1010	Art Appreciation or Music Appreciation	3
THTR 2020	Appreciation of Drama	3
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
ASOR 100B	Orientation for Social Science Majors	1
(Teacher education students should take EDCI 101.)		
HPER 1010-1053, AERO, or MUSC 2010	Physical Education Activity (2 semesters required)	2

In any general education course category, students may take any of the courses listed on pages ___ as satisfying that category requirement, except that the Department does require that THTR 2020, Appreciation of Drama, be one of the two required Humanities courses.

Students seeking the B.A. degree must add 12 hours of a single foreign language to the above General Education requirements. The number of hours in the foreign language may be reduced by advanced standing in the language at the time of admission, but the B.A. candidate must earn at least 6 hours of credit in the language and complete it at least through the intermediate level (201, 202).

Upper-division Admission

For admission into the upper-division programs of the Speech Communication and Theatre major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination. They must have earned at least a grade of C in SPCH 220 and THTR 2020. Students seeking the B.A. degree must have completed the foreign language requirement before upper-level admission.

Most 300-400 level courses are offered only once a year.

Major Core 47 Semester Hours

RTV 362	Radio and Television Communication	3
SPCH 200	Introduction to Mass Communication	3
SPCH 320	Argumentation and Debate	3
SPCH 322	Advanced Public Speaking	3
SPCH 354	Oral Interpretation	3
SPCH 420	Small Group Communication	3
SPCH 450	Senior Project	3
THEA 111 or 112	Theatre Practice I or II	2
THEA 240	Elementary Acting	3
THEA 341 or 342	Children's Theatre I or II	3
THEA 351 or 352	Classical Drama or Modern Drama	3
THEA 400	Scene Design and Stagecraft	3
THEA 401	History of Drama I	3
THEA 402	Stage Lighting and Make-Up	3
THEA 403	History of Drama II	3
THEA 422	Contemporary Black Drama	3

Speech Communication Emphasis 38 Semester Hours

Major Core: RTV 362; SPCH 200, 320, 322, 354, 420, 422, 430, 434, 448, 450; SPTH 305; THEA 111 or 112, 240.

Theatre Emphasis 44 Semester Hours

Major Core: SPCH 200, 354, 450; SPTH 305; THEA 111 or 112, 240, 300, 303, 304, 352, 400, 401, 402, 403, 490.

Mass Communication Emphasis 33 Semester Hours

Major Core: JOUR 301, 302; RTV 360, 362, 364, 370 or JOUR 304; SPCH 200, 450; a practicum course (choice of RTV 391 or SPCH 442); and at least three courses from the following: all 400-level Journalism courses, all 400-level RTV courses, plus SPCH 446, 448, 452. In addition, THEA 240 and SPTH 305 are recommended, but not required.

Mass Communication students must be able to type 25 words per minute, as demonstrated by passing the departmental typing test or BISE 121 with a grade of C or better.

Minor

The Department offers a minor in Speech Communication and Theatre, requiring 18 semester hours which may be distributed within each optional area. A minor with a concentration in Speech Communication includes SPTH 305, SPCH 220, 320 or 420, 354, 422, 322 or JOUR 301 or 302. A minor with a concentration in Speech Communication and Theatre includes RTV 360; SPCH 322, 354; THEA 240, 303, 341. The requirements for a minor in Mass Communication include JOUR 301, 302, 304; RTV 360, 364; SPCH 200. A minor with a concentration in Theatre includes THEA 240, 300, 303, 352, 400 or 402, 401 or 403.

Bachelor of Science Degree in Speech Communication and Theatre

Suggested Four-Year Plans

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 200	3	CS 121	3
THEA 111 OR 112	2	MATH 1010	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
ASOR 100B	1		
	16		16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 220	3	ART 1010 OR MUSC 1010	3
THTR 2020	3	POLI 2010	3
THEA 240	3	ENGL 2020	3
ENGL 2010	3	ELECTIVES, ANY LEVEL	9
ELECTIVES, ANY LEVEL	6		
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 320	3	SPCH 322	3
RTV 362	3	SPCH 354	3
THEA 341 OR 342	3	THEA 351 OR 352	3
THEA 401	3	ELECTIVES, ANY LEVEL	9
ELECTIVES, ANY LEVEL	6		
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 420	3	THEA 402	3
SPCH 450	3	THEA 403	3
THEA 400	3	THEA 422	3
ELECTIVES, 300/400 LEVEL	6	ELECTIVES, 300/400 LEVEL	6
	15		15

Option 1 - Speech Communication Emphasis

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 305	3	SPCH 320	3
SPCH 322	3	SPCH 354	3
RTV 362	3	SPCH 410	3
SPCH 420	3	SPCH 422	3
SPTH 305	3	SPCH 434	3
ELECTIVES, ANY LEVEL	3	ELECTIVES, ANY LEVEL	3
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 430	3	SPCH 448	3
ELECTIVES, 300/400 LEVEL	12	SPCH 450	3
		ELECTIVES, 300/400 LEVEL	9
	15		15

Option 2 - Theatre Emphasis

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
THEA 300	3	THEA 400	3
THEA 304	3	SPTH 305	3
THEA 352	3	SPCH 354	3
THEA 401	3	ELECTIVES, ANY LEVEL	9
ELECTIVES, ANY LEVEL	6		
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
THEA 402	3	THEA 303	3
THEA 403	3	THEA 490	3
SPCH 450	3	ELECTIVES, 300/400 LEVEL	9
ELECTIVES, 300/400 LEVEL	6		
	15		15

Option 3 - Mass Communication Emphasis

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
THEA 111 OR BISE 121 OR ELECTIVE	2	MUSC 1010 OR ART 1010	3
THTR 2020	3	ENGL 1020	3
ENGL 1010	3	BIOL 1020, 1021	3
BIOL 1010, 1011	3	ELECTIVES, LOWER LEVEL	6
ELECTIVE, LOWER LEVEL	3	CS 121	3
ASOR 100B	1	HPER, AERO, OR MUSC 2010	1
HPER, AERO, OR MUSC 2010	1		
	16		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 200	3	SPCH 220	3
THEA 240 OR ELECTIVE	3	POLI 2010	3
ENGL 2010	3	ENGL 2020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	JOUR 301	3
RTV 300	3	RTV 360	3
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
JOUR 302	3	RTV 362 OR ELECTIVE	3
RTV 364	3	RTV 370 OR JOUR 304	3
SPTH 305 OR ELECTIVE	3	SPCH 442 OR RTV 391	3
400-LEVEL COURSE FROM LIST*	3	ELECTIVES, ANY LEVEL	9
ELECTIVES, ANY LEVEL	6		
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
400-LEVEL COURSE FROM LIST*	3	400-LEVEL COURSE FROM LIST*	3
ELECTIVES, 300/400 LEVEL	12	SPCH 450	3
		ELECTIVES, 300/400 LEVEL	9
	15		15

*Students must complete at least three courses from the following list: JOUR 400-level; RTV 400-level; SPCH 446, 448, 452.

Bachelor of Science Degree in Speech Communication and Theatre Speech Communication Emphasis With Teacher Certification Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 220	3	SPCH 200	3
MATH 1010	3	THTR 2020	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
EDCI 101	1	CS 121	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	17		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPTH 305	3	SPCH 354	3
ENGL 2010	3	ENGL 2020	3
ART 1010	3	MUSC 1010	3
POLI 2010	3	RTV 360	3
PSY 242	3	EDCI 201	3
HEA 151	3	PSY 312	3
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 320	3	SPCH 322	3
SPCH 430	3	SPCH 420	3
ELECTIVES, ANY LEVEL	3	RTV 364	3
EDAD 301 (FORMERLY EDCI 301)	2	RTV OR SPCH ELECTIVE, 300/400 LEVEL	3
EDCI 387	3	EDRD 491	3
EDSE 333	3		
	17		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 371	3	SPCH 472S	12
SPCH 432	3	EDCI 470A	3
SPCH 450	3		
RTV OR SPCH ELECTIVE, 300/400 LEVEL	3		
EDAD 400 (FORMERLY EDCI 400)	3		
EDCI 419	1		
	16		15

Bachelor of Science Degree in Speech Communication and Theatre Theatre Emphasis With Teacher Certification Licensure for Grades K-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 220	3	SPCH 200	3
MATH 1010	3	THTR 2020	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
EDCI 101	1	CS 121	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	17		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
THEA 240	3	THTR 2020	3
POLI 2010	3	THEA 352	3
ENGL 2010	3	ENGL 2020	3
ART 1010	3	MUSC 1010	3
PSY 242	3	EDCI 201	3
HEA 151	3	PSY 312	3
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
THEA 300	3	THEA 303	3
THEA 401	3	THEA 400	3
THEA 402	3	SPCH 354	3
ELECTIVE, ANY LEVEL	3	ELECTIVE, ANY LEVEL	3
EDAD 301 (FORMERLY EDCI 301)	2	EDRD 491	3
EDCI 387	3	EDSE 333	3
	17		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 371	3	SPCH 472S	12
SPCH 449	3	EDCI 470A	3
SPCH 450	3		
COMMUNICATIONS ELECTIVE	3		
EDAD 400 (FORMERLY EDCI 400)	3		
EDCI 419	1		
	16		15

Course Descriptions

Journalism (JOUR)

Prerequisite to all JOUR courses without stated prerequisites: SPCH 200 and 220.

JOUR 301 Survey of Journalism (3). Emphasis upon the organization and function of daily and weekly newspapers, community publicity, school publications, and news writing.

JOUR 302 Newswriting (3). Introduction to reporting techniques, with emphasis on newswriting.

JOUR 304 Advanced Reporting (3). Practice in advanced newswriting with emphasis on news features and beat reporting. Prerequisite: JOUR 302.

JOUR 306 Investigative Reporting (3). Special problems and assignments in in-depth investigative reporting. Prerequisites: JOUR 302 and 304.

JOUR 390 Newspaper Workshop (3). Practical experience in writing, editing, photography, layout, and advertising sales for the TSU Meter (student newspaper). Prerequisite: upper-level status or permission of instructor. May be taken three times for credit.

JOUR 405 News Editing (3). Editing copy, writing headlines, designing newspaper layout. Prerequisite: JOUR 302.

JOUR 410 Editorial Writing (3). Critical analysis of structure and content of newspaper editorials. Course also includes practice in writing editorials and columns.

JOUR 420 Broadcast Journalism (3). Preparation and production of news and documentaries for radio and television. Broadcast newswriting style, use of audio, video, and graphics, and newscast production are among the topics covered. Prerequisite: JOUR 302 and RTV 364, or permission of instructor.

JOUR 430 Desktop Publishing (3). Designing, laying out, and publishing newsletters, brochures, books, and other types of publications using computers. The course covers basic story and ad copy writing, headline writing, use of graphics, publication design, computerized page makeup, and printing/duplicating options. Intended for majors and non-majors.

JOUR 440 Feature Writing (3). Instruction and practice in writing feature articles. Prerequisite: JOUR 302 or permission of instructor.

JOUR 452 Reviewing and Criticism (3). Instruction and practice in reviewing entertainment and the arts. Emphasis on film criticism and one or more or the following: theatre, literature, music, dance, art. Prerequisite: JOUR 302.

JOUR 454 Specialized Publications (3). Business and industrial publications. Writing and editing for special interest newspapers and magazines in such fields as agriculture, business and industry, engineering, home economics, and music. Prerequisite: JOUR 302.

JOUR 460 Special Topics (3). Scope of subject matter to be determined by students and instructor. Prerequisites: JOUR 302 and permission of instructor.

Radio and Television (RTV)

Prerequisite to all RTV courses without stated prerequisites: any two of SPCH 200, 210, 220.

RTV 300 Mass Communication Seminar (2). An introductory course exploring "the real world" of mass communications through a combination of guest speakers and field trips. The class visits stations, production facilities, and publications, and hears a variety of working mass communication professionals.

RTV 360 Broadcasting in America (3). Overview of the history, form, content, and social impact of American radio and television. Examples of contemporary broadcasting are analyzed in these terms.

RTV 362 Radio and Television Communication (3). A course covering all types of non-dramatic broadcast performance, with practical application in a laboratory situation.

RTV 364 Radio and Television Production (3). An introductory course dealing with the basic principles of directing and producing radio and television programs. Practical application in a laboratory situation.

RTV 370 Radio and Television Writing (3). A study of the techniques and methods used in writing radio and television scripts. Students are required to write a number of scripts for various types of programs. Prerequisite: RTV 364 or permission of instructor.

RTV 391 Communication Laboratory (3). A practicum course involving radio production and broadcasting work at the campus radio station. Students undertake a variety of broadcasting responsibilities under the supervision of the station manager. Prerequisite: RTV 362 or permission of instructor. May be taken twice for credit.

RTV 424 Advanced Audio Production (3). A course which provides the student with experience in advanced audio production techniques, with emphasis on creative use of audio and audio documentary production. Aspects of news and public affairs production are covered in conjunction with production assignments at the campus radio station. Prerequisite: RTV 364.

RTV 438 Electronic Media Management (3). A course covering legal, social, programming, and economic aspects of radio and television management. Guest lectures by local station managers and department heads are an important feature of the course. Prerequisite: RTV 360 or permission of instructor.

RTV 440 Radio and Television Programming (3). A consideration of television and radio programming in terms of content, social impact, and artistic merit. News, documentaries, public affairs, talk shows, light entertainment, serious drama, and advertisements, as well as program schedules as a whole, are analyzed. Prerequisite: RTV 364 or permission of instructor.

RTV 444 Advanced Television Production (3). In-depth experience in producing and directing television programs. Prerequisite: RTV 364.

Speech (SPCH)

Prerequisite for all upper-level (300- or 400-level) SPCH courses without stated prerequisites: any two of SPCH 200, 210, 220.

SPCH 200 Introduction to Mass Communication (3). A survey of the mass media and their impact on the ideas, attitudes, and impressions of society.

SPCH 210 Fundamentals of Speech Communication (3). Fundamentals of the various types of speech communication, including interpersonal, small group, and non-verbal communication process.

SPCH 220 Public Speaking (3). Principles of speech composition and delivery with emphasis on preparing and presenting the various forms of oral communication.

SPCH 220H Honors Public Speaking (3). Honors section of SPCH 220. Enrollment limited to students in University Honors Program.

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

SPCH 230H Honors Business and Professional Speech Communication (3). Honors section of SPCH 230. Enrollment limited to students in University Honors Program.

SPCH 320 Argumentation and Debate (3). Principles and practices of argumentation, analysis of propositions and evidence, brief-making, and preparation and delivery of forensics, as well as participation in classroom discussions. Techniques governing roundtable, forum, and panel discussions are studied.

SPCH 322 Advanced Public Speaking (3). Study of standards of criticism and techniques involved in effective public address. Prerequisite: SPCH 220.

SPCH 354 Oral Interpretation (3). Understanding of and appreciation for literature through the oral recreation of poetry, prose, and drama. Recommended for prospective teachers of literature.

SPCH 356 Forensics Practicum (3). Practical experience through active class participation in individual events and performance activities. Prerequisite: SPCH 220.

SPCH 358 Readers' Theatre (3). Group interpretation performances of compiled scripts from the genres of poetic, prose, and dramatic literature. Choral speaking, chamber theatre, group interpretation, and interpreter's theatre are emphasized. Prerequisite: SPCH 354.

SPCH 371 Methods of Teaching Speech Communication and Theatre (3). A methods course in the teaching of speech, theatre, and communication on the secondary level. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in speech communication and theatre. Prerequisite: official admission to the Teacher Education Program.

SPCH 420 Small Group Communication (3). Communication in small groups, emphasizing principles, practices, and patterns in practical situations.

SPCH 422 Persuasion (3). Psychology of attitude formation and change, including theories of persuasion and principles of persuasive communication. Prerequisite: SPCH 220.

SPCH 430 Psychology of Speech Communication (3). Basic psychological factors and their relation to the various types of communicative processes, with emphasis on interpersonal communication. The nature, origin, and purposes of speech are analyzed, as well as the development of language and speech in the individual.

SPCH 432 Intercultural Communication (3). Understanding dimensions of communication theory that apply across cultural boundaries. Emphasis is placed on both theoretic and practical awareness of communication in and between cultures.

SPCH 434 Contemporary Black Speakers (3). A study of selected speeches of contemporary black leaders who have contributed to and made an impact on American life. The speeches are analyzed according to the principles of rhetoric, based on Aristotelian standards. Prerequisite: SPCH 210 or 220.

SPCH 442 Internship (3). Internship program between TSU and local media, communications, and theatre agencies, in which students undertake various duties. Specific internships available change from semester to semester. Open to students in all areas of the Department. May be taken three times for credit but no more than twice in the same job assignment area. Prerequisites: introductory courses in area related to internship (RTV 360 and 364 for electronic media, or JOUR 301 and 302 for journalism) and permission of instructor.

SPCH 442A Communication Cooperative (3). Supervised and approved program of learning experiences undertaken by students in governmental, business, or industrial setting. Formal proposals, project objectives, and learning plans are reviewed and approved by faculty. Student activities and progress are monitored, evaluated, and graded by a full-time faculty member. Prerequisite: permission of Department Head.

SPCH 446 Advertising and Media Sales (3). Basic print and broadcast advertising techniques, including ideas and their translations into persua-

sive words and pictures. Sales practices, for both print space and broadcast time, and the structure and function of advertising agencies are also covered.

SPCH 448 Principles of Public Relations (3). History, development, scope, and role of public relations in society. Course covers the processes and practices of public relations, emphasizing the use of mass communications in the field.

SPCH 449 Speech and Theatre for Children (3). Designed for the elementary school teacher with a minimum of training and experience in speech communication and theatre. The focus is on activities of a practical nature which the elementary teacher may use in the classroom. Representative topics include speech activities, oral interpretation, creative dramatics, and puppetry. Prerequisite: admission to Teacher Education Program.

SPCH 450 Senior Project (3). Completion of individual research or project through application of the research methodology process. Required of all Departmental majors. Students must register for this course during the term they plan to graduate, unless they are engaged in practice teaching, in which case they must take the course earlier.

SPCH 452 Communication Law (3). Analysis of law and regulation in terms of the social, political, and economic interests they are designed to protect and in terms of their impact on the communication industry. The First Amendment, rights of privacy, and communication ethics are considered. Prerequisite: RTV 360 or JOUR 301, or permission of instructor.

SPCH 458 Advanced Public Relations (3). Practical exercises in public relations, stressing campaigns, schedules, budgets, and media strategies. Prerequisite: SPCH 448.

SPCH 472S Enhanced Student Teaching (12). A semester-long experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in the teaching of Speech Communication or Theatre. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently.

SPCH 480 Independent Study (3). Individual study and research under faculty guidance. May be taken twice for up to six hours of credit.

Theatre (THEA)

Prerequisite to all upper-division (300- or 400-level) THEA courses (excluding THEA 344) without stated prerequisites: THEA 111 or 112 and THTR 2020.

THTR 2010 Introduction to Drama (3). Elements of theory and practical experience in the drama, through study of representative plays and dramatic theory, as well as a study of theatre operations, from working backstage to observing and critiquing plays, to theatrical field trips. This course may be taken to remove high school deficiency in the visual and performing arts. If it is used for this purpose, it does not yield degree credit. Course may also be used toward satisfying University humanities requirement, but not if it is used to remove high school deficiency.

THEA 111 Theatre Practice (2). Introduction to theatre technology, stage terms, building of scenery. Laboratory experience.

THEA 112 Theatre Practice (2). Fundamentals of floor plans and perspective drawings, introduction to make-up, and continuation of theatre technology. Laboratory experience.

THTR 2020 Appreciation of Drama (3). Introduction to dramatic principles though the study of major periods and representative plays from the Greek period to the present. Course may be used toward satisfying University humanities requirement.

THTR 2021 Honors Appreciation of Drama (2). Honors section of THTR 2020. Enrollment limited to students in University Honors Program. Course may be used toward satisfying University humanities requirement.

THEA 205 Introduction to Theatre (3). Theatre as a form of artistic expression. Emphasis is placed on dramatic structure, types of plays from representative periods, schools of dramatic thought, and the function of fundamental theatre personnel.

THEA 240 Elementary Acting (3). Study and practice in the fundamentals of acting technique based on play and character analysis. The importance of voice, posture, gesture, and movement in theatrical expressiveness are emphasized, using speeches and short scenes from the world's best dramas.

THEA 300 Play Production (3). Study of the major components in producing a play: directing, acting, scenery and lighting, sound, costuming and make up, selecting a play, casting, theatre business, and stage management. Emphasis is also placed on the collaborative and managerial skills necessary for artistic production.

THEA 303 Directing (3). Analyzing scripts and directing one-act plays, with attention to casting, blocking, and rehearsal styles through practicum. Prerequisites: THEA 240 and 300.

THEA 304 Playwriting (3). Theory and practice of writing one-act plays for the stage. Prerequisite: THEA 351 or 352.

THEA 341 Children's Theatre I (3). Development of more sensitive characterizations and increased awareness of such demands of a drama as structure, pace, mood, and tension. 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 (3). Fundamental principles of crew and committee work for a children's play, 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 Stage Movement (3). Use of the body and bodily movement for characterization and general stage movements. Exercises, dance, and improvisations are emphasized in examining body dynamics for contemporary and classical acting and movement styles.

THEA 344 Drama Workshop (1-2). Credit given for acting, crew, or committee work in a production. Non-majors may repeat for maximum of 4 hours; majors may repeat for maximum of 6 hours. Prerequisite: permission of instructor.

THEA 351 Classical Drama (3). Study of western world's masterpieces from the Greeks to the Restoration. Readings and reports.

THEA 352 Modern Drama (3). Extensive study of world-famous plays from 1880's to the present day. Readings and reports.

THEA 400 Scene Design and Stagecraft (3). Advanced scene design and advanced stagecraft. Construction of three-dimensional scenery required. Practicum with current productions. Prerequisite: THEA 111 or 112.

THEA 401 History of Drama I (3). Development, literature, and staging practices of the theatre from the Egyptians to the Restoration Period.

THEA 402 Stage Lighting and Make-up (3). Advanced make-up and lighting practicum in major productions and laboratory productions. Prerequisites: THEA 111 or 112; THTR 2020.

THEA 403 History of Drama II (3). Development, literature, and staging practices of the theatre from the Restoration through the nineteenth century.

THEA 420 Advanced Acting (3). Expansion of the techniques studied in elementary acting. Longer scenes from the world's best dramas are studied and used as criteria for the course. Prerequisite: THEA 240 or permission of instructor.

THEA 422 Contemporary Black Drama (3). Study of dramas by representative contemporary black playwrights.

THEA 490 Performance Seminar (3). Selected topics in acting, directing, and design as they relate to performance. Course involves class discussions, papers, out-of-class work, and research. Students work as a group and/or on individual topics and projects. A final project is the end product for the class. Prerequisites: Any two of THEA 240, 300, 303. Required of students with a concentration in Theatre.

Department of Criminal Justice

C. Bruce Mallard, Ph.D., Head
308 Hubert Crouch Hall (Graduate Building)
Telephone 615-963-5571

Faculty: K. Wheaton, L. Woods.

General Statement: The Department of Criminal Justice offers a program leading to the degree of Bachelor of Science. The curriculum contains a wide range of courses concerning all aspects of the criminal justice system, with an emphasis in the area of corrections. The major also provides a broad background in the social sciences with a wide variety of courses in Psychology and Sociology. Any student admitted to the University at the undergraduate level is eligible to major in Criminal Justice. It is an excellent pre-law major.

The Department also offers the Master of Criminal Justice (MCJ) degree jointly with Middle Tennessee State University. For details of the program, see the Graduate Catalog.

Departmental Requirements For Bachelor of Science Criminal Justice — **45 Semester Hours**

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
MATH 1010, 1020	College Algebra I, II	6
BIOL 1010, 1011, 1020, 1021	Introduction to Biophysical Science I, II and labs	6
HUMANITIES	Courses from 2 humanities disciplines	6
PSYC 2010	General Psychology	3
SOCI 2010	Introduction to Sociology	3
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
ASOR 100B	Orientation for Social Science Majors	1
HPER 1010-1053, AERO or MUSC 2010	Physical Education Activity (2 semesters required)	2

Upper-division Admission

For admission into the upper-division program of the Criminal Justice major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination. They must also have earned a minimum grade of C in CJ 200, 201, 202, and 203.

Major Core: A minimum of 45 semester hours with at least 33 hours at the 300-400 level. The required courses in the major core are:

CJ 200	Introduction to Criminal Justice Studies	3
CJ 201	Introduction to Law Enforcement	3
CJ 202	The American Legal System	3
CJ 203	Introduction to Corrections	3
CJ 300	Research Methods	3
CJ 400	Senior Practicum	12
CJ 450	Senior Project	3

Students must also complete a minimum of 15 hours of CJ electives at the 300-400 level. Police or correctional officers who have completed basic training at a city or state academy receive credit for the Senior Practicum (CJ 400) by registering for it and completing a research paper. All other students must complete a semester of work in a criminal justice agency to gain practical experience. Students must earn at least a C in all 45 hours used to complete the major.

Minor Requirements: All majors earn a minor in Psychology by completing 18 hours: PSYC 2010, 310, 311, 321, 462, and either 341 or 351, and one Upper Division elective.

Bachelor of Science Degree in Criminal Justice

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CJ 200	3	PSYC 2010	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	MATH 1020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
ASOR 100B	1	HUMANITIES	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	17		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CJ 201	3	CJ 202	3
SOCI 2010	3	CJ 203	3
ENGL 2010	3	ENGL 2020	3
SPCH 220	3	ENG 310C	3
PSY 310	3	HUMANITIES	3
		CS 121	3
	15		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CJ 300	3	CJ ELECTIVE, 300/400	3
PSY 311	3	SOC 330	3
PSY 321	3	SOC ELECTIVE, 300/400	3
PSY 341 OR 351	3	ELECTIVES, 300/400	6
SOC ELECTIVES, 300/400	6		
	18		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CJ 400	12	CJ ELECTIVES, 300/400	12
CJ 450	3	PSY 462	3
	15		15

Course Descriptions

CJ 200 Introduction to Criminal Justice Studies (3). A preliminary examination of the entire criminal justice system. It emphasizes the understanding of basic concepts in police science, correctional services studies, the law and our legal system, and the elements of the scientific method and research techniques. It also functions as an introduction to the orientation and demands of the Tennessee State University Department of Criminal Justice. Required of all CJ majors.

CJ 201 Introduction to Law Enforcement (3). An intensive study of findings and concepts in the area of police science. It covers law enforcement agencies, their procedures, and their problems. There is discussion of police-community relations and the FBI. History is emphasized. Required of all CJ majors.

CJ 202 The American Legal System (3). An intensive study of the concepts and findings of research concerning the functioning and the structure of the American legal system. Its history and development are stressed, and its place in the entire criminal justice system is discussed. Elements of constitutional criminal law are introduced. Problems such as crowded dockets, plea bargaining, and bail are discussed. Required of all CJ majors.

CJ 203 Introduction to Corrections (3). An intensive study of the concepts and findings of research in the area of corrections. In addition to consideration of the history and development of the correctional system, various techniques of correction are considered. The relationship of society and its norms to the operations of such systems is included. Required of all CJ majors.

CJ 300 Research Methods (3). An intensive survey of the various methods appropriate to criminal justice studies. Special emphasis is given to the consideration of logic, design, and importance of research for correctional practitioners. In addition to the development of research skills, a purpose of this course is to develop the student's ability to read critically and to evaluate proposals for change. Prerequisites: MATH 1010 and PSY 311 or SOC 300. Required of all CJ majors.

CJ 301 Court Procedure and Methods (3). An intensive study of courtroom case preparation, officer demeanor in court, effective presentation of evidence, trial procedure, use of written notes, officer appearance, and reaction to cross examination. (Elective)

CJ 302 Constitutional and Criminal Law (3) Discussion of criminal law and procedure, including constitutional law as it impinges upon the legal system and the crime. Topics include review of the relevant constitutional criminal cases before the various courts of appeals and the United States Supreme Court. (Elective)

CJ 303 Incidence of Crime (3). Intensive discussion of the problems involved with crime statistics. Course reviews uniform crime reports and relevant studies. Careful attention is devoted to the concept of unreported crime. (Elective)

CJ 304 Criminal Typology (3). Intensive discussion of the types of crimes. Consideration is given to the various bases for the division of crimes into different categories. In addition, there is an intensive examination of the specific research findings on crimes such as rape, robbery, and murder. (Elective).

CJ 305 Deviance and Control (3). A sociological discussion of the nature and role of deviance in a society. The various types of deviance are considered, and the nature of the relationship between deviance and the controlling and producing forces of society is discussed. The relationship of deviance to crime is also considered. (Elective)

CJ 306 Introduction to the Philosophy of Law (3). The philosophical development of the concept of law from the Pre-Greek era to the present (Babylonian, Greek, Roman, Germanic, and English systems), with emphasis on the more important philosophical ideas that have led to the present American legal system. (Elective)

CJ 307 Introduction to the Study of Law (3). An in-depth analysis of the Socratic method and case method of legal studies, along with the organization and function of law schools. The course should be taken by only those students interested in pursuing a career in law. (Elective)

CJ 308 Police and Patrol Service (3). A study of the organization, administration, and supervision of patrol function. Responsibilities, techniques, and methods of police and patrol are treated. Various services and public assistance offered by police organizations are emphasized. (Elective)

CJ 309 Traffic Investigation and Control (3). A study of the need for and development of traffic laws with primary attention focussed upon the Uniform Motor Vehicle Code and Model Traffic Ordinances, including use and implementation. The preparation and maintenance of an adequate records system of traffic safety are examined. (Elective)

CJ 310 Criminal Theory (3). A survey of the various theories which have been advanced over the years about the causation of crime; biological, sociological, psychological, and other theories are examined along with relevant research findings. (Elective)

CJ 313 Counseling (3). An intensive introduction to counseling, with special emphasis upon the nature and problems of correctional guidance counseling. Attention is devoted to the recognition and diagnosis of the psychological problems, as well as development of acceptable counseling methodology. Development of oral competency is stressed, as students participate in mock counseling sessions. (Elective)

CJ 321 Juvenile Delinquency (3). An intensive study of the basic ideas of criminology as applied to juvenile delinquency. Attention is devoted to the development and impact of the juvenile court system. (Elective)

CJ 322 Penal Institutions and Treatment Methods (3). Intensive discussion of the methods of corrections involving prisons, jails, and other places of incarceration. Special emphasis is placed on the inmate, treatment of custodial conflicts, and the utility (or lack of utility) of such institutions. (Elective)

CJ 323 Community-Based Treatment Methods (3). Intensive study of probation, parole, work-release, and other correctional methods which involve the inmate in his or her community rather than incarceration. Merits and defects of such programs are examined. (Elective)

CJ 330 Police Administration I (3). An examination of the principles of organization, administration, and functioning of police departments. Course includes an evaluation of personnel policies, divisions, operations, command policies, and departments as a whole. (Elective)

CJ 331 Police Administration II (3). Advanced study of the organization, administration, and functioning of police departments. The designing of policies and a study of the arrangement within a department of specific operations and commands are emphasized. (Elective)

CJ 400 Senior Practicum (12). Field experience consisting of nearly full-time work in an appropriate institution or agency. Course also involves intensive weekly discussions of problems that arise. Usual enrollment time is the student's senior year of study. Required of all CJ majors.

CJ 401 Independent Study (3). For the student who shows exceptional promise. Course consists of a research project or intensive reading program specially designed for the individual student. Only those students whose work shows reasonable probability of a new contribution to knowledge are permitted to enroll. Prerequisite: permission of Department Head. (Elective)

CJ 405 Introduction to Criminalistics (3). A course designed to give the student a basic knowledge of crime scene protection, as well as the collection, preservation, and identification of evidence, including proper search, dusting for latent prints, casting, fingerprint classification, use of the crime laboratory, and crime detection and prosecution. (Elective)

CJ 410A, 410B Cooperative Education I, II (3, 3). Supervised and approved program of learning experiences undertaken by students in governmental, business, or industry setting. Formal proposals, project objectives, or learning plans are reviewed and approved by faculty. Student activity and progress are monitored, evaluated, and graded by a full-time faculty member. Prerequisite: permission of Department Head. (Electives)

CJ 420 Seminar in Law Enforcement (3). Review and synthesis of basic principles, practices, and procedures. Course includes visitation to operating police organization and final preparation for employment in law enforcement. (Elective)

CJ 421 Sociology of Law (3). A discussion of the role of the legal system in society. There is consideration of the actual effects of certain types of legislation. Other topics include conflict resolution, the problems of a pluralistic society, and the nature of the law. (Elective)

CJ 422 White Collar Crime (3). A discussion of the incidence and problems of white collar crime. Topics range from tax evasion and business crimes to political corruption and bribes. (Elective)

CJ 430, 431, 432 Special Topics I, II, III (3, 3, 3). A course taught from time to time as faculty expertise and student interest warrant, with topics in such areas as police-community relations, behavior modification in corrections, and street laws. (Elective)

CJ 450 Senior Project (3). Course involving the preparation of an acceptable piece of research, including a final written report, in some aspect of criminal justice. Required of all CJ majors.

Department of History, Geography, and Political Science

Joel H. Dark, Ph.D., Head
216 Hubert Crouch Hall (Graduate Building)
Telephone 615-963-5471
FAX 615-963-5497

Faculty: R. Brooks, J. Burchett, E. Dachowski, D. Elliott, D. Gibran, J. Haney, H. King, B. Lovett, E. McClain, H. C. McGinnis, J. Miglietta, A. Oyebade, D. Padgett, J. Paruchuri, E. Schmeller.

General Statement: The Department of History, Geography, and Political Science seeks to expand students' awareness of their world, its history, and its political institutions. The Department offers general education courses for all students of the University, minor concentrations in each of its three disciplines, and full undergraduate degree programs in History and Political Science.

The undergraduate degree in History is a Bachelor of Arts degree, which means that History majors complete at least one foreign language at the intermediate level. The undergraduate degree in Political Science is a Bachelor of Science degree and does not include the requirement of a foreign language. Students pursuing either degree must obtain a grade of C or better in all courses used to satisfy major requirements. The minor in Geography consists of 18 hours including physical, systematic, and regional geography courses.

Majors in History and Political Science who wish to seek teacher licensure for middle and secondary education should apply in writing to the College of Education for admission to the Teacher Education Program, usually during their sophomore year. Applicants must have a cumulative grade point average of 2.75 or better and must pass the Praxis Series Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessment Tests (CBT). Students who have previously earned a score of 21 on the ACT, a score of 22 on the Enhanced ACT, or a combined score of 990 on the verbal and mathematical portions of the SAT are exempt from the PPST and the CBT. Admission to the Teacher Education Program is a prerequisite to all upper-level courses in the professional education curriculum. For a complete description of admission and retention requirements for the Teacher Education Program, see pages ___.

Accreditation: The teacher licensure programs in the Department are accredited by the Tennessee Department of Education and the National Council on the Accreditation of Teacher Education (NCATE).

History

Departmental Requirements For Bachelor of Arts History — **34 Semester Hours**

The major in History is designed to familiarize students with important events, developments, and themes of the human past while also training them in the skills of history as a intellectual discipline. While students are welcome to focus their studies regionally or topically, the curriculum and degree requirements reflect the goal of providing students with a broad understanding of their field at the local, national, and international levels.

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II (minimum grade of C in each)	6
MATH 1010	College Algebra I	3
SCIENCE	Biology, Chemistry, or Physics, including laboratories	6-8
GEOG 171, 172	World Regional Geography I, II	6
SPCH 220	Public Speaking	3
Humanities	2 courses from 2 different humanities disciplines	6
Foreign Language	French, German, or Spanish through intermediate level (2010, 2020)	6
CS 121	Introduction to Computing	3
HPER 1010-1053, AERO, or MUSC 2010	Physical Education Activity (two semesters required)	2
ASOR 100B	Orientation for Social Science Majors (Teacher certification students should take EDCI 101.)	1

Upper-level Admission

For admission into the upper-level program of the History major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination. Students must also have earned minimum grades of C in HIST 121 and 122.

Major Core

The requirements for a major in History include HIST 121 and 122, World History I, II (6 hours); two 300- or 400- United States history courses (6 hours); at least 6 hours at the 300 or 400 level in non-American history; HIST 450, Senior Project (3 hours); and HIST 499, Senior Seminar (1 hour). With these core courses included, a major in History must total no less than 34 hours, 28 of which must be from 300- or 400-level offerings. All 34 hours must have a grade of C or better.

Minor Requirements: A minimum of 18 semester hours in History, including HIST 2010 and 2020.

Political Science

Departmental Requirements For Bachelor of Science Political Science — **36 Semester Hours**

The Department offers courses which allow students to pursue a variety of specific interests. Courses numbered in the 360's, for example, focus on international relations and comparative politics. Students interested in public administration should elect courses in the 440 series. Regardless of students' specific interests, however, they should sample at least one course from each of the areas of the discipline.

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
MATH 1010	College Algebra I	3
SCIENCE	Biology, Chemistry, or Physics and labs	6-8
POLI 2010	American National Government (minimum grade of C)	3
SPCH 220	Public Speaking	3
Humanities	2 courses from 2 different humanities disciplines	6

CS 121	Introduction to Computing	3
HPER 1010-, AERO, or MUSC 2010	Physical Education Activity (2 semesters required)	2
ASOR 100B	Orientation for Social Science Majors (Teacher certification students should take EDCI 101.)	1

Upper-level Admission

For admission into the upper-level program of the Political Science major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination. They must also have earned at least a C in PISI 101.

Major Core

The curriculum in Political Science offers students a broad view of the many facets of politics, policy-making, political thought, law, public administration, and international relations. In addition to the general education core listed above, students majoring in Political Science must take a minimum of 36 hours within the discipline, including PISI 101, Introduction to Political Science (3 hours); PISI 220, Introduction to International Politics or PISI 222, State and Local Government (3 hours); PISI 300, History of Political Philosophy, or PISI 301, Contemporary Political Philosophy (3 hours); PISI 310, Research Methodology (3 hours); and PISI 450, Senior Project (3 hours). A minimum of 30 hours of the Political Science major must be selected from 300- or 400-level courses. All 36 hours must have a grade of C or better.

Pre-Law Studies

The Political Science program provides one of the most frequently recommended curricula for students who wish to enter law school. Courses in the 430 series constitute the specific law-oriented curriculum. The following fifteen hours should be taken in the undergraduate career: POLI 2010, American National Government; PISI 430, Introduction to American Law; PISI 431, 432 Constitutional Law I, II; and PISI 434, Legal Research and Writing. But students interested in law school should also take a variety of courses which help to develop their analytical and communication skills. Upper-level courses in English, History, and Business are highly recommended, as are PHIL 250, Logic and Critical Thinking, and PHIL 430, Philosophy of Law.

Minor Requirements: A minimum of 18 semester hours in Political Science, including POLI 2010.

Departmental Requirements
Bachelor's Degree with Teacher Certification
History or Government

The Department's Teacher Education Program is designed for persons who desire to become licensed to teach History or Government (Political Science) in grades 7-12. The curriculum is designed to provide students with a broad educational base, including mastery of written and oral skills. In addition, course selections enable students to gain knowledge and appreciation of the diversity among people and nations of the world.

History licensure majors complete 150-154 hours, involving 49-53 hours of general education (depending on the humanities courses chosen), 58 hours in the social sciences, and 43 in professional education, of which 12 hours are devoted to enhanced student teaching.

Government (Political Science) licensure majors must complete 140-144 hours, including 43-47 of general education courses (depending on the humanities courses chosen), 54 in the social sciences, and 43 in professional education. Enhanced student teaching requires eight-week placement at the secondary level and seven weeks at the middle school level.

Bachelor's Degree with Teacher Certification
Geography, Psychology, and Sociology

Students may also earn teacher certification with licensure to teach Geography, Psychology, or Sociology in grades 7-12. The requirements in these programs are similar to those in the certification programs for History and Political Science, but with a few significant differences. Students interested in these programs should consult the Departmental advisor in teacher education for precise programs of study.

Geography

Departmental Requirements For Minor in Geography — **18 Semester Hours**

The Department provides an opportunity for a student to enrich his or her education by obtaining a minor in Geography, composed of 18 semester hours of courses. This program is designed so that each student is assured of a comprehensive exposure to the world's geographical arrangement, requiring each one to take two semesters of World Regional Geography (GEOG 1010 and 1020). In addition, the program requires a minimum of one course from each of the three components of the program: physical geography, systematic geography, and regional geography.

All students: World Geography		**6 HRS**
GEOG 1010	World Regional Geography I	3
GEOG 1020	World Regional Geography II	3

Students must select at least one course from each of the following areas.

A. Physical Geography		**3-6 HRS**
GEOG 301	Physical Geography I	3
GEOG 302	Physical Geography II	3
GEOG 350	Weather and Climate	3
GEOG 499	Special Topics in Geography	3

B. Systematic Geography		**3-6 HRS**
GEOG 430	Social Geography	3
GEOG 444	Cultural Geography	3
GEOG 464	Environmental Geography	3
GEOG 470	Political Geography	3
GEOG 475	Economic Geography	3
GEOG 485	Urban Geography	3
GEOG 499	Special Topics in Geography	3

C. Regional Geography		**3-6 HRS**
GEOG 371	Geography of the United States and Canada	3
GEOG 372	Geography of Mexico and the Caribbean	3
GEOG 373	Geography of South America	3
GEOG 381	Geography of Europe	3
GEOG 400	Geography of Latin America	3
GEOG 410	Geography of Asia	3
GEOG 412	Geography of Africa	3
GEOG 425	Historical Geography of the United States and Canada	3
GEOG 499	Special Topics in Geography	3

Bachelor of Arts Degree in History

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 2010	3	HIST 2020	3
ENGL 1010	3	ENG 1020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
*FOREIGN LANG (2ND YEAR)	3	FOREIGN LANG (2ND YEAR)	3
MATH 1010	3	HUMANITIES	3
ASOR 100B	1	HPER, AERO, OR MUSC 2010	1
HPER, AERO, OR MUSC 2010	1		
	17		16

*Students not prepared for the intermediate level of the foreign language must begin at the level for which they are prepared, but must complete the language through the intermediate level.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 121	3	HIST 122	3
ENGL 2010	3	ENGL 2020	3
GEOG 1010	3	GEOG 1020	3
CS 121	3	HUMANITIES	3
ELECTIVE; ANY LEVEL	3	SPCH 220	3
		ELECTIVE, ANY LEVEL	3
	15		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
AMERICAN HISTORY, 300/400	3	AMERICAN HISTORY, 300/400	3
NON-AMERICAN HIST, 300/400	3	NON-AMERICAN HIST, 300/400	3
ELECTIVES, ANY LEVEL	6	HISTORY ELECTIVE, 300/400	3
ELECTIVES, 300/400 LEVEL	6	ELECTIVES, 300/400 LEVEL	6
	18		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 450	3	HIST ELECTIVE, 300/400	3
HIST 499	1	ELECTIVES, 300/400 LEVEL	5
HIST ELECTIVES, 300/400	6	ELECTIVES, ANY LEVEL	9
ELECTIVES, 300/400 LEVEL	6		
	16		17

Bachelor of Arts Degree in History With Teacher Certification Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 2010	3	HIST 2020	3
ENGL 1010	3	ENGL 1020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
*FOREIGN LANG (2ND YEAR)	3	FOREIGN LANG (2ND YEAR)	3
MATH 1010	3	CS 121	3
EDCI 101	1	HUMANITIES	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	17		19

*Students not prepared for the intermediate level of the foreign language must begin at the level for which they are prepared, but must complete the language through the intermediate level.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 121	3	HIST 122	3
ENGL 2010	3	ENGL 2020	3
POLI 2010	3	PISI 222	3
GEOG 1010	3	GEOG 1020	3
ANTH 230	3	EDCI 201	3
HUMANITIES	3	HEA 151	3
PSY 242	3	PSY 312	3
	21		21

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 301 OR 302	3	HIST 491 or 492	3
HIST 2030	3	SPCH 220	3
PISI 301	3	PISI 431 or 432	3
SOCI 2010	3	SOC 330	3
EDAD 301	2	EDAD 400	3
ECON 2010	3	EC 212	3
	17		18

Students must also take GEOG 444 and 470 or PISI 365 and 368.

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 371	3	HIST 472S	12
HIST 450	3	EDCI 470A	3
HIST 499	1		
EDCI 387	3		
EDCI 419	1		
EDRD 491	3		
EDSE 333	3		
	17		15

Bachelor of Science Degree in Political Science

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 101	3	MATH 1010	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
HUMANITIES	3	HUMANITIES	3
ELECTIVE	3	ELECTIVES	6
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
ASOR 100B	1		
	17		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
POLI 2010	3	PISI 220 OR 222	3
ENGL 2010	3	ENGL 2020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
CS 121	3	ELECTIVES	6
SPCH 220	3		
	15		15

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 310	3	PISI 300 OR 301	3
PISI ELECTIVES, 300/400	6	PISI ELECTIVES, 300/400	6
ELECTIVES, 300/400 LEVEL	9	ELECTIVES, 300/400 LEVEL	9
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 450	3	PISI ELECTIVES, 300/400	6
PISI ELECTIVE, 300/400	3	ELECTIVES, 300/400 LEVEL	9
ELECTIVES, 300/400 LEVEL	9		
	15		15

Bachelor of Science Degree in Political Science With Teacher Certification in Government Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 101	3	MATH 1010	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
HUMANITIES	3	HEA 151	3
EDCI 101	1	CS 121	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	17		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
POLI 2010	3	ANTH 230	3
SPCH 220	3	PISI 222	3
ENGL 2010	3	ENGL 2010	3
GEOG 1010	3	GEOG 1020	3
HUMANITIES	3	SOCI 2010	3
PSY 242	3	PSY 312	3
EDCI 201	3		
	21		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 300 OR 301	3	PISI 310	3
PISI 368	3	SOC 330	3
HIST 121 OR 122	3	HIST 301 OR 302	3
HIST 2030	3	HIST 491 OR 492	3
EDAD 301	2	EDAD 400	3
ECON 2010	3	ECON 2020	3
	17		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 371	3	HIST 472S	12
PISI 450	3	EDCI 470A	3
EDCI 387	3		
EDCI 419	1		
EDRD 491	3		
EDSE 333	3		
	16		15

Course Descriptions

Geography (GEOG)

GEOG 1010, 1020 World Regional Geography (3, 3). A survey of the geographic regions of the world, including studies of the physical character of the land, resources, economics, and cultures. Courses are designed to provide general background in world geography; they are required for History majors, Geography minors, and some teacher education programs. Either course may be used to satisfy the University's social science requirement.

GEOG 301, 302 Physical Geography I, II (3, 3). Study of landforms, maps, weather and climate, vegetation, soils, mineral resources, major surface waters, ground water regions, and types of coastlines. Included are the cause and distribution of these elements and their impact on humanity.

GEOG 310 Cartography (3). The nature and use of maps, the construction of map projections and their uses, and the preparation and use of maps for various types of analysis. Course includes both lectures and laboratories.

GEOG 350 Weather and Climate (3). The properties, behavior, and importance of the atmosphere. Emphasis is given to observation and analysis of clouds and storm systems--cyclones, tornados and hurricanes--the causes and global distribution of climate types, and major atmospheric concerns, including the greenhouse effect, acid rain, the ozone hole, and climatic change.

GEOG 371 Geography of the United States and Canada (3). The physical and cultural geography of the regions of Anglo-America, with recognition, analysis, and interpretation of the landforms, resources, and human adjustments that are made within its several regions.

GEOG 372 Geography of Mexico and the Caribbean (3). A study of Mexico, Central America, and the islands of the Caribbean: their historical geography, cultural patterns, economic resources, and role among the nations of the world.

GEOG 373 Geography of South America (3). Regions and resources of South America beyond the Caribbean, with special study of the distinctive role of each country according to its geographic significance. Problems of future development are emphasized.

GEOG 381 Geography of Europe (3). A regional examination of Europe west of Russia, involving analysis of the physical, cultural, and economic character, as well as the problems and prospects of European nations.

GEOG 400 Geography of Latin America (3). An analysis of the physical and cultural characteristics of Latin America, encompassing Mexico and Central America, the Caribbean, and all of South America. The unique physical and environmental concerns, the vast mosaic of cultures, and the population dynamics in this region are central to this course.

GEOG 410 Geography of Asia (3). An examination of the physical and cultural geography of Asia, including land utilization, resources, and population characteristics and settlement. Stages of economic development and challenges of the future are examined.

GEOG 412 Geography of Africa (3). The regions, resources, and peoples of the African continent with special attention to Africa south of the Sahara desert, its development and potential.

GEOG 425 Historical Geography of the United States and Canada (3). The changing physical and cultural geography of Anglo-America during four centuries of settlement and development.

GEOG 430 Social Geography (3). The spatial behavior of urban and suburban populations. Topics include prospects of the future to understand and resolve social complexities, such as poverty, unharnessed population growth, overcrowding, social class, and multicultural relationships, including those of the local community.

GEOG 444 Cultural Geography (3). An introduction to the study of the geography of human cultures. Topics include demographics; migration dynamics and settlement patterns; the spatial dimensions of ethnic, linguistic and religious diversity; political, economic and urban structures; and differing approaches to the ecological interface.

GEOG 450 Senior Project (3). Directed research in a significant problem in the study of geography. Special attention is given to relevant publications and the construction of a research design.

GEOG 464 Environmental Geography (3). Exploration of the world's natural environment and physical landscapes, and the challenges presented by modern man. Course also includes study of the conservation and environmentalist movements.

GEOG 470 Political Geography (3). The structures and function of political regions, with emphasis on the sovereign state, geopolitics, internal conflict, and relationships among sovereign countries, illustrated by unions of nations, recent developments, and current situations.

GEOG 475 Economic Geography (3). An examination of the geography of world economic systems, including an analysis of the principles of resource utilization and location theory.

GEOG 485 Urban Geography (3). Cities as geographic units, including functions and structures, with attention to urban growth patterns, socioeconomic functions and issues, rural/urban relationships, and contemporary trends.

GEOG 499 Special Topics in Geography (3). An in-depth examination of selected areas of geography through readings, research projects, and oral and written presentations. Prerequisites: GEOG 1010 and 1020, or permission of instructor.

History (HIST)

HIST 121, 122 World History I, II (3, 3). A survey of the major societies and civilizations of Asia, Africa, the Middle East, and the West—their geography, major economic and social structures, political systems, religions, and philosophies. The first semester covers from pre-history to about 1500 CE, and the second semester covers from 1500 to the present. Required of all History majors.

HIST 2010, 2020 American History I, II (3, 3). A study of the development of cultural, economic, and political institutions in America from pre-Columbian times to the present. HIST 2010 covers the period from pre-Columbian times to 1877. HIST 2020 covers the period from 1877 to the present. Both courses required of all University graduates.

HIST 2011, 2021 Honors American History I, II (3, 3). A study of American history from pre-Columbian times to the present. Limited to students in University Honors Program. Both courses may be used to satisfy University American History requirement.

HIST 203 Introduction to Public History (3). An introductory course focusing on the distinctions between academic and public history. The course examines the methodology and process of historical work, with specific concentration on the unique focus of public historians. For each section of the course, career choices are presented. Practicing public historians participate as guest lecturers.

HIST 301 Europe, 1648-1789 (3). A survey of early modern Europe from the end of the Thirty Years' War to the beginning of the French Revolution. Themes include the rise of the modern state system in Europe, the creation of colonial empires, the development of global commerce, and the impact of scientific revolution and the Enlightenment.

HIST 302 Europe, 1789-1871 (3). A survey of European history from the French Revolution to the unification of Italy and Germany. This course examines the transformation of Europe through the influence of revolutionary movements and modern ideologies as well as the social and economic forces of urbanization and industrialization.

HIST 303 Europe, 1871-1945 (3). A survey of Europe from the height of its power and influence to the crisis of its civilization in the First and Second Wold Wars. The course examines the nature of European imperialism, the growth of international rivalry, the history of fascism and communism, and the great military conflicts of the early twentieth century.

HIST 304 Europe since 1945 (3). A survey of European history during and after the Cold War. This course examines the end of European empire, the division of Europe in the struggle between the Soviet Union and the United States, and quest for European unity, the collapse of communism, and the challenges of the new century.

HIST 318A, B, C Cooperative Education (3, 3, 3). Supervised and approved program of learning experiences undertaken by students in governmental, business, or industry setting. Formal proposals, project objectives, and learning plans are reviewed and approved by faculty. Student activity and progress are monitored, evaluated, and graded by a full-time faculty member. Prerequisite: permission of Department Head.

HIST 331 American Colonial History (3). A study of the economic, social, cultural, and political history of North America and the early United States from 1492 to 1789.

HIST 332 The Early Republic, 1789-1836 (3). An in-depth study of the American Republic from its beginnings under George Washington through the presidency of Andrew Jackson.

HIST 333 The Late Republic, 1836-1860 (3). The history of the United States during the nid-nineteenth century. Topics include territorial expansion, sectional conflict, the debate over slavery, and the coming of the Civil War.

HIST 334 Civil War and Reconstruction (3). A study of the sectional disputes dividing the nation, the course of the Civil War, the Constitutional problems of Reconstruction times, the condition of the freedmen after the war, and the political history of the nation to 1877.

HIST 335 United States 1877 to 1920 (3). An analysis of the political, economic, and cultural evolution of the United States. Key issues include the end of Reconstruction, end of frontier America, rise of big business, imperialism, the Spanish-American War, the Progressive era, and World War I.

HIST 336 United States 1920 to 1945 (3). A study of the political, economic, and cultural development of the American people from the end of World War I through World War II. Topics include the Roaring Twenties, the Great Depression, the New Deal, and World War II.

HIST 337 America Since 1945 (3). An investigation of the American nation since World War II. Topics include domestic politics, America's involvement in post-war world affairs, and economic, cultural, and social developments.

HIST 338 The Cultural History of the United States (3). A study of selected cultural aspects of America from colonial times to the present day. The principal topics include folklore, mythologies, music, art, literature, popular culture, and fads.

HIST 2030 History of Tennessee (3). A study of the state from neolithic time until the present day. It includes a survey of social, cultural, economic, and political developments which have influenced Tennessee's growth and development. Course may be substituted for either HIST 2010 or 2020 in satisfying the University's American history requirement.

HIST 361 Introduction to the Philosophy of History (3). A study of the philosophy of history and historical literature of major European and American thinkers from the time of the Greeks to the present. Course includes such writers as Thucydides, Herodotus, Tacitus, St. Augustine, Vico, Voltaire, Hegel, von Ranke, Marx, Turner, Beard, and Toynbee.

HIST 363 History of Science and Technology (3). Selected topics and sources in the historical development of modern science and technology from the Renaissance to the present. It includes the developments in mathematics, physical sciences, earth sciences, biological sciences, medicine, and technology.

HIST 369 Economic History of the United States (3). An investigation of selected economic issues in American history from the colonial period to the present. Topics include mercantilism, capitalism, industrialism, labor-management relations, corporatism, and multi-national organizations.

HIST 371 Teaching of History and Social Science (3). The methods, strategies, and materials of the secondary teaching of social studies. The philosophical and definitional literature of the social studies and its relationship to pedagogy are explored. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all History majors in the Teacher Education Program. Prerequisite: official admission to the Teacher Education Program.

HIST 384 Ancient History (3). An examination of ancient civilizations, including Egyptian, Roman, Hellenic, and Hellenistic cultures. Materials in this course include archaeological evidence, philosophical writings, and political institutions.

HIST 386 The Middle Ages and Renaissance (3). An intensive study of Western Europe from 500 to 1600. The course focuses on the political, economic, social, and cultural developments of the middle ages, the twelfth-century Renaissance, and the Italian and Northern Renaissance.

HIST 387 The Reformation (3). An investigation of the religious, political, and social events from 1517 to 1648 that led to conflicts and resultant major changes in Europe. Both theological and political controversies are noted, along with the various ways religion in Europe experienced change.

HIST 421, 422 Diplomatic History of the United States (3, 3). An analysis of American foreign affairs, 1776 to the present. HIST 421 begins with the diplomacy surrounding the emergence of the United States as a nation and concludes with the nation's growth into a world power by 1870. HIST 422

treats the further expansion of the United States' role as a dominant world power by covering the years 1870 to the present, including foreign policies preceding and during the world wars, containment and anti-communist policies, the Vietnam dilemma, detente, and the collapse of the Soviet empire.

HIST 425, 426 American Social and Intellectual History (3, 3). Analysis of social, cultural, and intellectual thought. The first semester covers the period to the Civil War and focuses on such topics as Puritanism, the Enlightenment, romanticism, individualism, Social Darwinism, urbanism, and popular culture. HIST 426 covers the period from 1865 to the present.

HIST 432A, 432B, 432C Vital Topics in History (3, 3, 3). Designated topics focusing on specialized historical fields, allowing students to become aware of the expanding frontiers of historical investigation and to participate in an intensive research experience.

HIST 433A, 433B, 433C, 433D Vital Topics in Public History (3, 3, 3, 3). Selected topics in Public History Administration, introducing students to identifiable career positions in the field. Possibilities include A - Archival Administration; B - Historical Editing; C - Historical Preservation; and D - Community and Oral History. Prerequisite for all courses: HIST 203.

HIST 450 Senior Project (3). Introduction to historical literature and methodology, primarily for seniors majoring in History. Students are introduced to classical historical literature as well as the techniques and analytical tools necessary for carrying out research projects. Limited to advanced juniors and seniors. Required of all History majors.

HIST 451, 452 Latin American History I, II (3, 3). An examination of the general history of the civilization of Latin America to the present. HIST 451 covers Indian times through the Portuguese-Spanish colonization period. HIST 452 covers the period from 1800 to the present, including revolution, independence, nationhood, and international relations.

HIST 458 Public History Administration Internship (3). A practicum or internship with a history-related agency (public or private) to provide the student with on-the-job experiences. The details of the internship are negotiated among student, agency, and instructor. A major paper is required for successful completion of course, as well as a satisfactory evaluation by both instructor and internship agent. Prerequisites: HIST 203 and 6 hours in 433A, B, C, or D.

HIST 472S Student Teaching (12). A semester-long, supervised student teaching experience divided between middle school and high school. Required of all students seeking certification in teaching history or government. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently.

HIST 481, 482 Asian Civilizations I, II (3, 3). An investigation of civilizations of the Indian subcontinent and the Far East, especially China and Japan. The first semester covers the time from the development of the classical period to Western domination. The second semester covers the period from the age of imperialism to the present.

HIST 485, 486 History of Africa I, II (3, 3). An examination of the history of Africa from ancient times to the recent period of African nationalism. The first semester addresses the major events and leaders in African history to the beginnings of European colonization. The second covers from colonization through the emergence and organization of independent states.

HIST 488 Africa and the Trans-Atlantic Slave Trade (3). A study of the trans-Atlantic slave trade from its beginnings in the fifteenth century to its suppression in the 1800s. The course examines the origins of the slave trade, its extent, and its impact on the African continent and the African diaspora.

HIST 489 Modern Africa, 1960-Present (3). A study of Africa in the post-independence period. Topics include the challenges of economic development, issues of the environment and population, the dilemmas of democratic nation building, and the impact of international politics on emerging African states.

HIST 491, 492 Afro-American History I, II (3, 3). A study of the integral role and contributions of African-Americans to the history and development of the United States. HIST 491 covers the period from the history of African kingdoms to the end of American slavery. HIST 492 covers the period from 1865 to the present.

HIST 493 The Civil Rights Movements in the United States (3). A study of movements in America from 1900 to the present, including African-American, Mexican-American, Native American, and women's organizations.

HIST 499 Senior Seminar (1). A special readings course for seniors. Designated historical works are assigned which reinforce the study of history, enhance general education, and intensify historical scholarship. Required of all History majors.

Political Science (PISI)

Completion of PISI 101 or POLI 2010 is a prerequisite to all upper-level (300- and 400- level) PISI courses.

PISI 101 Introduction to Political Science (3). The crucial ideas, questions, problems, and methods involved in human attempts 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 is explored in depth. Required of all Political Science majors. Course does not satisfy the University social science requirement.

PISI 2010 American National Government (3). The foundation, organization, and principles of American national government. Attention is focused on the relations of the citizens to the government and the rights, duties, and obligations of citizens. POLI 2010 is prerequisite to all upper-level PISI courses. Course may be used to satisfy the University social science requirement. Required of all Political Science majors.

PISI 220 Introduction to International Politics (3). The basic concepts and elementary theories of international politics. Tracing the establishment of the modern nation-state system from 1648, the course examines the early historical development of the discipline and the many fundamental concepts that support its structure. Concepts such as the state, nation, power, nation-state, sovereignty, nationalism, interdependence, and integration are explored in depth.

PISI 222 State and Local Government (3). The structure, principles, and operation of the state and local units of government and the nature of intergovernmental relations in the American federal system. Illustrative materials are drawn largely from Tennessee. Required of all teacher certification students in History and Political Science. Course does not satisfy the University social science requirement.

PISI 300 History of Political Philosophy (3). Selected political philosophers from classical Greece to 1900, including Plato, Aristotle, Machiavelli, Locke, and Rousseau.

PISI 301 Contemporary Political Philosophy (3). Twentieth-century works on the central issues in political philosophy, economic justice, rights, and political authority.

PISI 310 Research Methodology (3). An introduction to social science research methodology, which involves data collection and processing procedures, computer usage, surveys, statistical analysis, and research design. Prerequisites: PISI 101, POLI 2010, 222. This course is a prerequisite to PISI 450. Required of all Political Science majors.

PISI 315 Public Opinion and Voting Behavior (3). The process by which opinions are formed, the purposes and techniques of propaganda, and the functions and expression of public opinion, all factors which influence how and why people vote.

PISI 360 Introduction to Comparative Government and Politics (3). Theoretical frameworks which have been used to compare different types of political systems. Course focuses on the issue of what constitutes a valid comparison.

PISI 363 International Organizations (3). The nature of international organizations and regional organizations. Materials include military, economic, cultural, and political integration experiences, with emphasis on the United Nations and its agencies, the European Economic Community (EEC), North Atlantic Treaty Organization (NATO), Organization of American States (OAS), Organization of African Unity (OAU), and Economic Community of West African States (ECOWAS).

PISI 365 International Relations (3). Contemporary relations and problems among states of the world and the major factors which underlie and influence these relations.

PISI 367 American Foreign Policy (3). The forces and factors involved in American foreign policy and the processes through which it is developed.

PISI 368 Third World Politics (3). An introduction to political and economic change in the Third World to provide an understanding of some of the major problems confronting these nations and the various tools and strategies that their political leaders can use in dealing with those problems. Course investigates some of the major avenues toward political development and assesses the costs and benefits of the approaches discussed.

PISI 369 Theoretical Approaches to International Relations (3). An in-depth analysis of international relations theory, beginning with the institutionalization of the discipline in 1919 and on to the current state of the subject. The discourses and controversies dominating the field are examined from a paradigmatic perspective, drawing heavily on epistemological approaches to knowledge and focusing on current theoretical debates.

PISI 370 International Security Studies (3). Analysis of U.S. national and international security affairs in contemporary world politics. While focused on the international system as a whole, course places special emphasis on the U.S. and the evolution of its security policy from both a national and an international perspective. Course is interdisciplinary in approach, drawing from theories, concepts, ideas, and literature from political science, history, philosophy, economics, and law.

PISI 371 Teaching Political Science in Secondary School (3). The theory, methods, and materials for the teaching of government and other disciplines in the social science area. This methods course is required of government licensure majors who plan to teach on the middle school or high school level. Prerequisite: official admission to the Teacher Education Program.

PISI 391 Urban Politics (3). Principal urban problems, their causes, and public policies that deal with them. The course is designed to acquaint students with the ideas of the major writers on such aspects of urban communities as the role and development of cities; their government, administration, and finance; urban planning and design; poverty and slums; ethnic, race, and class relations; the administration of justice; urban mass transit; and the quality of life in the urban environment.

PISI 393 International Political Economy (3). A rigorous analysis of the global political economy with emphasis on international trade, balance of payments, theories of development and underdevelopment, the role of multinational corporations, and issues related to migration, the debt crisis, and the environment. The course draws on the extensive literature currently available from a wide range of sources.

PISI 405, 405A, 405B, 405C Special Topics (3, 3, 3, 3). Student- or faculty-generated courses. Scope of subject matter is determined by students and instructor. PISI 405A treats black political thought from 1850 to 1920 and 405C treats the philosophy of Dr. Martin Luther King, Jr.

PISI 420 Legislative Process (3). The structure and methods of transacting business in the American Congress and state legislatures: the role of legislatures in the American political system.

PISI 421 Judicial Process (3). The court systems in the United States, both their role in the political system and the procedures by which they make decisions.

PISI 422 Parties and Elections (3). The structure and functions of the party system, including nominations, campaigns, and elections. The course examines the role of parties in the political process.

PISI 423 The Presidency (3). The office of the President of the United States in terms of both the institution and the men who have held that office. Emphasis is placed on the study of the presidency as it has developed in the last half century.

PISI 424 Government, Public Opinion, and the Press (3). An exploration of the mutual dependence between journalists and public officials and candidates for office. Course examines how each "side" views what is news and how the coverage of various institutions of government affects the image of government in the mind of the citizen.

PISI 430 Introduction to American Law (3). The development of English common law and its influence on the shape of American law as it has evolved from the colonial era to the present. Basic legal concepts and doctrines as reflected in the operation of the national and state court systems are analyzed, culminating with a general survey of the law in modern American society as it determines the basic rights and liabilities of private persons.

PISI 431 Constitutional Law: The Federal Government and Separation of Powers (3). The sources, principles, and powers of government in the United States as embodied in the Constitution, as well as judicial decisions in leading cases. The course covers judicial review; the powers of the legislative, executive, and judiciary; and the relations between the federal government and the states.

PISI 432 Constitutional Law: The Bill of Rights (3). The sources, principles, and powers of government in the United States as embodied in the Consititution, especially the Bill of Rights, as well as judicial decisions in leading cases. The course covers freedom of speech, press, and religion; due process; privacy; and equal protection of the laws.

PISI 434 Legal Research and Writing (3). An overview of the major types of federal court reports, digests, citations, annotated reports, encyclopedias, treatises, restatements, and law reviews. A factual situation provides the basis for legal research problems.

PISI 435 International Law (3). The basic legal concepts and principles governing state behavior in the international order, the nature and sources of international law, international agreements, sovereignty of states, and recognition of statehood, jurisdiction, immunities, and responsibility.

PISI 440 Introduction to Public Administration (3). Principles of public administration structure, organization, financial management, administrative responsibility, and the relation between the administration and other branches of government in the United States. Course is prerequisite to all other courses in the PISI 440 series.

PISI 446 Intergovernmental Relations and Regionalism (3). The relations among government agencies throughout the sectors of government (local, state, and national), including the impact of these relations on policy development and the level and quality of citizen participation. Prerequisites: PISI 222 and 440.

PISI 448 Internship (3-12). A supervised internship allowing students to experience firsthand the workings of government and private agencies involved in legal and political processes. Students may receive up to 12 hours of credit for the internship. Only 3 hours, however, may be counted toward the requirements for a major in Political Science. Prerequisites: Junior or Senior standing and at least 12 hours of upper-level PISI courses.

PISI 450 Senior Project (3). Directed research on a specific problem. The purpose of the project is to use conceptual knowledge and skills learned in research methodology and knowledge acquired relative to a particular area of political science. Required of all Political Science majors. Prerequisite: PISI 310.

PISI 451 Independent Study (3). A supervised project of research or course of guided readings. Topics are selected by enrolled students in consultation with the supervising faculty member. The course may be repeated with faculty approval for up to 6 hours of credit. Prerequisites: Junior or Senior standing and at least 12 hours of upper-level PISI courses.

PISI 492 Black Politics (3). The past, present, and future role of blacks in the American political system. The social, economic, and political position of blacks related to that of the larger population is explored. Major works by and about black Americans are studied.

Department of Languages, Literature, and Philosophy

(Vacant)
104 Humanities Building
Telephone 615-963-5641
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Faculty: W. Billings, K. Bryant, D. Daniels, D. Gendron, J. Grimes, W. Hardy, J. Head, H. Houston, J. Irby, P. Jordan, R. Lee, L. Lewis, M. Mazzone, A. McQueen, C. Mojica-Diaz, J. Montmarquet, C. Moran, E. Phillips, L. Powers, T. Quain, J. H. Railsback, M. Reaves, A. Rueda-Garcia, A. Springfield, L. Watkins.

General Statement: The Department of Languages, Literature, and Philosophy contains the University's degree programs in English and Foreign Languages; it also offers courses in Philosophy and Religious Studies. Since all of these disciplines have distinct programs, they are discussed under separate headings, but each provides a broad, sound education in the humanities, those studies specifically designed to cultivate one's full humanity.

The Department also offers a Master of Arts degree in English, as well as graduate courses in French and Spanish, although it does not offer an advanced degree in either language. For details of the graduate programs, see the Graduate Catalog.

Accreditation: The teacher certification programs in English and foreign languages are accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

English

General Statement: The program provides an education in literature and in the English language. A student who majors in English should gain an understanding of the use of the language for both aesthetic and practical purposes, and should therefore be able to use language effectively and recognize its effective use. Through the study of literature, the student also becomes familiar with some of the great minds in history and the cultures of which they were a part.

Students must earn at least a grade of C in all classes required to complete the English major. English majors are also expected to take ENGL 2011 and 2021, World Literature I and II (or ENG 2018 and 2028, Honors World Literature I and II) , as part of the general education core. Since English offers only the B.A. degree, students must complete at least twelve semester hours of work in a single foreign language. This number of hours cannot be reduced by advanced placement in the language. For example, if a student is initially placed in the sophomore level because of competence in the language, he or she must take twelve hours at the sophomore, junior, and/or senior level of the language. (Students are not allowed to take freshman-level courses in the language once they have earned at least a C in the sophomore level of that language.) Ideally these hours should build upon the foreign language learned in high school, in order for the student to develop a high level of proficiency in a language other than English. Other requirements for the major are listed in the four-year curriculum.

Students may earn secondary school certification in English by completing the requirements of the general education and professional education cores, as well as ENG 371, Methods of Teaching High School English, and ENG 372, Adolescent Literature. The other certification requirements are spelled out in the four-year curriculum. Successful completion of the certification program results in licensure for grades 7-12. Students ordinarily enter the certification program in their sophomore year. They must pass the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT), as well as have a cumulative quality point average of 2.75, before they are officially admitted and become eligible to enroll in upper-level certification courses. Students who have previously earned a 21 on the ACT, a 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. Students must apply in writing to the College of Education for formal admission to the certification program. Certification candidates in English are required to complete twelve semester hours of enhanced student teaching with an eight-week placement at the secondary level and seven weeks at the middle school level. For a complete list of admission and retention requirements in the Teacher Education Program, see pages 133-134.

The Department offers two other programs in English: the English minor and the minor in Professional Writing. Also, the Department encourages students to take a double major, combining English with another major. Students interested in any of these programs should consult an English advisor or the Department Head.

Departmental Requirements For Bachelor of Arts English — **24 Semester Hours**

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENG 2011, 2021 or ENG 2018, 2028	World Literature I, II or Honors World Literature (minimum grade of C in each)	6
FOREIGN LANGUAGE	12 hours of a single language (See statement above about the level of these courses.)	12
HIST 2010, 2020	American History I, II	6
MATH 1010 or 1040	College Algebra I or Pre-calculus Mathematics I	3
SCIENCE	Biology, Chemistry, or Physics, including laboratories	6-8
SOCIAL SCIENCE	3 semester hours	3
SPCH 220	Public Speaking	3
HUMANITIES	2 courses from 2 humanities disciplines	6
CS 121	Introduction to Computing	3
HPER 1010-1053, AERO, or MUSC 2010	Physical Education Activity (2 semesters required)	2
ASOR 100C	Orientation for Humanities Major (Teacher certification students should take EDCI 101.)	1

Upper-division Admission

For admission into the upper-division program of the English major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination.

Major Core

ENG 301	Critical Approaches to Literature	3
ENG 400	Senior Seminar	3
ENG 431 or 432	Shakespeare Comedies or Shakespeare Tragedies	3

American Literature	6 hours from ENG 361, 362, 363, 364, 481	6
British Literature	6 hours, 3 hours before 1800 (ENG 329, 331, 332, 333, or 423) and 3 hours after 1800 (ENG 330, 341, 342, 351, 353, or 421)	6
Literature and Culture	6 hours from ENG 314, 315, 364, 365, 372, 373, 380, 386, 481, 485	6
Genre or Major Author	3 hours from genre courses (ENG 353, 363, 365, 368, 367, 369, 421) or major author courses (ENG 420, 431, 432, 434)	3
Language and Theory	3 hours from ENG 410, 411, 412, 413, 480	3
Writing	3 hours from ENG 300, 310, 311, 312, 414, 415, 416, 491, 492, 495	3

No course can satisfy more than one of the above requirements: e.g., ENG 431 can be used to satisfy the requirement in either Shakespeare or a major author, but cannot satisfy both. Teacher certification students must take ENG 372 as one of their language and culture requirements.

Requirements for Minor in English: A minimum of 18 upper-level semester hours including ENG 301, 361 or 362, 412 or 413, 431 or 432.

Requirements for Minor in Professional Writing: A minimum of 18 upper-level semester hours in writing courses including: ENG 300 or ENG 310 and courses selected from ENG 311, 312, 491, 490, 414, 415, 416, 495W. A student may include 3 semester hours of ENG 499, if approved before the professional writing internship begins. Other writing courses or writing intensive courses may be approved as part of the requirement.

Foreign Languages

General Statement: The offerings of the programs in 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. A foreign language may be used to satisfy one of the University's two humanities requirements.

The curricula encompass courses leading to the Bachelor of Arts degree in Foreign Languages, with concentrations in French and Spanish. "C" is the lowest acceptable grade for the departmental major and minor in any required foreign languages course. Courses in which students receive "D" or below must be repeated and the grade raised to at least a "C."

Students who wish to be certified to teach French or Spanish must be officially admitted to the certification program through the College of Education, ordinarily in the sophomore year. Admission to this program requires a 2.75 cumulative quality point average and a passing score on the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously scored at least 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. Admission to the Teacher Education Program is a prerequisite for upper-level certification courses. Students are required to complete twelve semester hours of enhanced student teaching, with an eight-week placement in secondary school and seven-week placement in middle school. For a complete list of requirements for admission to and retention in teacher certification, see pages 133-134. Successful completion of the program earns licensure to teach grades 7-12.

The program offers a minor in French, Spanish, or German.

Departmental Requirements
For Bachelor of Arts
Foreign Languages (French or Spanish)

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010, 2020	Sophomore Literature I, II	6
FOREIGN LANGUAGE	French or Spanish through intermediate level (Number of hours may be reduced through advanced status.) (minimum grade of C in all courses)	6- 12
HIST 2010, 2020	American History I, II	6
MATH 1010 or 1040	College Algebra I or Pre-Calculus Mathematics I	3
SCIENCE	Biology, Chemistry, or Physics, including laboratories	6-8
GEOG 1010 or 1020	World Regional Geography I or II	3
SPCH 220	Public Speaking	3
ART 1010	Art Appreciation	3
MUS 1010	Music Appreciation	3
CS 121	Introduction to Computing	3
HPER 1010-1053, AERO, or MUSC 2010	Physical Education Activity (2 semesters required)	2
ASOR 100C	Orientation for Humanities Majors (Teacher certification students should take EDCI 101.)	1

Upper-division Admission

For admission into the upper-division program of either the French or Spanish concentration of the Foreign Language major, students must complete all of the requirements listed above under the General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial-developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination.

Major Core: French Concentration

FR 300	French Phonetics and Phonology	3
FR 301, 302, 303	Advanced French Grammar, French Pronunciation and Conversation, Reading and Pronunciation (Students must take two of the three.)	6
FR 310	Introduction to Literary Studies	3
FR 312	Culture and Civilization of France	3
FR 313	Francophone Culture and Civilization	3
FR 320 or 321	Survey of French Literature or Survey of Francophone Literature	3
FR 401 or 402	Literary Masterpieces of France or Topical Readings in Literature of France	3
FR 410 or 411	Literary Masterpieces of Francophone Literature or Topical Readings in Francophone Literature	3
MFL 450	Senior Seminar	3

Students seeking teacher certification in French must take only one of FR 401, 402, 410, or 411. In addition, they must take the following courses:

FR 311	Introduction to French Linguistics	3
MFL 371	Methods of Teaching Foreign Languages	3
MFL 472S	Student Teaching in the Secondary Schools	12

French Minor: Eighteen hours in French courses at the 300/400 level. FR 300, 301, 302, 303, and 310 required.

Major Core: Spanish Concentration

SPN 300	Spanish Phonetics and Phonology	3
SPN 310	Introduction to Literary Studies	3
SPN 301, 302, 303	Advanced Spanish Grammar, Spanish Pronunciation and Conversation, Reading and Composition (Students must take two of the three.)	6
SPN 312	Culture and Civilization of Spain	3
SPN 313	Culture and Civilization of Latin America	3
SPN 320 or 321	Survey of Peninsular Literature or Survey of Latin American Literature	3
SPN 401 or 402	Literary Masterpieces of Spain or Topical Readings in the Literature of Spain	3
SPN 410 or 411	Masterpieces of Latin American Literature or Topical Readings in Latin American Literature	3
MFL 450	Senior Seminar	3

Students seeking teacher certification in Spanish must take only one of SPN 401, 402, 410, or 411. In addition, they must take the following courses:

SPN 311	Introduction to Spanish Linguistics	3
MFL 371	Methods of Teaching Foreign Languages	3
MFL 472S	Student Teaching in the Secondary Schools	12

Spanish Minor: eighteen hours in Spanish courses at the 300/400 level. SPN 300, 301, 302, 303, and 310 required.

Philosophy

General Statement: "Philosophy," said Kant, "is primarily concerned with three questions: What can I know? What ought I to do? What may I hope?" These broad questions suggest many problems that have puzzled some of the greatest thinkers in human history. Is belief in God rationally defensible? What is a just society? Can we know the truth? Is a human being more than a body and brain? Are we free? These, and many more, are the traditional problems of philosophy. Contemporary life in a highly scientific, technological society raises important philosophical issues of its own which we all face on a daily basis.

The study of philosophy benefits students in many ways. It encourages them to reflect critically on their own most basic beliefs and values, and it helps develop the capacity to think critically and carefully, a particularly valuable ability in our increasingly complex world. Studying philosophy also provides a sense of the evolution of human thinking about ourselves and our world.

Students who wish to concentrate in Philosophy may do so by fulfilling the requirements for the Interdisciplinary Studies program in Arts and Sciences and take at least 15 upper-level hours in Philosophy, including two of the courses in the History of Philosophy sequence (PHIL 310, 311, 312) and Logic and Critical Thinking (PHIL 250). Other courses should be selected in consultation with a Philosophy advisor.

Departmental Requirements For Minor in Philosophy — **18 Semester Hours**

Students wishing to minor in Philosophy must take 18 hours of course work, including at least 12 upper-level hours, of which at least one course must be in the History of Philosophy sequence. All students interested in concentrating or minoring in Philosophy should discuss their plans with a Philosophy advisor.

Bachelor of Arts Degree in English

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 1010	3	ENGL 1020	3
FR, GER, OR SPN	3	FR, GER, OR SPN	3
HIST 2010	3	HIST 2020	3
HUMANITIES	3	HUMANITIES	3
MATH 1010 OR 1040	3	CS 121	3
HPER, AERO, OR MUS 2010	1	HPER, AERO, OR MUSC 2010	1
ASOR 100C	1		
	17		16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 2011 OR 2018	3	ENG 2021 OR 2028	3
WRITING, UPPER-LEVEL	3	SPCH 220	3
FR, GER, OR SPN	3	FR, GER, OR SPN	3
BIO/CHEM/PHY AND LAB	3 OR 4	BIO/CHEM/PHY AND LAB	3 OR 4
SOCIAL SCIENCE	3	ELECTIVE, ANY LEVEL	3
	15 OR 16		15 OR 16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 301	3	AMERICAN LITERATURE	3
LANGUAGE AND THEORY	3	BRITISH LITERATURE	3
BRITISH LITERATURE	3	LITERATURE AND CULTURE	3
AMERICAN LITERATURE	3	ELECTIVES, ANY LEVEL	9
ELECTIVES, ANY LEVEL	6		
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 400	3	GENRE OR MAJOR AUTHOR	3
ENG 431 OR 432	3	LITERATURE AND CULTURE	3
ELECTIVES, 300/400 LEVEL	12	ELECTIVES, 300/400 LEVEL	9
	18		15

Bachelor of Arts Degree in English With Teacher Certification Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 1010	3	ENGL 1020	3
FR, GER, OR SPN	3	FR, GER, OR SPN	3
HIST 2010	3	HIST 2020	3
MATH 1010 OR 1040	3	CS 121	3
MUSC 1010	3	ART 1010	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
EDCI 101	1	HEA 151	3
	17		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 2014	3	ENGL 2024	3
FR, GER, OR SPN	3	FR, GER, OR SPN	3
BIO/CHEM/PHY AND LAB	3 OR 4	BIO/CHEM/PHY AND LAB	3 OR 4
SPCH 220	3	SOCIAL SCIENCE	3
EDCI 201	3	PSY 242	3
	15 OR 16		15 OR 16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 301	3	ENG 371	3
AMERICAN LITERATURE	3	AMERICAN LITERATURE	3
LANGUAGE AND THEORY	3	BRITISH LITERATURE	3
BRITISH LITERATURE	3	PSY 312	3
GENRE OR MAJOR AUTHOR	3	EDCI 387	3
ENG 372	3	EDAD 400	3
EDAD 301 (FORMERLY EDCI 301)	2	(FORMERLY EDCI 400)	
	20		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 400	3	ENG 472S	12
ENG 431 OR 432	3	EDCI 470A	3
LITERATURE AND CULTURE	3		
EDCI 419	1		
EDRD 491	3		
EDSE 333	3		
	16		15

Bachelor of Arts Degree in Foreign Languages Concentration In French

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
*FREN 2010	3	*FREN 2020	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010 OR 1040	3	CS 121	3
HUMANITIES	3	HUMANITIES	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUS 2010	1
ASOR 100C	1		
	17		16

*Students need not take these courses if they demonstrate equivalent proficiency.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 300	2	FR 301, 302, OR 303	3
FR 301, 302, OR 303	3	GEOG 171 OR 172	3
ENGL 2010	3	ENGL 2020	3
BIO/CHEM/PHY AND LAB	3 OR 4	BIO/CHEM/PHY AND LAB	3 OR 4
SPCH 220	3	ELECTIVES, ANY LEVEL	6
ELECTIVE, ANY LEVEL	3		
	17 OR 18		18 OR 19

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 310	3	FR 313	3
FR 312	3	FR 320 OR 321	3
ELECTIVES, ANY LEVEL	12	ELECTIVES, 300/400 LEVEL	9
	18		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 401 OR 402	3	MFL 450	3
FR 410 OR 411	3	ELECTIVES, 300/400 LEVEL	12
ELECTIVES, 300/400 LEVEL	12		
	18		15

Bachelor of Arts Degree in Foreign Languages Concentration in French With Teacher Certification Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
*FREN 2010	3	*FREN 2020	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010 OR 1040	3	CS 121	3
MUSC 1010	3	ART 1010	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
EDCI 101	1		
	17		16

*Students need not take these courses if they demonstrate equivalent proficiency.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 300	2	FR 301, 302, OR 303	3
FR 301, 302, OR 303	3	GEOG 1010 OR 1020	3
ENGL 2010	3	ENGL 2020	3
BIO/CHEM/PHY AND LAB	3 OR 4	BIO/CHEM/PHY AND LAB	3 OR 4
SPCH 220	3	PSY 242	3
EDCI 201	3	HEA 151	3
	17 OR 18		18 OR 19

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 310	3	FR 313	3
FR 311	3	FR 320 OR 321	3
FR 312	3	PSY 312	3
MFL 371	3	EDCI 387	3
EDAD 301 (FORMERLY EDCI 301)	2	EDCI 419	1
		ELECTIVE, ANY LEVEL	3
ELECTIVE, ANY LEVEL	3		
	17		16

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 401, 402, 410, OR 411	3	MFL 472S	12
MFL 450	3	EDCI 470A	3
EDAD 400	3		
EDRD 491	3		
EDSE 333	3		
	15		15

Bachelor of Arts Degree in Foreign Language Concentration in Spanish

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
*SPAN 2010	3	*SPAN 2020	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010 OR 1040	3	CS 121	3
HUMANITIES	3	HUMANITIES	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
ASOR 100C	1		
	17		16

*Students need not take these courses if they demonstrate equivalent proficiency.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 300	3	SPN 301, 302, OR 303	3
SPN 301, 302, OR 303	3	GEOG 1010 OR 1020	3
ENGL 2010	3	ENGL 2020	3
BIO/CHEM/PHY AND LAB	3 OR 4	BIO/CHEM/PHY AND LAB	3 OR 4
SPCH 220	3	ELECTIVE, ANY LEVEL	3
ELECTIVE, ANY LEVEL	3		
	18 OR 19		15 OR 16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 310	3	SPN 313	3
SPN 312	3	SPN 320 OR 321	3
ELECTIVES, ANY LEVEL	9	ELECTIVES, ANY LEVEL	12
	15		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 401 OR 402	3	ELECTIVES, 300/400 LEVEL	15
SPN 410 OR 411	3		
MFL 450	3		
ELECTIVES, 300/400 LEVEL	9		
	18		15

Bachelor of Arts Degree in Foreign Languages Concentration in Spanish With Teacher Certification Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
*SPAN 2010	3	*SPAN 2020	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010 OR 1040	3	CS 121	3
MUSC 1010	3	ART 1010	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
EDCI 101	1		
	17		16

*Students need not take these courses if they demonstrate equivalent proficiency.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 300	3	SPN 301, 302, OR 303	3
SPN 301, 302, OR 303	3	GEOG 1010 OR 1020	3
ENGL 2010	3	ENGL 2020	3
BIO/CHEM/PHY AND LAB	3 OR 4	BIO/CHEM/PHY AND LAB	3 OR 4
SPCH 220	3	PSY 242	3
EDCI 201	3	HEA 151	3
	18 OR 19		18 OR 19

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 310	3	SPN 313	3
SPN 311	3	SPN 320 OR 321	3
SPN 312	3	PSY 312	3
MFL 371	3	EDCI 387	3
EDAD 301 (FORMERLY EDCI 301)	2	EDCI 419	1
ELECTIVE, ANY LEVEL	3	ELECTIVE, ANY LEVEL	3
	17		16

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 401, 402, 410, OR 411	3	MFL 472S	12
MFL 450	3	EDCI 470A	3
EDAD 400	3		
EDRD 491	3		
EDSE 333	3		
	15		15

Course Descriptions

English (ENG)

English 1010 and 1020 are prerequisites to all upper-level English classes.

ENGL 1010 Freshman English I (3). An introduction to the fundamentals of written composition and communication through the study of illustrative essays, as well as an introduction to the reading and critical analysis of essays. Grammar and mechanics, insofar as they are an integral part of developing proficiency in writing, are covered in the course. Those students who do not demonstrate satisfactory performance in the use of grammar and mechanics are required to attend the Writing Clinic. Successful completion of 1010 is a prerequisite for English 1020. All degree-seeking students must earn at least a C in this course.

ENGL 1020 Freshman English II (3). An introduction to more advanced techniques of composition through the study of literature. The analysis and explication of literature serve as topics for discussion, study , and writing of themes. Special attention is paid to the writing of the literary review and the research paper. Those students who do not demonstrate satisfactory performance in the use of grammar and mechanics are required to attend the Writing Clinic. Prerequisite: successful completion of English 1010. All degree-seeking students must earn at least a C in this course.

ENGL 1011, 1021 Honors Freshman English I, II (3, 3). An Honors Course in Freshman Composition designed for students able to work at an advanced level. Enrollment is restricted to students in the University Honors Program. All degree-seeking students must earn at least a C in each of these courses.

ENG 200 Advanced Composition (1-3). A workshop approach to written composition through group and individual project production. The focus is to demonstrate well formed expository communications through critical analysis, writing skill, technical development, all brought to bear in a final paper. Collaborative learning and writing models in a seminar approach support the coursework.

ENGL 2010, 2020 Sophomore Literature (3, 3). A study of literary works with a variety of foci and perspectives. All of the following 2010-2020 courses satisfy the sophomore literature requirement of the General Education Core.

ENGL 2010, 2020 American Literature (3, 3). A survey of American literature from the first European settlements to the present time. The first semester covers from the beginning to the Civil War, and the second covers the period since the Civil War.

ENGL 2011, 2021 World Literature (3, 3). A survey of world literature from the beginnings in the Far East and Middle East until the present time. The first semester treats literature through the Renaissance (approximately 1650 CE), and the second treats the Renaissance to the present.

ENGL 2012, 2022 Literary Genres (3, 3). An approach to literature from the point of view of the genre, or type, of work to be studied. The first semester takes up the short story and the novel, the second poetry and drama.

ENGL 2013, 2023 Black Arts and Literature (3, 3). A study of the contributions of black artists and writers to world culture, especially American culture. The first semester treats oral traditions and music; the second semester takes up literature.

ENGL 2014, 2024 Survey of English Literature I, II (3, 3). A survey of English literature from its origins until the present. The first semester concludes with the end of the eighteenth century, and the second semester covers the period since 1800. Required of English majors, but open to all students.

ENGL 2018, 2028 Honors World Literature I, II (3, 3). An analytical reading of selected poetry, prose, and drama from the nations of the world. The subject matter of both semesters is arranged chronologically, with that of the first ranging from the ancient Chinese through the Renaissance (approximately 1650 CE), and that of the second from the Age of Classicism and Reason through the twentieth century. Limited to students in the University Honors Program.

ENG 300 Expository Writing (3). The reading and examination of essays representing the major expository types, with particular attention to rhetorical principles, styles, and structure, resulting in the writing of essays illustrating these types. The final project is the preparation of the research report, with emphasis on the collection of materials, analysis, and organization. Required of all English majors.

ENG 301 Critical Approaches to Literature (3). A writing-intensive introduction to major critical theories with emphasis on application to interpretation of literary works. Students interpret a number of literary works drawn from different genres and periods, applying several different theoretical perspectives, such as feminism, new historicism, Marxism, psychoanalysis, and cultural and gender studies. Prerequisites: ENG 1010, 1020, 2011 (or 2018), 2021 (or 2028). The course is required of all English majors and is a prerequisite or co-requisite for English majors to all upper-division courses in literature.

ENG 310 Technical Report Writing (3). A study of fundamentals of written reports in a variety of professional fields, with the emphasis on grammar, sentence structure, and style, as well as on specialized techniques. 310E focuses on reports required in professional engineering. 310S is the study and preparation of forms and reports required of social workers. 310C is the study and preparation of forms and reports required of students majoring in Criminal Justice. 310N treats reports required in the nursing profession. Acquaintance with documents of various agencies is stressed.

ENG 311 Creative Writing: Short Story (3). 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.

ENG 312 Creative Writing: Poetry (3). A workshop in writing poetry. The course examines the techniques involved in writing poetry, placing emphasis on the writing of varied poetic types and relating poetry to other forms of art.

ENG 315 The Film (3). A study of films: their makers, their message, and their appeal. Students not only view films but also read articles and books about movies.

ENG 329 Survey of British Literature I (3). A survey of important British writers beginning with the Old English tradition and continuing to the Romantic Period.

ENG 330 Survey of British Literature II (3). A continuation of ENG 329, beginning with the Romantic Period and concluding with the twentieth century.

ENG 331 British Literature from the Renaissance to the Restoration (3). A study of representative selections from 1500 to 1660 with concentration on non-dramatic literature.

ENG 332 Poetry and Drama of the Restoration and Eighteenth Century (3). A study of selected poetry, prose, and drama from the ages of Dryden, Pope, and Johnson.

ENG 333 Prose of the Eighteenth Century (3). A study of the attempts of journalists and novelists to create myths or moral models for their age in a series of social and cultural fictions. Readings in Addison and Steele, Johnson, Fielding, and Richardson.

ENG 341 Literature of the Romantic Movement (3). A study of representative selections from 1798 to 1832. Attention is given both to poetry and prose.

ENG 342 The Victorian Era (3). A study of nonfiction prose writers such as Carlyle, Mill, and Arnold; and of poets such as Tennyson, Browning, and Arnold. Some assignments are made in the major novelists such as Dickens, Thackeray, and Eliot.

ENG 351 Twentieth-Century British Literature (3). A study of the major trends in poetry, drama, and the novel of the twentieth century. Emphasis is placed on themes, techniques, and social criticism. Representative British, Irish, and Commonwealth writers are included.

ENG 353 Modern British Poetry (3). Selections from works of Hopkins, Yeats, Eliot, Thomas, and others.

ENG 361 American Literature I (3). A study of major American writers and literary movements, including such writers as Edwards, Franklin, Emerson, Thoreau, Hawthorne, Melville, Douglass, Dickinson, and Whitman, and such movements as Puritanism, the Enlightenment, Romanticism, and Transcendentalism. Required of all English majors.

ENG 362 American Literature II (3). A study of literary trends since the Civil War, with emphasis on such major figures as Twain, Crane, Dreiser, Frost, Eliot, Faulkner, Fitzgerald, Ellison, Lowell, Bishop, Baldwin, Rich, and Bellow. Required of all English majors.

ENG 363 The American Novel (3). A study of representative works designed to reflect formal developments in the novel, as well as intellectual and moral concerns of the American people.

ENG 364 Literature of Black Life in America (3). A study of black literature from its inception in America to current times. Particular emphasis is placed on biography, poetry, the essay, and short fiction.

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

ENG 367 The Short Story (3). Emphasis on the origin and growth of the short story as a literary form.

ENG 371 Methods of Teaching High School English (3). A course in the methods of teaching English in the secondary schools. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all English majors in the Teacher Education Program. Prerequisite: official admission to Teacher Education Program.

ENG 372 Adolescent Literature (3). A survey of literature relevant to the interest and concerns of young adults. Required of English majors enrolled in the Teacher Education Program.

ENG 373 Children's Literature (3). A course offering prospective teachers of the primary grades an opportunity to become familiar with literature suited to the needs and tastes of children. Principles that underline selection of children's literature for classrooms and libraries are considered. Required of all candidates for certification in Elementary Education.

ENG 380 African and West Indian Literature (3). An introductory course in the literature of Africa and the West Indies. Authors include Chinua Achebe, Wole Soyinka, James Ngugi, Mongo Beti, George Lamming, Camara Laye, and Jacques Roumain.

ENG 381 Greek and Roman Literature (3). Studies of major writers of classical civilization from Homer to fifth-century Athens to Augustan Rome. Extensive readings in the Iliad, the Odyssey, the Greek tragedies and comedies, and the Aeneid.

ENG 382 The Literature of the English Bible (3). The Bible considered as literature, with attention to historical backgrounds and textual problems.

ENG 386 Women in Literature (3). A course designed to investigate the image of women in literature as it relates to sexual roles, judgments, choices, and equality; and to broaden the students' knowledge of some of the values, lifestyles, goals, and achievements of women in the past and today.

ENG 390 Languages and Linguistics (3). A course to prepare students for the study and teaching of a language by introducing them to the scientific study of language. Comparisons between English and various other languages lay a foundation for a career as a teacher of English as a second language or a teacher of a foreign language. Same as MFL 390.

ENG 400 Senior Seminar (3). A course designed to complete the English major by inquiring into the purposes and methods of the liberal arts in general and literary study in particular. Attention is paid to the resources for literary scholarship and criticism. Required of all English majors.

ENG 401 Special Topics (3). Student- or faculty-generated course, with subject matter to be determined by students and instructor.

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

ENG 411 Current English (3). New trends in teaching English and their relationship to significant trends in the past. Students develop projects that are used as supplementary texts in the course.

ENG 412 Modern English Grammar (3). An introduction to the recent theories as a tool for analyzing literature and composition.

ENG 413 Advanced English Grammar (3). Traditional approaches to grammar. The course adddresses the needs of student writers and student teacher interns who need review of traditional grammar in light of their present and future professional goals.

ENG 414 Software Technical Writing I (3). A basic course in the writing of computer software manuals. ENG 310E is recommended as preparation. Prerequisite: permission of instructor.

ENG 415 Software Technical Writing II (3). Advanced documentation techniques for computer software. Prerequisite: successful completion of ENG 414.

ENG 416 Writing for Publication (3). A workshop in the various forms of writing that are marketable.

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

ENG 421 The English Novel (3). A selection of English novels from the eighteenth century to the present.

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

ENG 423 Literature of the Middle Ages (3). Studies in prose and poetry of the Middle Ages, including Beowulf and works of the Pearl poet, Langland, and Malory.

ENG 431 Shakespeare Comedies (3). A study of the principal comedies of Shakespeare, with attention to the cultural background of the Elizabethan Period. ENG 431 or 432 is required of all English majors.

ENG 432 Shakespeare Tragedies (3). A study of the principal tragedies of Shakespeare, with some attention to the history plays. ENG 431 or 432 is required of all English majors.

ENG 434 Milton and Bunyan (3). A study of John Milton's major prose tracts and poems, including Paradise Lost, Paradise Regained, and Samson Agonistes, as well attention to major works by John Bunyan.

ENG 441 Nineteenth-Century English Novel (3). A selection from the major writers of the period, such as Scott, Dickens, Eliot, Thackeray, Trollope, the Brontes, Hardy, and Galsworthy.

ENG 451 The English Novel: Twentieth Century (3). Selections from the works of Conrad, Forster, Lawrence, Joyce, Woolf, and others.

ENG 472S Student Teaching in the Secondary Schools (12). A semester-long experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in the teaching of English. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently.

ENG 480 Introduction to Literary Criticism (3). Major critical doctrines from antiquity to the present, with emphasis on twentieth-century movements.

ENG 485 Masterpieces of African World Literature (3). Study of classics of African and Caribbean literature in the context of cultural revolution in Africa. Issues of cultural determinism are examined, as well as the possibility of creating a synthesis out of the disparate forces that mold African and Caribbean reality.

ENG 490 Undergraduate Readings and Research (3). Individual study and research under faculty guidance. May be repeated once, for a total of six hours.

ENG 491 Advanced Story Writing (3). An advanced workshop in story writing, focusing on student work. The course covers such elements of a story as plot, character development, and scene-making. Students learn about these elements through the process of writing their own stories and studying stories by professional writers.

ENG 492 Advanced Poetry Writing (3). An advanced workshop in poetry writing, focusing on student work. The course covers such elements of poetry as rhythm, lineation, image-making, and figurative language. Students learn about these elements through the process of writing their own poems, studying poems by professionals, and delivering oral reports.

ENG 495W Research Writing (3). A course designed for liberal arts and technical/professional majors to extend investigative and research skills necessary for senior projects and other major papers in the various disciplines. Final projects focus on details in information management and articulation through a variety of documentation styles. Electronic writing for data and production is required. A writing-intensive course. Prerequisites: ENG 1010, 1020.

ENG 499 Internship in Professional Writing (3-9). Professional experience in a writing or publishing position. Students must write a report on their experience, and work supervisors must also submit a report. Open only by prior arrangement with instructor.

French (FR)

FREN 1010 Elementary French I (3). A beginning course in French. The four skills of listening comprehension, speaking, reading, and writing are taught, with an emphasis on oral proficiency in everyday situations. For students with no previous knowledge of the language. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

FREN 1020 Elementary French II (3). Continuation of FREN 1010, with further development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis is on oral proficiency in everyday situations. Prerequisite: FREN 1010 or an equivalent placement examination score. Course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

FR 121 Intensive French Review (3). Intensive review of the language to continue the development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis is on oral proficiency in everyday situations. Prerequisite: two years of high school French or equivalent placement examination score.

FR 201 Intermediate French I (3). Development of vocabulary, syntax, grammar, and oral and writing skills to incorporate these elements into a satisfactory intermediate level of performance in the language. Prerequisite: FREN 1020, 121, or equivalent placement examination score.

FR 202 Intermediate French II (3). Further development of the listening comprehension and speaking skills with an emphasis on reading and writing. Course incorporates vocabulary, syntax, and grammar to bring the student to an intermediate level of performance in French. Prerequisite: FR 201 or equivalent placement examination score.

FR 300 French Phonetics and Phonology (2). An introduction to the study of French sounds in isolation and in connected speech. Primary focus is on the development of good articulatory habits through an understanding of the physiology of speech organs, the description of speech sounds, and the system underlying natural speech of native speakers of French. Prerequisite: FREN 2020 or equivalent placement examination score. Required of all students with a concentration in French.

FR 301 Advanced French Grammar (3). An intensive review of French grammar with emphasis on the application of grammar rules to the four skills needed in the acquisition of the French language. Prerequisite: FREN 2020 or equivalent placement examination score. Course may be taken concurrently with FR 302 or 303.

FR 302 French Pronunciation and Conversation (3). Intensive practice in the development of oral skills in French through discussion of a wide variety of topics and common situations. Prerequisite: FREN 2020 or equivalent placement examination score. Course may be taken concurrently with FR 300, 301, or 303.

FR 303 Reading and Composition (3). Further development of reading and writing skills through the use of authentic cultural and literary texts aimed at improving the student's mastery of written French. Prerequisite: FREN 2020 or permission of the instructor. Course may be taken concurrently with FR 300, 301, or 302.

FR 304 French for Specific Purposes (3). An intensive course with emphasis on grammar and vocabulary as it applies to a profession. Specific topics are announced in advance. Prerequisite: FREN 2020 or permission of the instructor.

FR 310 Introduction to Literary Studies (3). Introduction to the techniques and theories of literary analysis, with application to all genres and selected literary texts. Prerequisite: FR 301, 302, 303, or permission of the instructor. Required of all students with a concentration in French.

FR 311 Introduction to French Linguistics (3). Introduction to linguistic analysis of the French language. Prerequisite: FR 300 or permission of instructor. Required of all students seeking teacher certification in French.

FR 312 Culture and Civilization of France (3). A study of the development of the culture and civilization of metropolitan France, examining art, geography, history, customs, music, and politics. Prerequisite: FR 301, 302, 303, or permission of the instructor. Required of all students with a concentration in French.

FR 313 Francophone Culture and Civilization (3). A study of the development of the cultures and civilizations of Francophone areas outside metropolitan France, examining art, geography, history, customs, music, and politics. Prerequisite: FR 312. Required of all students with a concentration in French.

FR 320 Survey of French Literature (3). A chronological overview of the main periods in French literature, from the Middle Ages to the present. Prerequisite: FR 310 or permission of the instructor.

FR 321 Survey of Francophone Literature (3). A chronological overview of the development of Francophone literature outside metropolitan France, covering the period from the Seventeenth Century to the present. Prerequisite: FR 310 or permission of the instructor.

FR 401 Literary Masterpieces of France (3). An introduction to the major works of French literature through selected texts and authors. Prerequisite: FR 310, 320, or permission of the instructor.

FR 402 Topical readings in the Literature of France (3). A specific author, genre, period, or theme is chosen for study. Topic is announced in advance. Prerequisite: FR 401 or permission of instructor..

FR 410 Literary Masterpieces of Francophone Literature (3). An introduction to the major works of Francophone literature through selected texts and authors. Prerequisite: FR 310, 320, or permission of the instructor.

FR 411 Topical Readings in Francophone Literature (3). A specific author, genre, period, or theme is chosen for study. Topic announced in advance. Prerequisite: FR 410 or permission of instructor.

FR 430 Special Topics on the Contemporary French World (3). Rotating topics of special interest relating to the French world. Specific topics announced in advance. Usually taught in English. Prerequisites: FR 312, 313.

FR 431 Special Topics in Language (3). Rotating topics of special interest relating to the French language. Specific topics announced in advance (e.g., history of the French language, dialects in the French-speaking world, sociolinguistics, etc.) Prerequisites: FR 300, 301.

FR 490 On-Site(s) French Culture (3-7). Cultural and linguistic enrichment through travel and study in a French-speaking country.

International Student Exchange Program (ISEP)

The following courses are limited to students who have entered into contractual agreement with the International Student Exchange Program to study abroad. After the students have completed their foreign study, the actual courses they have completed at the foreign university will be substituted for the ISEP courses. For details of program, consult Department head. ISEP 101, 102, 103, 104, 105, 106 Student Exchange Program (3, 3, 3, 3, 3, 3).

Modern Foreign Languages (MFL)

MFL 371 Methods of Teaching Foreign Languages (3). A course which acquaints students with methods, materials, and texts. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in teaching a foreign language.

MFL 390 Languages and Linguistics (3). A course to prepare students for the study and teaching of a language by introducing them to the scientific study of language. Comparisons between English and various other languages lay a foundation for a career as a teacher of English as a second language or a teacher of a foreign language. Same as ENG 390.

MFL 450 Senior Project (3). Individual research and project-writing. Prerequisites: at least 12 upper-level hours in French or Spanish, or permission of instructor. Required of all students majoring in Foreign Languages.

MFL 470 Independent Study (3). Individual research project carried out under supervision of faculty member. Project requires extensive written report in the language of the topic. Prerequisite: permission of instructor.

MFL 472S Student Teaching in the Secondary Schools (12). A semester-long experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in the teaching of French or Spanish. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently.

Philosophy (PHIL)

PHIL 2010 Introduction to Philosophy: Moral Issues (3). A course addressing many of the most pressing ethical issues we face, such as euthanasia, abortion, preferential hiring, sex, animal rights, mass starvation, punishment, violence, pacifism, and civil disobedience. May be used toward satisfying University humanities requirement.

PHIL 2020 Introduction to Philosophy—Enduring Problems (3). A course including historical and recent sources on the perennial issues in philosophy, including the justification and significance of religious beliefs; knowledge and truth; materialism; human nature; free-will and determinism. May be used toward satisfying University humanities requirement.

PHIL 2021 Introduction to Film (3). Aesthetic and philosophical issues in film theory and criticism; principles of film criticism; film and other art forms; and the relation of the audience to film. Course aims toward understanding and appreciation of a major art form. Films exemplifying particular techniques and movements are viewed and discussed.

PHIL 2022 History of Film (3). An historical study of the development of film as an art medium.

PHIL 250 Logic and Critical Thinking (3). Informal fallacies in ordinary life; e.g., politics, editorials, advertising; language and its uses; analyzing extended arguments; introduction to deductive logic. May be used toward satisfying University humanities requirement.

PHIL 251 Symbolic Logic (3). Modern deductive logic, propositional and quantificational; philosophy of logic.

PHIL 310 History of Philosophy, Ancient (3). Development of philosophic thought from the Greeks to the thirteenth century.

PHIL 311 History of Philosophy, Modern (3). Modern philosophy from Descartes through Kant.

PHIL 312 History of Philosophy, Contemporary (3). Philosophy from Hegel to the present.

PHIL 330 Ethical Theory (3). Traditional and contemporary ethical theories; the meaning and justification of ethical language.

PHIL 335 Business Ethics (3). Survey of major ethical issues arising in business: corporate social responsibility, corporate loyalty, government regulation and public interest, advertising, environmental responsibilities, preferential hiring, free enterprise, and social welfare.

PHIL 336 Medical Ethics (3). A detailed consideration of various ethical issues in medicine and health care, including death and patients' rights, abortion, truth-telling, experimenting on human beings, religious conflicts, and the rights to medical resources.

PHIL 360 African-American Philosophy (3). Issues in ethics and social philosophy, including foundational arguments of the civil rights movement, cultural diversity, and African-American approaches to philosophy.

PHIL 410 Philosophy of Religion (3). The rationality of religious beliefs and practices, religious experience, the role of faith, religious language.

PHIL 420 Philosophy of Law (3). Problems in the nature and justification of legal systems; natural law and legal positivism; theory of punishment.

PHIL 440 Special Topics (3). Student- or faculty-generated course, with scope of subject matter to be determined by students and instructor.

PHIL 450 Undergraduate Readings and Research (3). Individual study and research under faculty guidance. Prerequisites: 12 hours of upper-level philosophy and permission of instructor.

Religious Studies (RS)

RELS 2010 Introduction to Religious Studies (3). Current issues in religious studies: ethics, theology, and history of religion. May be used toward satisfying the University humanities requirement.

RELS 2011 World Religions (3). Introduction to selected themes in world religions. May be used toward satisfying the University humanities requirement.

RS 310 The Old Testament (3). A study of the origins, literature, beliefs, and ethics of the Hebrew Bible/Old Testament, along with the ancient Near Eastern cultural environment of Israel, Africa, Asia, and southern Europe which had major impact on its development. Formerly RS 210.

RS 311 The New Testament (3). An exploration of the history, literature, and ethics of the early Christian movement in its Greco-Roman environment, using Koine Greek-English translation of the biblical text as foundation. Formerly RS 211.

RS 330 Religion in America (3). The role of religious institutions and practices in American history.

RS 410 Contemporary Religious Thought (3). Major themes, issues, and thinkers.

RS 420 African Roots in Christianity (3). The literary, historical, cultural, philosophical, and biblical contributions from the African continent to Christianity. Prerequisite: RS 310, or RS 311, or permission of instructor.

Spanish (SPN)

SPAN 1010 Elementary Spanish I (3). A beginning course in Spanish. The four skills of listening comprehension, speaking, reading, and writing are taught with emphasis on oral proficiency in everyday situations. For students with no previous knowledge of the language. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

SPAN 1020 Elementary Spanish II (3). Continuation of Spanish 1010. The four skills of listening comprehension, speaking, reading, and writing are taught with emphasis on oral proficiency in everyday situations. Prerequisite: two years of high school Spanish or equivalent placement examination score. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

SPN 121 Intensive Spanish Review (3). Intensive review of the language to continue the development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis on oral proficiency in everyday situations. Prerequisite: two years of high school Spanish or equivalent placement examination score.

SPAN 2010 Intermediate Spanish I (3). Development of vocabulary, syntax, grammar, and oral and writing skills to incorporate these elements into a satisfactory intermediate level of performance in the language. Prerequisite: SPAN 1020, 121, or equivalent placement examination score.

SPAN 2020 Intermediate Spanish II (3). Further development of listening comprehension and speaking skills with emphasis on reading and writing. Course incorporates vocabulary, syntax, and grammar to bring the students to an intermediate level of performance in Spanish. Prerequisite: SPAN 2010 or equivalent placement examination score.

SPN 300 Spanish Phonetics and Phonology (3). An introduction to the study of Spanish sounds in isolation and in connected speech. Primary focus is on development of good articulatory habits through an understanding of the physiology of speech organs, the description of speech sounds, and the system underlying natural speech of native speakers of Spanish. Prerequisite: SPAN 2020 or equivalent placement examination score. Required of all students with a concentration in Spanish.

SPN 301 Advanced Spanish Grammar (3). An intensive review of Spanish grammar with emphasis on the application of grammar rules to the four skills needed in the acquisition of the Spanish language. Prerequisite: SPAN 2020 or equivalent placement examination score. Course may be taken concurrently with SPN 302 or 303.

SPN 302 Spanish Pronunciation and Conversation (3). Intensive practice in the development of oral skills in Spanish through discussion of a wide variety of topics and common situations. Prerequisite: SPAN 2020 or equivalent placement examination score. Course may be taken concurrently with SPN 300, 301, or 303.

SPN 303 Reading and Comprehension (3). Further development of reading and writing skills through the use of authentic cultural and literary texts aimed at improving the student's mastery of written Spanish. Prerequisite: SPAN 2020 or equivalent placement examination score. Course may be taken concurrently with SPN 300, 301, or 302.

SPN 304 Spanish for Specific Purposes (3). An intensive course with emphasis on grammar and vocabulary as it applies to a profession. Specific topics are announced in advance. Prerequisite: SPAN 2020 or equivalent placement examination score.

SPN 310 Introduction to Literary Studies (3). Introduction to the techniques and theories of literary analysis, with application to all genres and selected literary texts. Prerequisite: SPN 301, 302, 303, or permission of the instructor.

SPN 311 Introduction to Spanish Linguistics (3). Introduction to linguistic analysis of the Spanish language. Prerequisite: SPN 300 or permission of instructor. Course required of all candidates for teacher certification in Spanish.

SPN 312 Culture and Civilization of Spain (3). A study of the development of the culture and civilization of Spain, examining art, geography, history, customs, music, and politics. Prerequisite: SPN 301, 302, 303, or permission of the instructor. Course required of all students with a concentration in Spanish.

SPN 313 Culture and Civilization of Latin America (3). A study of the development of the culture and civilization of Latin America, examining art, geography, history, customs, music, and politics. Prerequisite: SPN 312 or permission of the instructor. Course required of all students with a concentration in Spanish.

SPN 320 Survey of Peninsular Literature (3). A chronological overview of the main periods in Spanish literature, from the Middle Ages to the present. Prerequisite: SPN 310 or permission of instructor.

SPN 321 Survey of Latin American Literature (3). A chronological overview of the main periods in Latin American literature, from pre-Columbian times to the present. Prerequisite: SPN 310 or permission of instructor.

SPN 401 Literary Masterpieces of Spain (3). An introduction to the major works of Spanish literature through selected texts and authors. Prerequisite: SPN 310, 320, or permission of instructor.

SPN 402 Topical Readings in the Literature of Spain (3). A specific author, genre, period, or theme is chosen for study. Topic announced in advance. Prerequisite: SPN 401 or permission of instructor.

SPN 410 Masterpieces of Latin American Literature (3). An introduction to the major works of Latin American literature through selected texts and authors. Prerequisite: SPN 310, 321, or permission of instructor.

SPN 411 Topical Readings in Latin American Literature (3). A specific author, genre, period, or theme is chosen for study. Topic announced in advance. Prerequisite: SPN 410 or permission of instructor.

SPN 430 Special Topics in the Contemporary Hispanic World (3). Rotating topics of special interest relating to the Hispanic U.S., Latin America, or Spain. Specific topics (e.g., African influences in Latin American music, art, food) announced in advance. Prerequisite: SPN 312, 313, or permission of instructor.

SPN 431 Special Topics in Language (3). Rotating topics of special interest relating to the Spanish language. Specific topics (e.g., history of the Spanish language, dialects in the Spanish-speaking world, sociolinguistics) announced in advance. Prerequisite: SPN 300, 311, or permission of instructor.

SPN 490 On-Site(s) Hispanic Culture (3-7). Cultural and linguistic enrichment through travel and study in a Spanish-speaking country.

Department of Music

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Faculty: T. Davis, C. Gafford, E. Graves, D. Nettles, C. Perkey, C. Rhodes.

General Statement: The Department of Music is organized (1) to provide services to the state's music education structure through teacher education, leadership, and statewide cooperation; (2) to provide sound guidance and thorough training for the student whose career goal is to teach music in public schools or in the private sector; and (3) to bring the gift of music through exhibitions, lecture demonstrations, concerts, and participation opportunities to all its people, as its contribution to the cultural enrichment of the campus, the community, and the state.

The curriculum is designed to provide experiences in general culture, a mastery of fundamental tools, the development of sound performance ability, and training in the science and art of teaching.

The Department offers a Bachelor of Science in Music Education with teacher certification. The minimum number of semester hours required for this degree is 162 for instrumental students and 164 for students in vocal music. The minimum number of semester hours required in Music courses is 77, apart from Music certification courses. Successful completion of the teacher certification program results in licensure to teach in grades K-12, either in vocal or instrumental music.

Programs with concentrations in commercial music and the liberal arts are also available. Both concentrations lead to the Bachelor of Science degree; they require 130 semester hours each. The concentrations in the liberal arts require two semesters of a single foreign language.

Accreditation: The Department of Music is accredited by the National Association of Schools of Music, the official accrediting agency for schools of music in the United States. The teacher certification programs in Music are accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

Departmental Requirements For Bachelor of Science Music — **75 Semester Hours**

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
MATH 1010	College Algebra I	3
BIOL 1010, 1011, 1020, 1021	Introduction to Biophysical Science I, II and labs	6
ART 1010	Art Appreciation	3
MUS 1010	Music Appreciation (minimum grade of C)	3
SOC 330, 340, or 360	Social Problems, Courtship and Marriage, or The Family	3
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
ASOR 100C	Orientation for Humanities Majors (Teacher education students should take EDCI 101.)	1
HPER 1010-1053, AERO, or MUSC 2010	Physical Education Activity (2 semesters required)	2

Upper-level Admission

For admission into the upper-level program of the Music major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination. They must also have earned at least a C in MUS 011A, 011B, 120, 121, 125, 126, 337, 338, four semesters of the applied major, and four semesters of ensemble.

Major Core

All Music majors must take a minimum of 75 semester hours in the discipline, including MUS 11A, 11B, 21A, 21B; 120, 121, 125, 126; 220, 221; 302 (7 hours); 305, 306; 310, 311, 312, 313, 314 (any four); 301, 320, 337, 338, 420, 422, 430, 451; eight semesters of applied voice or instrument. Within the 75 hours, students with a concentration in instrumental music must take 7 hours from 004B and 306A; students concentrating in vocal/piano music must take 7 hours of 307. Teacher certification candidates must also take MUS 371A, 371B or 371C, and 472. Music majors must earn at least a C in all Music courses used to satisfy Departmental requirements.

Music majors must also meet these requirements:

1. Each student must declare a primary applied area of performance and must focus in this area for the equivalent of four years. He or she must present a recital in the senior year. Each

student must perform at seminars and student recitals during the sophomore and junior years. For all students focusing in some instrument other than piano, it is expected that piano will be the secondary performance area. In most cases the choice of the primary applied area and curriculum is governed by the proficiency which the student has achieved prior to entering the University. A senior recital is required for the completion of the degree. A senior project is required of students in commercial music.

2. Each music major is required to participate in a primary ensemble for the entire four years of his or her matriculation. Membership is not limited to one ensemble, but instrumental students must participate in University Band, and vocal students must participate in University Choir.

Bachelor of Science in Music With Teacher Certification

Students who seek teacher certification in Music must apply in writing for admission to the Teacher Education Program, located in the College of Education, usually in the sophomore year. They must have a minimum 2.75 cumulative quality point average at the time of application and must pass the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. Formal admission to the Teacher Education Program is a prerequisite to enrolling in all upper-level certification courses. Enhanced student teaching of twelve semester hours is required of all candidates for certification. Placement for enhanced student teaching is at both the elementary school and secondary school level. For a complete list of requirements for admission to and retention in the Teacher Education Program, see pages ___-___.

It is mandatory that students confer with Departmental advisors prior to registering for a semester. The degree with teacher certification requires completion of the general education requirements, the above major core, plus the following courses.

EDAD 301	School Organization, Management, and Community Relations (formerly EDCI 301)	2
EDAD 400	Professional Rights and Responsibilities (formerly EDCI 400)	3
EDCI 201	History and Foundations of Education	3
EDCI 387	Curriculum Development	3
EDCI 419	Technology in the School	1
EDCI 470A	Educational Seminar, Secondary	3
PSY 242	Human Growth and Learning	3
PSY 312	Measurement and Evaluation for the Classroom in the Public School	3
EDRD 491	Teaching Reading and Study in the Secondary School	3
EDSE 333	Education of Exceptional Children	3
MUS 371A	Music Education	3
MUS 371B or MUS 371C	Vocal Methods or Instrumental Methods	3
MUS 472	Enhanced Student Teaching	12

Minor Requirements: A minimum of 18 semester hours including MUS 120, 338, 371A; two hours of applied voice or instrument ensemble; MUS 121 or 305-306, or MUS 310, 311, 312, 313, or 314; or four semesters of ensemble participation.

Bachelor of Science Degree in Music Education Concentration in Instrumental Music Licensure for Grades K-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 11A	1	MUS 11B	1
*MUS 120	3	MUS 121	3
*MUS 125	1	MUS 126	1
MUS 302	1	MUS 302	1
MUSC 2010	1	MUS 004B	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
MUSC 1010	2	CS 121	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
EDCI 101	1		
	17		17

*Students must pass the theory entrance examination or pass MUS 101 before enrolling in these classes.

SUMMER SEMESTER

MATH 1010	3
SPCH 220	3

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 21A	1	MUS 21B	1
MUS 220	3	MUS 221	3
MUS 302	1	MUS 302	1
MUSC 2010	1	MUS 004B	1
MUS 313	1	MUS 312	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
ENGL 2010	3	ENGL 2020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
EDCI 201	3	PSY 242	3
ART 1010	2		
	19		17

SUMMER SEMESTER

MUS 310 or 311	1
SOC 330, 340, OR 360	3
EDAD 301	3

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 302	1	MUS 302	1
MUS 305	3	MUS 306	2
MUSC 2010	1	MUS 004B	1
MUS 337	3	MUS 314	1
MUS 371A	3	MUS 320	3
MUS 420	3	MUS 338	3
MAJOR INSTRUMENT	2	MUS 422	3
EDCI 387	3	MAJOR INSTRUMENT	2
		EDAD 400	2
		EDCI 419	1
	19		19

SUMMER SEMESTER

MAJOR INSTRUMENT	2
EDRD 491	3
EDSE 333	3

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 301	3	MUS 472	12
MUS 302	1	EDCI 470A	3
MUSC 2010	1		
MUS 371C	3		
MUS 430	3		
MUS 451	2		
MAJOR INSTRUMENT	2		
PSY 312	3		
	18		15

Bachelor of Science Degree in Music Education Concentration in Vocal Music Licensure for Grades K-12

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 11A	1	MUS 11B	1
MUS 14A	1	MUS 14B	1
*MUS 120	3	MUS 121	3
*MUS 125	1	MUS 126	1
MUS 302	1	MUS 302	1
MUS 307	1	MUS 307	1
MUSC 1010	3	CS 121	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
EDCI 101	1		
	18		17

*Students must pass the theory entrance examination or pass MUS 101 before enrolling in these classes.

SUMMER SEMESTER

MATH 1010	3
SPCH 220	3

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 21A	1	MUS 21B	1
MUS 24A	1	MUS 24B	1
MUS 220	3	MUS 221	3
MUS 302	1	MUS 302	1
MUS 307	1	MUS 307	1
MUS 313	1	MUS 310	1
ENGL 2010	3	ENGL 2020	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
EDCI 201	3	PSY 242	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
ART 1010	3		
	21		18

SUMMER SEMESTER

MUS 311	1
SOC 330, 340 OR 360	3
EDAD 301	3

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 34A	2	MUS 34B	2
MUS 302	1	MUS 302	1
MUS 305	3	MUS 306	2
MUS 307	1	MUS 307	1
MUS 337	3	MUS 314	1
MUS 371A	3	MUS 320	3
MUS 420	3	MUS 338	3
EDCI 387	3	MUS 422	3
		EDAD 400	2
		EDCI 419	1
	19		19

SUMMER SEMESTER

MUS 44A	2
EDRD 491	3
EDSE 333	3

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 44B	2	MUS 472	12
MUS 301	3	EDCI 470A	3
MUS 302	1		
MUS 307	1		
MUS 371B	3		
MUS 430	3		
MUS 451	2		
PSY 312	3		
	18		15

Bachelor of Science Degree in Liberal Arts Concentration in Vocal or Piano Music

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 11A	1	MUS 11B	1
*MUS 120	3	MUS 121	3
*MUS 125	1	MUS 126	1
MUS 302	1	MUS 302	1
MAJOR ENSEMBLE	1	MAJOR ENSEMBLE	1
MAJOR APPLIED	1	MAJOR APPLIED	1
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	SPCH 220	3
ASOR 100C	1	HPER, AERO, OR MUSC 2010	1
	18		18

*Students must pass the theory entrance examination or pass MUS 101 before enrolling in these classes.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 21A	1	MUS 21B	1
MUS 220	3	MUS 221	3
MUS 302	1	MUS 302	1
MAJOR ENSEMBLE	1	MAJOR ENSEMBLE	1
MAJOR APPLIED	1	MAJOR APPLIED	1
ART 1010	3	*TECHNIQUE CLASS	1
ENGL 2010	3	ENGL 2010	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
SOC 330, 340, OR 360	3	MUSC 1010	3
		HPER, AERO, OR MUSC 2010	1
	19		18

*Technique class must be outside applied major.

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 302	1	MUS 302	1
MUS 305	3	MUS 306	2
MUS 337	3	MUS 338	3
MUS 420	3	TECHNIQUE CLASS	1
MAJOR ENSEMBLE	1	MAJOR ENSEMBLE	1
MAJOR APPLIED	2	MAJOR APPLIED	2
FOREIGN LANGUAGE	3	FOREIGN LANGUAGE	3
		CS 121	3
	16		16

*Technique class must be outside applied major.

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 302	1	MUS 422	3
MUS 430	3	MUS 451	2
MUS 433	3	MAJOR ENSEMBLE	1
MAJOR ENSEMBLE	1	MAJOR APPLIED	2
MAJOR APPLIED	2	ELECTIVES, LIBERAL ARTS	6
ELECTIVES, LIBERAL ARTS	3		
	13		14

Bachelor of Science Degree in Liberal Arts Concentration in Instrumental Music

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 11A	1	MUS 11B	1
*MUS 120	3	MUS 121	3
*MUS 125	1	MUS 126	1
MUS 302	1	MUS 302	1
MUSC 2010	1	MAJOR ENSEMBLE	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	SPCH 220	3
ASOR 100C	1		
	18		17

*Students must pass the theory entrance examination or pass MUS 101 before enrolling in these classes.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 21A	1	MUS 21B	1
MUS 220	3	MUS 221	3
MUS 302	1	MUS 302	1
MUSC 2010	1	MAJOR ENSEMBLE	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
ART 1010	3	*TECHNIQUE CLASS	1
ENGL 2010	3	ENGL 2010	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
SOC 330, 340, OR 360	3	MUSC 1010	3
	19		17

*Technique class must be outside applied major.

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 302	1	MUS 306	2
MUS 305	3	MUS 338	3
MUS 337	3	MAJOR ENSEMBLE	1
MUS 420	3	MAJOR INSTRUMENT	2
MAJOR INSTRUMENT	2	VOCAL TECHNIQUE	1
MUSC 2010	1	FOREIGN LANGUAGE	3
FOREIGN LANGUAGE	3	CS 121	3
	16		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 302	1	MUS 422	3
MUSC 2010	1	MUS 451	2
MUS 430	3	MAJOR ENSEMBLE	1
MUS 433	3	MAJOR INSTRUMENT	2
MAJOR INSTRUMENT	2	ELECTIVES, LIBERAL ARTS	6
ELECTIVES, LIBERAL ARTS	6		
	16		14

Bachelor of Science Degree in Commercial Music Concentration in Vocal or Piano Music

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 11A	1	MUS 11B	1
*MUS 120	3	MUS 121	3
*MUS 125	1	MUS 126	1
MUS 307	1	MUS 270	3
MAJOR APPLIED	1	MAJOR APPLIED	1
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MUSC 1010	3	ART 1010	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
ASOR 100C	1		
	18		19

*Students must pass the theory entrance examination or pass MUS 101 before enrolling in these classes.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 21A	1	MUS 21B	1
MUS 220	3	MUS 221	3
MUS 303	1	MUS 271	2
MAJOR APPLIED	1	MUS 303	1
ENGL 2010	3	MUS 307	1
BIOL 1010, 1011	3	MAJOR APPLIED	1
MATH 1010	3	ENGL 2010	3
SPCH 220	3	BIOL 1020, 1021	3
		CS 121	3
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 260	3	MUS 303	1
MUS 303	1	MUS 319	2
MUS 304	2	MUS 338	3
MUS 307	1	MUS 360	3
MUS 370	2	MAJOR APPLIED	2
MUS 433	3	ELECTIVES, ANY LEVEL	5
MAJOR APPLIED	2		
SOC 330, 340, OR 360	3		
	17		16

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 303	1	MUS 303	1
MUS 400A	3	MUS 400B	3
MUS 430	3	MUS 452A	2
MUS ELECTIVE	3	MAJOR APPLIED	2
MAJOR APPLIED	2	ELECTIVES, 300/400 LEVEL	6
	12		14

Bachelor of Science Degree in Commercial Music Concentration in Instrumental Music

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 11A	1	MUS 11B	1
*MUS 120	3	MUS 121	3
*MUS 125	1	MUS 126	1
MUSC 1010	3	MUS 270	3
MUSC 2010	1	MAJOR INSTRUMENT	1
MAJOR INSTRUMENT	1	ART 1010	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
ASOR 100C	1		
	17		18

*Students must pass the theory entrance examination or pass MUS 101 before enrolling in these classes.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 21A	1	MUS 21B	1
MUS 220	3	MUS 221	3
MUS 303	1	MUS 271	2
MUSC 2010	1	MUS 303	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
ENGL 2010	3	ENGL 2010	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
MATH 1010	3	CS 121	3
SPCH 220	3		
	19		17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 260	3	MUS 303	1
MUS 303	1	MUS 319	2
MUS 304	2	MUS 338	3
MUS 337	3	MUS 360	3
MUS 370	2	MAJOR INSTRUMENT	2
MAJOR INSTRUMENT	2	ELECTIVES, 300/400 LEVEL	6
SOC 330, 340, OR 360	3		
	16		17

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 303	1	MUS 303	1
MUS 400A	3	MUS 400B	3
MUS 430	3	MUS 452A	2
MUS ELECTIVE, 300/400	3	MUS ELECTIVE, ANY LEVEL	2
MAJOR INSTRUMENT	2	MAJOR INSTRUMENT	2
		ELECTIVE, ANY LEVEL	3
	12		13

Course Descriptions

Applied Music Courses

Enrollment in all applied music courses is by permission of instructor only. The laboratory fees are for each semester. The stated periods are the number of times each week the student has an individual practice session with the instructor.

MUS 10A, 10B First-Year Percussion (1, 1). An intensive study of elements of percussion technique. Accent is on snare drum rudiments. One full-hour lesson or two half-hour lessons per week. Laboratory fee $30.00.

MUS 20A, 20B Second-Year Percussion (1, 1). Continuation of percussion studies, with attention to bass drum and timpani. One full-hour lesson per week. Prerequisite: MUS 10B. Laboratory fee $30.00.

MUS 30A, 30B Third-Year Percussion (2, 2). Intermediate materials for percussionist. Review of all rudiments, introduction of solo and ensemble materials for percussion, attention to tuned percussion with instruments. One full-hour lesson per week. Prerequisite: MUS 20B. Laboratory fee $30.00.

MUS 40A, 40B Fourth-Year Percussion (2, 2). Advanced technique and literature for solo percussion instruments and percussion ensemble. Emphasis is on recital literature in preparation for Senior Recital. Prerequisite: MUS 30B. Laboratory fee $30.00.

MUS 11A, 11B First-Year Piano (1, 1). Some of the easier works of Bach, Haydn, Mozart, Beethoven, and others whose works are of equivalent technical value, together with purely technical materials including all major and minor scales. Two one-half-hour periods each. Laboratory fee $30.00. Both courses required of all Music majors.

MUS 21A, 21B Second-Year Piano (1, 1). Selected works of Bach and other composers. Prerequisite: MUS 11B. Two one-half-hour periods each. Laboratory fee $30.00. Both courses required of all Music majors.

MUS 31A, 31B Third-Year Piano (2, 2). Larger compositions and other exacting materials requiring excellent musicianship, skills, and techniques. Prerequisite: MUS 21B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 41A, 41B Fourth-Year Piano (2, 2). The study of advanced piano materials. Prerequisite: MUS 31B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 12A, 12B First-Year Organ (1, 1). Pedal studies, major and minor scales, legato studies, little preludes and fugues of Bach, trios by Stainer, Rheinberger, and others; selected books of Guilmant, Mendelssohn, and other reputable composers. Prerequisites: the highest non-credit level of piano and permission of instructor. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 22A, 22B Second-Year Organ (1, 1). Advanced pedal studies and scales. Prerequisites: MUS 12B and permission of instructor. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 32A, 32B Third-Year Organ (2, 2). A continuation of technical studies and major works, some from modern composers. Prerequisites: MUS 22B and permission of instructor. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 42A, 42B Fourth-Year Organ (2, 2). A continuation of Music 32B with special emphasis on representative works from the various schools of composition, including twentieth-century composers. Two one-half-hour periods each. Prerequisite: MUS 32B and permission of instructor. Laboratory fee $30.00.

MUS 13A, 13B First-Year Violin (1, 1). Instruction with standard elementary violin or viola materials. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 23A, 23B Second-Year Violin (1, 1). Instruction with standard intermediate violin or viola materials. Prerequisite: MUS 13B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 33A, 33B Third-Year Violin (2, 2). Instruction with standard advanced violin or viola materials. Prerequisite: MUS 23B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 43A, 43B Fourth-Year Violin (2, 2). Advanced instruction with standard violin or viola materials. Prerequisite: MUS 33B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 14A, 14B First-Year Voice (1, 1). The study of breath control and voice placement in tone production. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 24A, 24B Second-Year Voice (1, 1). The study of voice drills in voice placement, intonation, breathing, phrasing, and diction. Prerequisite: MUS 14B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 34A, 34B Third-Year Voice (2, 2). Continuation of the study of drills, vocal techniques, and appropriate repertoire. Prerequisite: MUS 24B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 44A, 44B Fourth-Year Voice (2, 2). Advanced study of drills, vocal techniques, and appropriate repertoire. Prerequisite: MUS 34B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 15A, 15B First-Year Cornet (1, 1). Instruction with standard elementary materials. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 25A, 25B Second-Year Cornet (1, 1). The study of standard intermediate materials. Prerequisite: MUS 15B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 35A, 35B Third-Year Cornet (2, 2). Instruction with standard advanced materials. Two one-half-hour periods each. Prerequisite: permission of instructor. Laboratory fee $30.00.

MUS 45A, 45B Fourth-Year Cornet (2, 2). Instruction with standard advanced materials. Two one-half-hour periods each. Prerequisite: permission of instructor. Laboratory fee $30.00.

MUS 16A, 16B First-Year Trombone (1, 1). Instruction with standard elementary materials. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 26A, 26B Second-Year Trombone (1, 1). The study of standard intermediate materials. Prerequisite: MUS 16B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 36A, 36B Third-Year Trombone (2, 2). Instruction with standard advanced materials. Two one-half-hour periods each. Prerequisite: MUS 26B. Laboratory fee $30.00.

MUS 46A, 46B Fourth-Year Trombone (2, 2). Instruction with standard advanced materials. Two one-half-hour periods each. Prerequisite: MUS 36B. Laboratory fee $30.00.

MUS 17A, 17B First-Year Clarinet (1, 1). Instruction with standard elementary materials. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 27A, 27B Second-Year Clarinet (1, 1). The study of standard intermediate materials. Two one-half-hour periods each. Prerequisite: MUS 17B. Laboratory fee $30.00.

MUS 37A, 37B Third-Year Clarinet (2, 2). Instruction with standard advanced materials. Two one-half-hour periods each. Prerequisite: MUS 27B. Laboratory fee $30.00.

MUS 47A, 47B Fourth-Year Clarinet (2, 2). Instruction with standard advanced materials. Two one-half-hour periods each. Prerequisite: MUS 37B. Laboratory fee $30.00

MUS 18A, 18B First-Year Oboe or Bassoon (1, 1). The study of standard elementary materials. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 28A, 28B Second-Year Oboe or Bassoon (1, 1). Instruction with standard intermediate materials. Prerequisite: MUS 18B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 38A, 38B Third-Year Oboe or Bassoon (2, 2) Individual instruction with advanced materials. Two one-half-hour periods each. Prerequisites: MUS 28B and permission of instructor. Laboratory fee $30.00.

MUS 48A, 48B Fourth-Year Oboe or Bassoon (2, 2) Individual instruction with advanced materials. Two one-half-hour periods each. Prerequisites: MUS 38B and permission of instructor. Laboratory fee $30.00.

MUS 19A, 19B First-Year Saxophone (1, 1). The study of standard elementary materials. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 29A, 29B Second-Year Saxophone (1, 1). The study of standard intermediate materials. Prerequisite: MUS 19B. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 39A, 39B Third-Year Saxophone (2, 2). Instruction with standard advanced materials. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 49A, 49B Fourth-Year Saxophone (2, 2). Instruction with standard advanced materials. Two one-half-hour periods each. Laboratory fee $30.00.

MUS 300 Seminar in Songwriting (3). Individual creative and analytical projects in songwriting. May be repeated for credit; no more than 9 hours may be applied toward a degree. Prerequisites: MUS 120 and permission of instructor.

MUS 302 Performance Seminar (1). Required of all music majors each semester of matriculation, even if auditing is required to prevent an overload. A satisfactory grade (C or better) is obtained by attending a minimum of 75% of all faculty and student recitals in a given semester, and by at least two performances in the seminar for upperclassmen. Open to Music majors only.

MUS 305 Orchestral Conducting (3). A study of the technique of conducting a band or an orchestra, with particular emphasis on use of the baton, score reading, program planning, and rehearsal procedures. Scores suitable for use in secondary school bands and orchestras are examined and evaluated. Prerequisite: junior standing in Music. Two lectures. Required of all Music majors.

MUS 306 Choral Conducting (2). A study of the technique of conducting a choir, with particular emphasis on score reading, program planning, and rehearsal procedures. Scores suitable for use in secondary school choirs are examined and evaluated. Prerequisite: junior standing in Music. Two lectures. Required of all Music majors.

MUS 310 Brass Techniques (1). Fundamentals of care, construction, minor repair, and performance. Not for brass majors. Prerequisite: MUS 121.

MUS 311 Woodwind Techniques (1). Fundamentals of tone production, technique, care, construction, and minor repair. Not for woodwind majors. Prerequisite: permission of instructor. Two one-hour periods.

MUS 312 Vocal Techniques (1). The study of techniques of vocal tone production, breathing, articulation, enunciation, and pronunciation as applied to the training of choral groups. Not for vocal majors. Course is required of students majoring in an instrument.

MUS 313 String Techniques (1). The study of the fundamentals of bowing, fingering, construction, and care of string instruments, including fretted instruments. Not intended for string majors.

MUS 314 Percussion Techniques (1). Fundamentals of care and minor repair; study of technique of performance on most percussion instruments with emphasis on the snare drum. Not for percussion majors. Two one-hour periods.

MUS 316 Opera Workshop (3). An introduction to operatic performance to include acting, movement, and the staging of various operatic scenes. Three sessions per week. Prerequisite: permission of instructor.

Major Ensembles (Fall Semester)

MUSC 2010 University Marching Band (1). Admission by audition and permission of the Director of Bands. The study and performance of marching routines and performance styles designed for live, film, and televised performances. Meets daily 6:00-8:00pm. Extra rehearsals as called. May be used to satisfy University's Physical Education requirement. All instrumental majors must have a combination of 7 semesters of MUS 306A and 004B. Music majors may repeat this course for up to 7 hours of credit; non-majors may repeat it for up to 4 hours of credit. (Spring Semester)

MUS 004B Concert Band I (1). Admission by permission of the Director of Bands. A concerting group made up of those bandsmen who exhibit outstanding musicianship and an interest in performing the finest of literature for concert bands. This ensemble conducts tours, broadcasts, and recordings, and appears in formal concerts on the campus. Meets daily 4:00-6:00 p.m. All instrumental majors must have a combination of 7 semesters of MUS 306A and 004B. Course may be repeated for up to 4 hours of credit. (Fall and Spring Semesters)

MUS 307 University Choir (1). The study and performance of a variety of the finest choral literature, including non-western music. Prerequisite: permission of the Director of the University Choir. Three or more periods per week. All vocal or piano majors must have 7 semesters of MUS 307.

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 schools. Required of all string majors, and open to all students with proficiency on a string instrument. Two rehearsals per week. May be repeated for up to 7 hours of credit.

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 rehearsals per week. May be repeated for up to 4 hours of credit.

MUS 006 Percussion Ensemble (1). Course intended for percussion majors, who are exposed to definitive literature from all periods and cultures. Special emphasis is placed on the performance of scores suitable for public concerts. Prerequisite: permission of instructor. May be repeated for up to 4 hours of credit.

Music Education

MUS 301 Public School Music (3). A study of methods of teaching music in grades K-8. Emphasis is placed on modern techniques, materials, and strategies. Prerequisite: junior standing in the University. Three lectures per week. Required of all students seeking certification in the teaching of Music.

MUS 371A Music Education (3). A study of principles, methods, materials, objectives, and procedures for teaching music in primary and secondary schools. Clinical and field-based experiences which call for active participation for students are part of the course requirements. Prerequisite: junior standing in Music and official admission to the Teacher Education Program. Three lectures. Required of all students seeking certification in the teaching of Music.

MUS 371B Vocal Methods (3). A study of principles and problems of teaching voice, managing and directing choral organizations, and analyzing and evaluating choral materials. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in Music who wish an emphasis in teaching voice. Prerequisite: permission of instructor and official admission to the Teacher Education Program. Three lectures.

MUS 371C Instrumental Methods (3). A study of methods, philosophies, materials, and objectives for teaching instrumental music from grade four through grade twelve. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in Music who wish an emphasis in teaching instrumental music. Prerequisite: permission of instructor and official admission to the Teacher Education Program. Three lectures.

MUS 472 Enhanced Student Teaching in Elementary and Secondary Schools (12). A semester-long experience of supervised practice teaching, appropriately divided between primary and secondary schools. Required of all students seeking certification in the teaching of music. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently.

Theory and Composition

MUS 101 Materials of Music (3). A course designed to prepare students, through instruction and practical application of knowledge, to read, write, and hear music. A student may be exempted from this course and move directly to MUS 120 by passing the entrance examination in theory.

MUS 120, 121 Freshman Theory I, II (3, 3). Basic notation, intervals, scales, and modes; rhythms; contrapuntal harmony, written and keyboard; sight singing; ear training; harmonic and form analysis. Five lectures. Both courses required of all Music majors. Prerequisite: MUS 101 or passing score on entrance examination in theory.

MUS 125 Freshman Aural Skills I (1). Practical training for the ear. Emphasis is on gaining the ability to write down rhythms, melodies, and harmonic progressions. To be taken concurrently with MUS 120. Prerequisite: MUS 101 or passing score on entrance examination in theory.

MUS 126 Freshman Aural Skills II (1). Continuation of MUS 125, to be taken concurrently with MUS 121. Prerequisite: MUS 125.

MUS 220, 221 Sophomore Theory I, II (3, 3). Aural and written harmony; keyboard harmony; figured bass; counterpoint; sight singing; ear training; analysis. Prerequisite: MUS 121. Three lectures. Both courses required of all Music majors.

MUS 320 Counterpoint (3). A study of the techniques and principles used in writing good melodies and the interaction of melodies without their losing independence. Prerequisite: MUS 121. Three lectures. Required of all Music majors.

MUS 401 Practicum in Arranging (2). Individual projects supervised by a practicing professional arranger. Prerequisites: permission of instructor and junior standing in Music.

MUS 420, 421 Form and Analysis I, II (3). A study of compositions in the smaller and larger forms. Prerequisite: MUS 221. Three lectures. MUS 420 required of all Music majors.

MUS 430 Orchestration (3). A systematic study and application of the techniques for using the capabilities of orchestral and band instruments in music composition. Prerequisite: MUS 320. Three lectures. Required of all Music majors.

MUS 435 Composition (3). Exploration of techniques of composition. Close attention is given to style, texture, and creating by synthetic means. Prerequisite: two years of theory.

MUS 451 Senior Recital (2). Credit given only upon successful completion of public senior recital. Prerequisite: permission of major applied instructor. Required of all Music majors.

Commercial Music

The courses in Commercial Music are designed for serious students of songwriting to learn with and from each other the techniques of melodic composition and harmonic structure, along with writing lyrics within standard and atypical song forms.

MUS 140 Fundamentals of Music (3). Theory and practice of basic elements of music.

MUS 141, 142 Elements of Popular Song I, II (3, 3). Study of form, rhythm, melody, harmony, and lyrics in popular song. Analysis and creative composition. Courses must be taken in sequence. Prerequisite: permission of instructor.

MUS 159A, 159B Beginning Guitar I, Advanced Guitar I (1, 1). Instruction in playing the guitar. These courses represent progressive development. Each course may be repeated a maximum of three times. Prerequisite: permission of Department Head.

MUS 164 Country Fiddle (3). Emphasis on folk (including Bluegrass) violin performance. Prerequisite: permission of instructor.

MUS 241, 242 Intermediate Songwriting I, II (2-3, 3). Skills and techniques of crafting original material. Creative writing, analysis of standard songs, and critiquing works performed in class. Prerequisite: MUS 142. MUS 241 may be repeated once for credit.

MUS 259 Solo Guitar II (2). A continuation of MUS 159B, which is a prerequisite for the course.

MUS 260 Introduction to Computers in Music (3). Introduction to computer music workstation environments. Fundamentals of MIDI (Musical Instrument Digital Interface), sequencing, signal routing, synthesis, and notation. Required of all commercial music students. Prerequisite: CS 121.

MUS 270 Introduction to Commercial Music (3). Overview of the practices and procedures of the music industry, including such topics as development of artists, songwriting, publishing, recording, record companies, record marketing and promotion, and legal issues. A general introduction to the commercial music program. No prerequisites.

MUS 271 History of Popular Music (2). A survey of popular styles in American music, with special attention to jazz, ragtime blues, and show music. Two lectures per week. Open to all students. No prerequisites.

MUS 300 Seminar in Songwriting (3). Survey of standard forms in popular music. Emphasis is on creation of original works. Prerequisite: MUS 121.

MUS 303 Commercial Styles Seminar (1-3). Instruction in popular and commercial styles and their practical application. Course is oriented toward performance and production, with primary emphasis on use of original material and secondary emphasis on reworking of standard materials in all areas. Weekly performances for peers, with one or more public concerts showcasing student work held every semester. Required of all commercial music students. No prerequisites. May be repeated for up to 6 hours of credit.

MUS 304 Rehearsal Techniques (2). Simple conducting, organizational principles, and the Nashville number system. Emphasis is on recognizing and attaining quality outcome and on the efficient use of time. Prerequisite: permission of instructor.

MUS 319 Intensive Skills (2). Mastery of rapid reading and hearing comprehension. Level of required achievement varies with the specialization. Required of all commercial music students. Prerequisites: MUS 120, 121, 220, 221.

MUS 360 Basic Studio (3). Practical experience in the recording studio and the study of basics, including rudimentary physics of sound, function of basic equipment, principles of microphone placement, and mixing down. Prerequisite: MUS 260.

MUS 363 Advanced Sound Production (3). Continuation of MIDI and sound-processing experience. Prerequisite: MUS 260.

MUS 370 Music Business and Law (2). Study of music licensing, intellectual property rights, contracts, and marketing of music. Required of all commercial music students. Prerequisite: junior standing.

MUS 400A, B, C Internship (3, 3, 3). Onsite, hands-on experience in student's area of specialization, e.g., recording, sequencing, performing, and arranging. Interns must have completed at least ten hours of commercial music courses. Each course may be repeated once for credit. Prerequisite: junior standing.

MUS 410 Piano Tuning and Maintenance (2). A hands-on course on how to tune pianos. Students learn to use the tuning, dampers, and other devices essential to successful tuning maintenance of pianos. Prerequisite: MUS 121.

MUS 440 Arranging (3). Practical survey of commercial arranging styles. Course includes production of arrangements in several styles and study of practices and conventions of a broad range of categories, including jingles, television, movies, jazz ensembles, marching bands, and school choruses. Prerequisite: MUS 430.

MUS 452 C, D Special Topics in Music Engraving II, III (3, 3). A hands-on course for students whose interest is the publishing of music. Emphasis is on the use of notation software and the use of publishing formats. Students learn use of current software and hardware in the notation of musical symbols. Prerequisites: MUS 260, 350.

MUS 452E, F Special Topics: Advanced Sound Production II, III (3, 3). A hands-on course to assist students in mastering computer workstation tools. Intended for students whose interest is composition. Emphasis is on sound manipulation by electronic means. Prerequisites: MUS 260, 363.

MUS 452 G, H Special Topics: Advanced Studio II, III (3, 3). A hands-on course designed to assist advanced students in mastering the use of up-to-date studio equipment. Students upgrade their knowledge of sound equipment, computers, synthesizers, and similar equipment. Prerequisites: MUS 260, 360, 460.

MUS 460 Advanced Studio (3). Continuation of studio experience, with emphasis on advanced mixing recording sound. Students acquire skills in addressing recording problems and in evaluating results of recording and mixing efforts. Prerequisites: MUS 260, 360.

MUS 480 Studio Maintenance and Repair (2). Emphasis on preventive maintenance of recording equipment, computers, synthesizers, and playback equipment. Course is designed for music technicians in charge of maintaining studio facilities. Prerequisite: MUS 360.

Music History, Literature, and Appreciation

MUSC 1010 Music Appreciation (3). Emphasis upon development of listening skill and on a broad repertoire of literature, including both western and nonwestern music. History is brought in only when it gives deeper meaning to the music being studied. Course applies toward satisfaction of University humanities requirement. Two lectures per week.

MUSC 1020 Honors Music Appreciation (3). Honors version of MUS 131. An intensive course, with emphasis on expanding the student's exposure to musical literature representative of western and nonwestern cultures. Course applies toward satisfaction of University humanities requirement. Limited to Music majors and students in the University Honors Program.

MUS 315 Folk Music (3). Folk music with emphasis upon that of the Southeastern United States. Prerequisite: MUS 131.

MUS 331 Introduction to Music Literature (3). An introductory course in music literature.

MUS 335 Introduction to Afro-American Music (4). History of blues, gospel music, jazz, and African music, with emphasis on black artists and their contributions. Prerequisite: permission of instructor.

MUS 337, 338 Music History I, II (3, 3). General study of the history of music. The course embodies an analytic approach to music of various periods and cultures. Prerequisite: permission of instructor. Three lectures. Both courses required of all Music majors.

MUS 422 Non-Western Music (3). A study of non-western music with emphasis on the music of Africa, India, China, and Asia. Attention is given to the diversity of the world's music as influenced by geographical conditions, social and economic systems, values, beliefs, and ways of life. Required of all Music majors. Prerequisite: MUS 221 and junior standing.

MUS 424, 425 American Music I, II (3, 3). MUS 424 treats music from colonial times through Charles Ives; MUS 425 covers music from 1930 to the present. Prerequisite: permission of instructor.

MUS 433, 434 Seminar in Jazz (3, 3). Study of the history of jazz and an analysis of the styles and major contributors.

MUS 452, 452A, 452B Special Topics I, II, III (1-3, 2, 3). *Independent* studies courses intended to serve students who would otherwise be impeded in normal progress toward earning their degree. May be taken for a maximum of 9 hours of credit. Prerequisite: permission of Department Head.

Department of Physics and Mathematics

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Faculty: F. Allen, M. Anabtawi, T. Anderson, O. Bignall, A. Biswas, C. Calmelet-Eluhu, K. Daniels, A. Dean, K. Ganesan, P. Hull, J. Jackson, W. Myint, G. Nagarajan, J. Propes, M. Rajagopalan, R. Richardson, M. Sarkar, S. Sathananthan, K. Semenya, T. Taylor, C. Williams, G. Yang.

General Statement: The objectives of the Department are: (1) to provide programs of study for those who desire to pursue an undergraduate major or minor in mathematics or physics; or who desire to pursue the interdisciplinary degree program with a concentration in one of these disciplines; (2) to provide courses designed to satisfy the mathematics and physics requirements for the several colleges and schools of the University; (3) to provide a limited number of courses in astronomy and statistics; and (4) to provide services to the University and the wider community related to the academic mission of the Department. The Department offers curricula leading to B.S. degrees in Mathematics and Physics. The Department also offers an Interdisciplinary Degree with concentra-

tions in either of these disciplines. In addition, students may earn secondary school licensure in Mathematics through the Department.

Accreditation: The teacher certification program in Mathematics is accredited by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

Mathematics

General Statement: The objectives of the Mathematics Program are (1) to provide training to enable graduates to be employed by any of a number of private industries, government agencies, foundations, and institutions requiring high-level quantitative skills and a highly developed ability to think critically and logically; (2) to provide training to enable graduates to enter graduate school in mathematics or related areas; (3) to provide training to enable graduates to assume careers as teachers of mathematics in secondary schools; (4) to develop proficiency in basic mathematical operations and develop skills in the use of formulas for the solution of problems; (5) to provide science and engineering majors the mathematical skills required by their various programs of study.

Departmental Requirements For Bachelor of Science Mathematics — **35 Semester Hours**

The curriculum for a B.S. degree in Mathematics consists of a minimum of 130 semester hours, of which 48 must be at the 300 or 400 level. A minimum of 35 semester hours must be in Mathematics or Statistics, exclusive of MATH 191-192 and 161-162, with at least 24 of these being at the 300 or 400 level, exclusive of MATH 371, 472S, and 475. The 35 hours in Mathematics are differentiated into a required core and an appropriate specialization. Further requirements include 12 hours of Computer Science, 8 hours of Physics, and 3 hours of Technical Writing. Also it is strongly recommended that the student include related areas (RA's) of interest in the program of study. Because of the very tight prerequisite structure, no major program in Mathematics should be started without first consulting a major advisor. No Mathematics or Statistics course in which a grade below C is earned will be counted towards meeting the Mathematics requirements.

The Mathematics core consists of a calculus sequence, an introduction to real analysis, courses in linear and abstract algebra, a sequence in either advanced calculus or modern algebra, and a senior project. A methods course in the teaching of mathematics is required for those who are certifying to teach. In addition to successfully completing 35 hours of course work (grade C or above), the major must pass a written comprehensive examination on the core requirements.

Students who minor in Mathematics must earn at least 23 or 26 semester hours: 11 or 14 semester hours of calculus depending on the sequence taken and a minimum of 12 semester hours of 300 or 400 level MATH or STAT courses, exclusive of MATH 371, 472S, and 475. Computer Science 390 and 395 may be used to satisfy upper level course requirements for the minor in Mathematics.

Besides the general program where the recommended RA's (related areas) are pre-medicine, pre-law, etc., there are four options of specialization.

a) The pure Mathematics option includes MATH 331 and 453, as well as both the sequences MATH 441-442 and 464-465 in the required core. The recommended RA's include computer science, physics, and philosophy.

b) The applied Mathematics option includes MATH 303, 456, and 457, as well as MATH 441-442 in the required core. The recommended RA's include engineering, physics, computer science, and chemistry.

c) The statistics option allows the student to use STAT 421-422 to satisfy the sequence requirement. The recommended RA's include pre-actuarial science, general business, sociology, and psychology.

d) The secondary mathematics teacher option includes CS 320, STAT 311, and MATH 381, 441, 442, and 475 in the required core. Students seeking teacher certification must apply in writing to the College of Education, usually in the sophomore year. At the time of applying they must have a 2.75 cumulative grade point average and must have passed the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. Formal admission to the Teacher Education Program is a prerequisite for enrolling in upper-division certification courses. Students must complete twelve semester hours of enhanced student teaching with an eight-week placement at the secondary level and a seven-week placement at the middle school level. Successful completion of the program results in licensure to teach grades 7-12. For a complete list of requirements for admission to and retention in the Teacher Education Program, see pages ___.

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
SOCIAL SCIENCE	3 Semester Hours	3
MATH 1061	Calculus I, Alternate (minimum grade of C)	4
PHY 221, 221L, 222, 222L	General Physics and Laboratory	8
HUMANITIES	2 courses from 2 different humanities disciplines	6
SPCH 220 OR 230	Public Speaking or Business and Professional Speech Communication	3
CS 210	Computer Laboratory	3
CS 211, 212	Computer Programming I, II	6
HPER, AERO, or MUSC 2010	Physical Education Activity (2 semesters required)	2
ASOR 100A	Orientation for Science Majors (Teacher certification students should take EDCI 101.)	1

Upper-division Admission

For admission into the upper-division program of the Mathematics major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination. They must also have earned a grade of C or better in MATH 1071 and 263A.

Major Core

MATH 1071, 263A OR MATH 1070, 263, 264	Calculus II, III, Alternate or Calculus II, III, IV	7 or 10
MATH 351	Intermediate Analysis	3
MATH 361, 362	Linear Algebra I, II	6
MATH 364	Abstract Algebra	3
MATH 381	Geometry (required of teacher certification candidates only)	3
MATH 441, 442 OR MATH 464, 465 OR STAT 421, 422	Advanced Calculus I, II or Modern Algebra I, II or Statistical Methods I, II (MATH 441, 442 required of teacher certification candidates)	6
MATH 450	Senior Project	3
MATH 475	History of Mathematics (required of teacher certification candidates only)	3
STAT 311	Probability and Statistics I (required of teacher certification candidates only)	3
CS 320	Discrete Mathematical Structures (required of teacher certification candidates only)	3

Suggested courses in areas of specialization may be obtained by consulting the major advisor.

Physics

General Statement: The objectives of the Physics Program are: (1) to provide training relating to scientific work in industry and government requiring (a) a clear understanding of the principles of physics and their application, and (b) the ability to reason logically and to analyze critically; (2) to provide a foundation for graduates to do graduate study in physics or related areas; (3) to provide majors from any of the science and engineering areas with the requisite knowledge in physics required to complete their various programs of study.

Departmental Requirements For Bachelor of Science Physics — **39 Semester Hours**

The curriculum for the B.S. degree in Physics consists of a minimum of 130 semester hours, of which 48 must be at the 300 or 400 level. A minimum of 39 hours must be taken in Physics courses with a minimum of 28 hours selected from Physics courses numbered 300 and above. No course with a letter grade below C will be counted towards meeting the 39 hours of work required in Physics.

General Education Core

ENGL 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENGL 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020	American History I, II	6
SOCIAL SCIENCE	3 Semester Hours	3
MATH 1061, 1071, 263A or MATH 1060, 1070, 263, 264	Calculus I, II, III, Alternate Calculus I, II, III, IV	11-14
CHEM 1010, 1011, 1020, 1021	General Chemistry and Laboratories	3
PHIL 250	Logic and Critical Thinking	3
HUMANITIES	One course (in addition to PHIL 250); must not be a PHIL class	3
SPCH 220 OR 230	Public Speaking or Business and Professional Speech Communication	3
CS 210	Computer Laboratory	3
CS 211, 212	Computer Programming I, II	6
HPER, AERO, OR MUSC 2010	Physical Education Activity (2 semesters required)	2
ASOR 100A	Orientation for Science Majors	1

Upper-division Admission

For admission into the upper-division program of the Physics major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination. They must also have earned a grade of C or better in PHY 221, 221L, 222, 222L, and 223.

Major Core

PHY 221, 221L, 222, 222L, 223	General Physics I, II, III and Laboratories	11
PHY 311, 312	Electricity and Magnetism I, II	6
PHY 320	Heat and Thermodynamics	3
PHY 321	Mechanics I	3
PHY 331, 332 OR 341, 342	Electrical Measurements I, II or Advanced Physics Laboratory	4
PHY 361	Solid State Physics	3
PHY 410	Intro to Quantum Mechanics I	3
PHY 412	Modern Physics I	3
PHY 450	Senior Project	3

Bachelor of Science Degree in Mathematics

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
*MATH 1061	4	MATH 1071	4
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
CS 210	3	CS 211	3
HUMANITIES	3	HUMANITIES	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
ASOR 100A	1		
	18		17

*MATH 1040 and/or 1050 must be taken prior to MATH 1061 if need is indicated.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 263A	3	MATH 351	3
ENGL 2010	3	ENGL 2020	3
PHY 221, 221L	4	PHY 222, 222L	4
CS 212	3	SOCIAL SCIENCE	3
SPCH 220 OR 230	3	ELECTIVE, ANY LEVEL	3
	16		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 361	3	MATH 362	3
CS ELECTIVE	3	MATH 364	3
**OC ELECTIVE	3	**OC ELECTIVE	3
ENG 310	3	ELECTIVES, ANY LEVEL	6
ELECTIVES, ANY LEVEL	6		
	18		15

**Out-of-college Elective: chosen, after consultation with the major advisor, to complement the career goals of the student, such as ECON 2010, 212; FN 320; ENGR 200; EE 212; etc.

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 441 OR 464 OR STAT 421	3	MATH 442 OR 465 OR STAT 422	3
MATH 450	3	MATH ELECTIVE, 300/400 LEVEL	3
MATH ELECTIVE, 300/400 LEVEL	3	ELECTIVES, 300/400 LEVEL	11
ELECTIVES, 300/400 LEVEL	9		
	18		17

Bachelor of Science Degree in Mathematics With Teacher Certification Licensure for Grades 7-12

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
*MATH 1061	4	MATH 1071	4
HUMANITIES	3	MATH 192	1
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
CS 210	3	CS 211	3
EDCI 101	1	SPCH 220 OR 230	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	18		18

*MATH 1040 and/or 1050 are to be taken prior to MATH 1061 if need is indicated.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 263A	3	MATH 351	3
MATH 361	3	MATH 362	3
ENGL 2010	3	ENGL 2020	3
CS 212	3	SOCIAL SCIENCE	3
HUMANITIES	3	EDCI 201	3
PSY 242	3	HEA 151	3
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 441	3	MATH 364	3
STAT 311	3	MATH 442	3
PHY 221, 221L	4	PHY 222, 222L	4
ENG 310	3	CS 320	3
EDAD 301 (FORMERLY EDCI 301)	2	EDSE 333	3
EDCI 387	3	PSY 312	3
	18		19

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 371	3	MATH 472S	12
MATH 381	3	EDCI 470A	3
MATH 450	3		
MATH 475	3		
EDAD 400 (FORMERLY EDCI 400)	3		
EDCI 419	1		
EDRD 491	3		
	19		15

Bachelor of Science Degree in Physics

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
CHEM 1010, 1011	4	CHEM 1020, 1021	4
*MATH 1061	4	MATH 1071	4
ASOR 100A	1	HUMANITIES	3
HPER, AERO, OR MUSC 2010	1	HPER, AERO, OR MUSC 2010	1
	16		18

*MATH 1040 and/or 1050 must be taken prior to MATH 1061 if the need is indicated.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PHY 221, 221L	4	PHY 222, 222L	4
ENGL 2010	3	ENGL 2020	3
CS 210	3	CS 211	3
MATH 263A	3	MATH 303	3
MATH 361	3	MATH 351	3
SPCH 220 OR 230	3	PHIL 250	3
	19		19

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PHY 223	3	PHY 361	3
PHY 311	3	PHY 312	3
PHY 331 OR 341	2	PHY 332 OR 342	2
PHY 321	3	SOCIAL SCIENCE	3
CS 212	3	CS ELECTIVE, ANY LEVEL	3
**OC ELECTIVE	3	**OC ELECTIVE	3
	17		17

**Out-of-College (OC) Electives (at least 6 semester hours) are chosen in consultation with the major advisor and are based on the career goals of the student. These are usually selected from the College of Engineering.

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PHY 412	3	PHY 320	3
ENG 310E	3	PHY 410	3
ELECTIVES, ANY LEVEL	9	PHY 450	3
		ELECTIVES, 300/400 LEVEL	8
	15		17

Course Descriptions

Astronomy (ASTR)

Astronomy courses do not satisfy the University's science requirement.

ASTR 110, 111 Introduction to Astronomy (4, 4). History of astronomy, development of theories, astronomical equipment, and observational techniques. Courses concentrate on the solar system—the sun, the planets, interplanetary matter, comets, and meteors.

ASTR 112 Modern Astronomy (4). Introduction to stellar and galactic astronomy. Course includes treatment of quasars, pulsars, black holes, and modern cosmology.

ASTR 301 Descriptive Astronomy (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 are also studied.

Mathematics (MATH)

MATH 110 The Mathematics of Drugs and Solutions (1). A course in measurements, calculations, and related topics for those entering the nursing profession. Calculations include the metric apothecary and home-type units, as well as determining IV rates, solution strengths, and miscellaneous procedures. Prerequisites: two years of high school algebra or one year of algebra and one year of geometry, or the equivalent. Course cannot be applied to satisfying the University mathematics requirement. Offered in fall and spring.

MATH 1010 College Algebra I (3). Graphs, relations, functions, inequalities, polynomials, exponents, radicals, logarithms, and exponential functions. Prerequisites: two years of high school algebra or the equivalent, or one year of high school algebra and one year of geometry, or the equivalent. Offered in fall, spring, and summer.

MATH 1011 Honors College Algebra I (3). The Honors version of MATH 1010. Enrollment is limited to members of the University Honors Program. Offered in fall.

MATH 1020 College Algebra II (3). Rational functions, conic sections, systems of equations and inequalities, matrices and determinants, and an introduction to discrete mathematics. Prerequisite: grade of C or better in MATH 1010 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 1021 Honors College Algebra II (3). The Honors version of MATH 1020. Enrollment is limited to members of the University Honors Program. Offered on demand.

MATH 1030 Basic Calculus I (3). An introduction to the basic concepts of differential and integral calculus, with applications oriented towards economics, business, and the social sciences. Prerequisite: grade of C or better in MATH 1010 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 114 Analytic Geometry and Trigonometry (3). A survey of analytic geometry and trigonometry, including conic sections, connections among right triangle ratios, variation, periodic and circular functions, and the use of appropriate calculators and computers. Prerequisites: two years of high school algebra or the equivalent, or one year of high school algebra and one of geometry, or the equivalent. Offered in fall and spring.

MATH 115 Introduction to Discrete Mathematics (3). A study of sets, relations and functions, mathematical induction, Boolean algebra and Boolean functions. Prerequisites: two years of high school algebra or the equivalent, or one year of high school algebra and one of geometry, or the equivalent. Offered on demand.

MATH 1040 Precalculus Mathematics I (3). A course which with MATH 1050 provides the student with the foundation necessary to enter the calculus sequence. The topics include the study of polynomial, rational, exponential and logarithmic functions, and matrices. Prerequisites: two years of high school algebra or the equivalent, or one year of high school algebra and one year of geometry, or the equivalent. Offered in fall, spring, and summer.

MATH 1041 Precalculus Mathematics, Alternate (3). Integrated college algebra and trigonometry. This course provides the student with the background necessary to enter the calculus sequence. Topics include polynomials; rational functions; exponential, logarithmic, and trigonometric functions; analytic geometry; and conic sections. Prerequisites: high school algebra II, geometry, and trigonometry, or the equivalent. Offered in fall and spring.

MATH 1050 Precalculus Mathematics II (3). A continuation of MATH 1040. Topics include right triangle trigonometry, trigonometric functions, analytic geometry, conic sections, sequences, and notation. Prerequisite: grade of C or better in MATH 161 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 1060 Calculus and Analytical Geometry (4). Part of the sequence MATH 1060, 1070, 263, 264, which emphasizes application to the physical sciences. Topics include functions, graphs, limits, derivatives, the definite integral, and rational functions including applications. Prerequisite: grade of C or better in MATH 1041 or 1050 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 1061 Calculus I, Alternate (4). Part of the sequence MATH 1061, 1071, 263A, recommended for Mathematics, Computer Science, Chemistry, and Biology majors. Topics include functions, graphs, limits, derivatives with applications, and the definite integral with applications. Prerequisite: grade of C or better in MATH 1041 or 1050 or permission of the Department Head. Offered in fall.

MATH 1070 Calculus II (4). Further applications of definite integral, derivatives and integrals of transcendental functions, techniques of integration, and polar coordinates. Prerequisite: grade of C or better in MATH 1060 or 1061 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 1071 Calculus II, Alternate (4). Study of derivatives and integrals of the trigonometric, logarithmic, and exponential functions, techniques of integration, sequences, and series. Course is part of the series MATH 1061, 1071, 263A, recommended for all Mathematics, Computer Science, Chemistry, and Biology majors. Prerequisite: grade of C or better in MATH 1061 or permission of the Department Head. Offered in spring.

MATH 191 Fundamentals of Problem-Solving (1). An introduction to Polya theories with emphasis on solving problems using mathematical methods. Prerequisite: 3 semester hours of college-level mathematics or permission of the Department Head. Offered in fall, spring, and summer.

MATH 192 Mathematics Education Orientation (1). An introduction to the Mathematics teacher education program, including field experience. Prerequisite: interest in becoming a mathematics teacher. Offered in spring.

MATH 211, 212 Structure of the Number System I, II (3, 3). Set theory; relations; functions; inverses; order properties; systems of numeration; rational and irrational numbers; elementary number theory; mathematical systems; algorithms for the fundamental operations on whole numbers, integers, fractions, decimals, percent, ratio and proportion; equations; problem-solving; measurement in the metric system; elements of algebra; plane and solid geometry; elementary statistics. Prerequisite: grade of C or better in MATH 1010 or permission of the Department Head. Offered on demand.

MATH 213 Mathematica (3). An introduction to the computer software "Mathematica" with emphasis on numerical calculations, graphics, algebraic expressions from calculus, matrices, and other selected topics. Prerequisites: grades of C or better in CS 121 and MATH 1010, or permission of the Department Head. Offered in fall.

MATH 263 Calculus III (3). Infinite sequences and series, vectors in two- and three-dimensional space, the calculus of a vector function, and applications. Prerequisite: grade of C or better in MATH 1070 or permission of the Department Head. Offered in fall, spring, summer.

MATH 263A Calculus III, Alternate (3). Vector functions, three- dimensional space, partial derivatives, multiple integrals, line integrals, and applications. Part of the sequence MATH 1061, 1071, and 263A, recommended for all Mathematics, Computer Science, Biology, and Chemistry majors. Prerequisite: grade of C or better in MATH 1071 or permission of the Department Head. Offered in fall.

MATH 264 Calculus IV (3). The calculus of vector variables, including partial, differentiation and multiple integration, line integrals, Stokes' theorem, and applications. Prerequisite: grade of C or better in MATH 263 or permission of the Department Head. Offered in fall, spring, summer.

MATH 264A Integrated Calculus and Linear Algebra (3). An intensive review of the concepts of calculus and linear algebra with emphasis on rapid problem-solving. Prerequisite: grade of C or better in MATH 263A or 362, or permission of the Department Head. Offered on demand.

MATH 303, 304 Applied Mathematics I, II (3, 3). Ordinary differential equations, Fourier series, and Laplace transforms, with emphasis on the application to mechanical and electrical systems. Prerequisites: grades of C or better in MATH 264 or 263A and in PHY 222, 222L. MATH 303 is required of all Physics majors. Offered on demand.

MATH 313 Advanced Mathematica (3). An in-depth treatment of the computer software "Mathematica" with emphasis on programming in the "Mathematica" language to solve selected problems. Prerequisites: grades of C or better in MATH 213, 263A, and 361, and CS 212, or permission of the Department Head. Offered in fall.

MATH 321 Introduction to Number Theory (3). Divisibility properties for the integers, the greatest common divisor, unique factorization, congruences, Diophantine equations, the Euler function, Wilson's theo-

rem, the Chinese remainder theorem, and other elementary properties of number. Prerequisite: grade of C or better in MATH 1071 or permission of the Department Head. Offered in fall.

MATH 331 Introduction to Topology (3). Topological spaces, metric spaces, compactness, and homeomorphisms, with applications to the real line. Prerequisite: grade of C or better in MATH 1071 or permission of the Department Head. Offered on demand.

MATH 351 Intermediate Analysis (3). A study of the foundations of real variable calculus, including the real numbers, limits, sequences, continuity, Bolzano-Weierstrass theorem, Heine-Borel theorem, intermediate-value theorem, and differentiability. Prerequisite: grade of C or better in MATH 1071 or permission of the Department Head. Required of all Mathematics and Physics majors. Offered in spring and summer.

MATH 361 Linear Algebra I (3). Homogeneous and non-homogeneous systems, matrix algebra, determinants, vector spaces and subspaces, bases, orthogonal bases, linear transformations, and rank. Prerequisite: grade of C or better in MATH 1071 or permission of the Department Head. Required of all Mathematics, Physics, and Computer Science majors. Offered in fall, spring, and summer.

MATH 362 Linear Algebra II (3). A continuation of MATH 361. It is strongly recommended that 361 and 362 be taken sequentially. Topics include a further treatment of linear transformations, rank, eigenvalues, eigenvectors, and the spectral theorem. Prerequisite: grade of C or better in MATH 361. Required of all Mathematics majors. Offered in spring.

MATH 364 Abstract Algebra (3). An introduction to properties of groups, rings, integral domains, and fields. Prerequisites: grades of C or better in MATH 1071 and 321, or permission of Department Head. Required of all Mathematics majors. Offered in spring.

MATH 371 Teaching Mathematics in the Secondary School (3). Lectures, discussions, and reports on materials and methods used in the instruction of mathematics at the middle school and high school level. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in Mathematics. Prerequisite: official admission to the Teacher Education Program. Offered in fall.

MATH 381 Geometry (3). A brief review of Euclidean geometry with further topics, including the non-Euclidean and projective geometries. Prerequisite: grade of C or better in MATH 1071 or permission of the Department Head. Required of all teacher certification candidates in Mathematics. Offered in spring and summer of even-numbered years.

MATH 390 Introduction to Numerical Analysis (3). Errors, interpolation, approximations, numerical quadrature, solution of ordinary differential equations. Prerequisite: grade of C or better in MATH 1071 or permission of the Department Head. Offered on demand.

MATH 431, 432 Topology I, II (3, 3). Homeomorphisms, connectedness, compactness, metric spaces, normal spaces, Urysohn's lemma, Tietze's theorem, separation axioms, product topology, Hilbert space, quotient space, paracompactness, nets, and filters, with an introduction to homotopy theory. Prerequisites: grades of C or better in MATH 263A, 331, and 351, or permission of the Department Head. Offered on demand.

MATH 441, 442 Advanced Calculus I, II (3, 3). A variety of topics including functions of several variables; the algebra and topology of Euclidean n-space; differentials; extrema; the gradient; line, surface and volume integral; Stokes' theorem; inverse mapping theorem; and manifolds. Prerequisites: grades of C or better in MATH 263A, 351, and 361, or permission of the Department Head. Mathematics majors must take this sequence or MATH 464-465 or STAT 421-422. MATH 441 is offered in fall and 442 in spring.

MATH 445 Vector Calculus (3). Derivative and integral of vector functions, gradient, divergence, curl, Green's theorem, Stokes' theorem, Laplace's equation, and elementary boundary value problems. Prerequisites: grades of C or better in MATH 263A and 362, or permission of the Department Head. Offered on demand.

MATH 450 Senior Project (3). A comprehensive inquiry into the nature of mathematics . Emphasis is on written presentation of the subject matter. Required of all prospective graduating seniors in Mathematics. Prerequisite: senior standing. Offered in fall.

MATH 451, 452 Real Analysis I, II (3, 3). Set theory, algebra, and topology of the real numbers, continuous functions, uniform convergence, measure and integration theory, Lebesque measure and integrals, convergence theorem, L-spaces, Banach spaces, differentiation, Radon-Nikodym theorem, Fubini theorem. Prerequisite: grade of C or better in MATH 442 or permission of the Department Head. Offered on demand.

MATH 453, 454 Complex Analysis I, II (3, 3). Analytic functions, Cauchy's integral theorem, Taylor and Laurent series, singularities, residue theory, analytic continuation, conformal mapping, Riemann surfaces, infinite products, and entire functions. Prerequisite: grade of C or better in MATH 442 or permission of the Department Head. MATH 453 is offered in fall of odd-numbered years and 454 is offered in spring of even-numbered years.

MATH 456, 457 Differential Equations I, II (3, 3). First- and second-order equations, general theory of linear nth-order differential equations, constant coefficient systems, variation of parameters, infinite series, singular solutions, asymptotic solutions, Green's functions, stability, special functions, Laplace transform. Prerequisites: grades of C or better in MATH 303 and 362, or permission of the Department Head. MATH 456 is offered in fall of even-numbered years and spring of odd-numbered years.

MATH 461, 462 Linear Space I, II (3, 3). Fields; vector spaces; quotient spaces; linear transformations; ring theory; similarity, equivalence, and congruence of matrices; bilinear forms; tensors; and other topics. Prerequisites: grades of C or better in MATH 362 and 364, or permission of the Department Head. Offered on demand.

MATH 464, 465 Modern Algebra I, II (3, 3). Equivalence relations, mappings, groups, rings, fields, polynomial rings, modules, vector spaces, Galois theory. Prerequisites: grades of C or better in MATH 321, 362, and 364, or permission of the Department Head. Mathematics majors must take this sequence or MATH 441-442 or STAT 421-422. MATH 464 is offered in the fall and 465 in the spring.

MATH 472S Student Teaching of Mathematics in the Secondary Schools (12). A semester-long experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in teaching mathematics. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently. Offered on demand.

MATH 473, 474 Logic I, II (3, 3). Introduction to mathematical logic. Logic I is a survey of fundamental material including the statement calculus and an informal treatment of the predicate calculus. Logic II is a formal treatment of the predicate calculus. Prerequisite: grade of C or better in MATH 263A or permission of the Department Head. Offered on demand.

MATH 475 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: grade of C or better in MATH 263A or permission of the Department Head. Offered in spring and summer of odd-numbered years.

MATH 490 Special Topics (3). Special topics in mathematics to be offered with permission of the undergraduate mathematics curriculum committee in response to the preference and needs of the students. Repeatable to six hours. Prerequisite: permission of the Department Head. Offered in fall, spring, and summer.

Physics (PHY)

PHY 211, 212 College Physics I, II (3, 3). A non-calculus-based introductory course that includes topics in mechanics, heat, sound, light, electricity, magnetism, and modern physics. The course presents the basic principles of physics. It is required of biology, pre-medicine, and allied health profession majors. Prerequisite: grade of C or better in MATH 114, 1041, or 1050. Successful completion of PHY 211 is the prerequisite for PHY 212. Offered in fall, spring, and summer.

PHY 211L, 212L College Physics I, II Laboratory (1, 1). One two-hour laboratory each week. These courses are designed to be taken concurrently with the corresponding lecture courses, PHY 211-212. Offered in fall, spring, and summer.

PHY 221, 222, 223 General Physics I, II, III (3, 3, 3). Mechanics, heat, sound, light and optics, electricity and magnetism, and modern physics. The course is calculus-based and is intended for students with majors in physics, engineering, mathematics, or a physical science. PHY 221, 222, and 223, with accompanying laboratories, are required of all Physics majors. PHY 221 and 222 with accompanying laboratories required of all Mathematics and Computer Science majors. Prerequisites: MATH 1050and 1060; co-requisite: MATH 1070. Offered in fall, spring, and summer.

PHY 221L, 222L General Physics I, II Laboratory (1, 1). One two-hour laboratory per week designed to be taken concurrently with PHY 221-222. PHY 223 has no laboratory. Required of all Physics, Mathematics, and Computer Science majors. Offered in fall, spring, and summer.

PHY 301 Qualitative Biophysics (3). A qualitative approach to introductory biophysics, including skeletal muscle dynamics, assessment of bone structure by measurement of the speed of sound and bone-mineral content, hydrodynamic analysis of the cardiovascular system. Prerequisite: one year of college physics. Offered on demand.

PHY 311, 312 Electricity and Magnetism I, II (3, 3). Fundamentals of theoretical electricity and magnetism. Emphasis is placed upon problems using vector calculus in three dimensions. Prerequisites: MATH 263A or 264, PHY 222, 222L, and PHY 223, all with a grade of C or better. Three lectures per week. Required of all Physics majors. PHY 311 is offered in fall of even-numbered years and 312 in spring of odd-numbered years.

PHY 314 Optics (3). A brief review of geometrical optics and a study of physical optics, including spectroscopy. Prerequisites: MATH 1070 and either of the sequences: PHY 211, 211L, 212, 212L or PHY 221, 221L, 222, 222L. Three lectures and one laboratory period per week. Offered in fall of even-numbered years.

PHY 320 Heat and Thermodynamics (3). A study of the fundamentals of heat and an introduction to thermodynamics with applications to chemistry. Prerequisites: PHY 221, 221L, 222, 222L, and MATH 1071. (MATH 361 and either MATH 263A or 264 recommended). Three lectures per week. Required of all Physics majors. Offered in spring of even-numbered years.

PHY 321, 322 Mechanics I, II (3, 3). Statics and dynamics of particles and rigid bodies, Lagrange's and Hamilton's equations, fluid statics, and vibrations. Prerequisites: PHY 221, 221L, 222, 222L, and MATH 1071. MATH 361 and either MATH 263A or 264 recommended. Three lectures per week. PHY 321 required of all Physics majors. PHY 321 is offered in fall of odd-numbered years and 322 is offered on demand.

PHY 331, 332 Electrical Measurements I, II (2, 2). The theory of electrical circuits. The laboratory is intended to give experience and facility with electrical measuring instruments. Prerequisites: MATH 1071 and either of the sequences PHY 211, 211L, 212, 212L or PHY 221, 221L, 222, 222L. Two laboratory periods per week. Either this sequence or PHY 341-342 is required of all Physics majors. PHY 331 is offered in fall of odd-numbered years and 332 in spring of even-numbered years.

PHY 341, 342 Advanced Physics Laboratory I, II (2, 2). A course designed to permit the student to develop a variety of laboratory skills and techniques by performing advanced experiments in mechanics, heat, sound, light, and modern physics. Prerequisites: PHY 221, 221L, 222, 222L, and MATH 1071. Two laboratory periods per week. Either this sequence or PHY 331-332 is required of all Physics majors. PHY 341 is offered in fall of even-numbered years and 342 in spring of odd-numbered years.

PHY 361 Solid State Physics (3). A physical interpretation of the conductive properties of metal and semi-conductor materials based on the periodic nature of the crystalline solid, with applications including the transistor. Primarily for engineering, physics, or computer science students with junior standing. Prerequisites: PHY 222, 222L and either MATH 263A or 264. Required of all Physics majors. Offered in fall of odd-numbered years.

PHY 401 Seminar in Modern Physics (2). A course designed as an elective suitable for liberal arts students. Selected topics in modern physics: concepts discussed from the standpoint of the effects these concepts have had on people and their environment. Prerequisite: one year of college physics. Offered on demand.

PHY 402 Modern Health Physics (2). An introduction to medical and health physics with descriptive emphasis on modern instrumentation, X-rays as a diagnostic tool, ultrasonics, electron-microscopy, optical and acoustical holography, laser surgery. Prerequisites: PHY 221, 221L, 222, 222L, and MATH 1070. Offered on demand.

PHY 410, 411 Introduction to Quantum Mechanics I, II (3, 3). Introduction to fundamental principles of quantum mechanics and methods of calculation, with application to atomic, molecular, and nuclear physics. PHY 410 is required of all Physics majors. Prerequisites: PHY 221, 221L, 222, 222L, and MATH 1070. PHY 410 is offered in fall of even-numbered years and 411 is offered on demand.

PHY 412, 413 Modern Physics I, II (3, 3). The classical and modern concepts of the atom and introduction to molecular structure, the chemical bond, nuclear physics, fission, isotopic tracers, medical radiology, cosmic rays. PHY 412 is required of all Physics majors. Prerequisites: MATH 1070 and either of the following two sequences: PHY 211, 211L, 212, 212L or PHY 221, 221L, 222, 222L. PHY 412 is offered in spring of odd-numbered years and 413 is offered on demand.

PHY 450 Senior Project (3). Individual study and presentation of a special topic in physics. Required of all Physics majors. Prerequisite: senior standing. Offered in spring.

PHY 460 Undergraduate Readings and Research (3). Individual study and research under faculty guidance. Prerequisites: 12 hours of upper-level physics and permission of instructor. Offered on demand.

PHY 490 Special Topics in Physics (Up to 9 hours total). Courses offered to the preference and needs of the student. The credits for each course vary from two to three semester hours, with a total of nine credit hours the maximum from this group permitted toward the Physics degree. Prerequisites: PHY 221, 221L, 222 222L, and permission of the instructor. Offered on demand.

Principal Topics covered:

A. (I, II) Advanced Laboratory Studies (2, 2)
B. (I, II) Analytical Mechanics (3, 3)
C. (I, II) Electricity and Magnetism (3, 3)
D. (I, II) Modern Physics (3, 3)
E. Optics (3)
F. Quantum Mechanics (3)
G. Research Project (3)
H. Solid State Physics (3)
I. Thermodynamics and Statistical Mechanics (3)

Statistics (STAT)

STAT 291, 292 Introduction to Probability and Statistics I, II (3, 3). An overview of what statistics is and what statisticians do. Topics include basic concepts of probability, random variables and probability distributions, basic concepts of inference, linear regression and correlation, analysis of variance, and analysis of enumerative data. Prerequisite: permission of the Department Head. Formerly MATH 291-292. STAT 291 is offered in fall and 292 on demand.

STAT 311, 312 Probability and Statistics I, II (3, 3). Probability as a tool for inference: the axioms of probability, random variables and their probability distributions, multivariate probability distributions, functions of random variables, hypothesis testing, linear models and estimation by least squares, the general linear model, analysis of categorical data, and non-parametric statistics. Prerequisite: MATH 1071 or permission of the Department Head. STAT 311 is required of all Computer Science majors. STAT 311 is offered every semester; 312 is offered only in the spring.

STAT 370 Introduction to Statistical Computing and Data Management (3). Components of digital computers, characteristics of magnetic storage devices, use of JCL and utility programs, concepts and techniques of research data management. Prerequisites: MATH 1071 and CS 222, or permission of the Department Head. Offered on demand.

STAT 421 Statistical Methods I (3). Approaches to the problems of description and goodness of fit; univariate location and scale; elvariate independence and correlation; comparison of independent or matched samples, involving categorical, discrete, or continuous data; non-parametric tests. Prerequisite: STAT 312 or permission of the Department Head. All Mathematics majors must take the STAT 421-422 sequence or MATH 441-442 or MATH 464-465. Offered in fall.

STAT 422 Statistical Methods II (3). A continuation of STAT 421. Topics include simple and multiple regression, analysis of variance and covariance, elements of experimental design and analysis, random effects models, simultaneous inference and the general linear model in matrix terms. Prerequisite: STAT 421 or permission of the Department Head. Offered in spring.

Department of Social Work and Sociology

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General Statement: The Department of Social Work and Sociology offers two baccalaureate degrees: the Bachelor of Science degree in Social Work and the Bachelor of Science degree in Sociology. Since these are distinct degree programs, they are discussed under separate headings.

Social Work Program Rationale: Tennessee State University has a service-mix area that includes some 1.1 million people, including all races and economic groups. This diverse population has many socioeconomic problems requiring social services. The Nashville metropolitan area, including small rural populations, requires a variety of social service agencies to serve the population. Additionally, Tennessee State University's student body and faculty originate from 48 states and more than fifty countries. The Social Work Program is needed to provide leadership and to produce a reservoir of Social Work professionals who can serve diverse populations in Nashville, Middle Tennessee, the State of Tennessee, and the nation.

Mission Statement: The mission of the Social Work Program is to prepare undergraduates for entry-level professional social work practice to provide and develop needed services for urban and some rural and international populations. This includes preparing graduates for the promotion of social and economic justice, to respond to diversity and oppression, and to serve populations-at-risk. Additionally, the program provides leadership and a reservoir of social work professionals for the region.

The Goals of the Social Work Program are to: (1) prepare students for professional entry level generalist social work practice to effectively meet the human needs in Metro Nashville and to provide leadership in human services organizations; (2) prepare graduates who are aware of their responsibility to continue their professional growth and development; (3) provide students with an understanding of the dynamics and consequences of human oppression and discrimination, and strategies to promote social and economic justice; and (4) provide all students of diverse social, economic, racial and cultural backgrounds the opportunity to become professional social workers.

Program Objectives: The objectives of the Social Work Program are to: (1) provide students with a generalist framework for problem-solving knowledge, skills and values in preparing them for entry-level social work practice including engagement, assessment, planning, implementation, evaluation, termination, follow-up, professional growth and support of professional values, (2) provide students with knowledge of the psychological, biological, and social aspects of human behavior and social environment preparing them for practice with individual, families, groups, organization and communities, (3) provide students with historical and analytical knowledge of social welfare programs, policies and services and related values and issues in preparing them to engage in policy formulation and analysis including the legislative processes, (4) increase student's knowledge of generalist social work practice utilizing supervised field placement instruction in preparing them to function within agencies and community settings, (5) help students build their professional social work practice on a liberal arts foundation including their ability to think critically, learn independently, and demonstrate effective oral and written communication skills, (6) assist students in developing the ability to integrate knowledge, skills and values in preparing ethical qualitative and quantitative research to inform their practice interventions, (7) infuse content on professional use of self, social work values, and ethical behavior as promoted in the National Association of Social Workers (NASW) Code of Ethics throughout the professional foundation curriculum in preparing students to become ethical practitioners in relation to the dignity of the individual, client self-determination, and respect for diversity, (8) provide students with an understanding of discrimination, oppression and strategies of change, promoting social and economic justice for populations-at-risk, (9) provide students with knowledge of urban community resources that serve individuals, families and groups from diverse populations, (10) demonstrate professional use of self encouraging personal self-awareness, assisting students in developing a commitment to lifelong learning and their personal growth and development, (11) provide diverse students with the opportunity both to explore social work as a career and to demonstrate readiness for admission to the program, and (12) prepare students to function within organizations and service delivery systems under supervision to become advocates for client systems and to seek organizational change.

The baccalaureate Social Work Program is the only public program in Nashville, Tennessee that prepares students for entry-level professional practice. It also prepares students for acquiring registration, certification, and licensure in social work.

Career Opportunities: Career opportunities include employment at the professional entry-level in social work positions in public and private agencies in the following areas: human services, public health, mental health, mental retardation, corrections, social services in hospitals and nursing homes, senior citizen centers, state and county social services agencies, public housing, adult protective services, child protective services, school social work, planned parenthood centers, criminal and juvenile justice agencies.

Accreditation: The Social Work Program is accredited by the Council on Social Work Education (CSWE), the national accrediting agency to the profession. The Program has been accredited since 1974.

Admission and Exit Requirements: Students who wish to gain formal admission to the Social Work Program are required to complete a written application and to take a pre-test, both of which are reviewed by the faculty. Students are eligible to make application for admission at the completion of fifteen semester hours with a minimum quality point average of 2.3. After review of the written application and pre-test, a faculty member conducts an interview. The questions to be asked are listed on the application form. The interview serves as the primary tool for exploration of the student's knowledge of the field of social work, motivation for selecting social work as a major, prior work or volunteer experiences, and future career goals. Application forms are available from the Program Director or any Social Work faculty member. Without formal admission to the program, students are not considered to be Social Work majors. Students who do not meet the grade point average requirement or who have failed courses in the major area may be asked to reapply for admission at a later date, or may be admitted on a provisional basis. No academic credit is given for life experience or prior work experience. All graduating seniors are required to

complete the Social Work exit examination, which serves as the Program's post-test.

These procedures are all in addition to the procedures for upper-level admission outlined below.

Transfer Students and Transfer Credit: Credits in Social Work earned at other higher education institutions are accepted toward the Social Work degree at Tennessee State University on the same basis as work taken at TSU, provided the courses are of the same quality and come from a CSWE-accredited program.

Departmental Requirements For Bachelor of Science Social Work — **50 Semester Hours**

A student must complete a minimum of 134 semester hours to receive a degree. At least 45 of the semester hours must be in courses on the 300 and 400 level. A minimum of 50 semester hours is required in Social Work professional courses, including SOC 300.

General Education Core

ENG 101, 102 (minimum grade of C in each)	Freshman English I, II	6
ENG 211C	Black Arts and Literature	3
ENG 212C	Black Literature: Short Story and Novel	3
HIST 201, 202	American History I, II	6
MATH 111	College Algebra I	3
BIO 101, 101L, 102, 102L	Introduction to Biophysical Science I, II and laboratories	6
EC 211, 212	Principles of Economics I, II	6
PISI 221	American National Government	3
PSY 201	General Psychology I	3
SOC 211	Introduction to Sociology	3
SPCH 220	Public Speaking	3
ART 133 or MUS 131	Art Appreciation or Music Appreciation	3
PHIL 201	Introduction to Philosophy: Contemporary Moral Issues	3
CS 121	Introduction to Computing	3
PE 11-94, AERO, or MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100B	Orientation for Social Science Majors	1
Free Electives		8

Upper-division Admission

For admission into the upper-division program of the Social Work major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of 2.3 on college-level coursework, and completed the Rising Junior Examination.

Professional Curriculum

In the professional phase of the Social Work Program, students must complete 47 semester hours of Social Work courses along with a three semester hour Social Statistics course. Social Work majors must earn at least a C grade in all of the following required courses. Students who earn less than a C grade in any of the courses must repeat them until they earn a C grade. Enrollment in Social Work courses 330, 335, 340, 345, 350, 360, 380, 385, 410, 420 and 490 is limited to Social Work majors only:

SW 201	Introduction to Social Work	2
SW 210	Social Work Interviewing Skills	3
SW 330	Human Behavior and the Social Environment I	3
SW 335	Human Behavior and the Social Environment II	3
SW 340	Social Welfare Policy	3
SW 345	Social Welfare Policy Analysis	3
SW 350	Social Work Practice I	3
SW 360	Social Work Practice II	3
SW 380	Social Work Research I	3
SW 385	Social Work Research II	2
SW 410	Field Instruction	10
SW 420	Field Instruction Seminar	3
SW 490	Senior Seminar in Social Work	1
SW 300/400	Social Work Electives	5
SOC 300	Social Statistics	3

To fulfill the need for more exposure in social welfare agencies, all students are required to have a participatory observation experience prior to field placement. During the sophomore year, all Social Work majors observe and participate in two social welfare agencies for a minimum of 30 clock hours. In the junior year, students complete two written agency profiles. Students participating in a regular volunteer program may use that experience in lieu of the observation and participation. Both requirements must be met prior to being admitted to the Field Instruction Program.

Students must spend a minimum of 450 clock hours (1 semester) in field instruction in selected social service agencies and organizations, while registered for SW 410 Field Experience. This experience provides students with an opportunity to apply theory to actual practice under supervision and guidance of a qualified practitioner. Students are evaluated on the basis of their growth and development in relation to the Program's formal education outcomes. Students must have a cumulative grade point average of at least 2.3 and must have earned the grade of C or better in SW 201, 210, 330, 335, 340, 345, 350, 360, and 380, as well as in SOC 300, before being admitted to Field Instruction. No academic credit is given for life experience or prior work experience. Only Social Work majors are admitted to Field Instruction Program.

Sociology Program

General Statement: Sociology is the study of group life. As a social science, it combines scientific and humanistic perspectives to identify, describe, explain, and understand the connections between the social forces that help shape who we are, what we believe, how we behave, and how we choose to live our lives. It examines how we shape our world through our interactions with others and by the choices we make, and how and why groups form, organize, achieve goals, and evolve. Key areas of inquiry include culture, identity, urban and rural life, family patterns and relationships, social change, racism, sexism, social class, economic systems, political power, conflict, education, population, environment, technology and communications, health care and illness, social movements, community responses to disasters, life in organizations, and contemporary social issues. In recent years the skills that are cultivated in sociological research have been in high demand by business, industry, and government. Sociology majors should choose electives both in the field and outside the field with this in mind.

Mission: The Sociology Program's mission is to prepare students for entry level professional employment in government, education, business, industry, and community organizations—with emphasis on the acquisition of basic research skills. The program also prepares students for graduate and professional study in Sociology and other social science disciplines, law, and business. The program's overall orientation is consistent with the College of Arts and Sciences' mission to provide a broad liberal arts education.

Objectives: This program of study is designed to develop students': 1) understanding of the connections between the social forces that help shape society; 2) knowledge of sociological concepts and theoretical perspectives on human social behavior;

3) skill in using social research and statistical methodology; 4) leadership and critical thinking skills; and 5) ability to engage in a lifetime of learning.

Career Opportunities: Career opportunities include employment in local, state, and federal social and community service agencies in the areas of housing, juvenile courts and juvenile and adult corrections, urban and community planning/development, mental health and drug counseling, youth guidance, human services, and social research; and in business and industrial management and management trainee programs in retail, manufacturing, insurance, banking, utilities, journalism, and personnel.

Departmental Requirements For Bachelor of Science Sociology — **30 Semester Hours**

General Education Core

ENG 1010, 1020	Freshman English I, II (minimum grade of C in each)	6
ENG 2010, 2020	Sophomore Literature I, II	6
HIST 2010, 2020; 2030	American History I, II; History of Tennessee (any two)	6
MATH 1010, 1011, 1020, 1021, 1030, 1040, 1041, 1050, 1060, 1061, 1070, 1071	Mathematics: any one course	3-4
BIO 1030, 1031, 1040, 1041 or CHEM 1010, 1011, 1020, 1021, or PHY 211, 211L, 212, 212L	General Biology I, II and Laboratories General Chemistry I, II and Laboratories General Physics I, II and Laboratories	8 8 8
ANTH 230, EC 211, GEOG 171, 172, PISI 220, 221, PSY 201	Social science: any three courses in three different fields	9
SPCH 220 or 230	Public Speaking or Business and Professional Speech Communication	3
ART 1010, 133H, FR 101, 102, GER 101, 102, SPN 101, 102, MUS 1010, 1020, PHIL 201, 202, 250, RS 200, 201, THEA 110, 120	Humanities: any two courses from two different disciplines	4-6
CS 121	Introduction to Computing	3
PE 11-94, AERO 151, 152, 251, 252 or MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100B	Orientation for Social Science Majors	1

Upper-division Admission

For admission into the upper-division program of the Sociology major, students must complete all of the requirements listed above under the General Education Core; in addition, they must have earned at least a C in SOC 211. They must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of 2.0 on college-level coursework, and completed the Rising Junior Examination.

Major Core

Sociology majors must earn at least a C in all of the following courses. If they earn a D or an F in any of these courses, majors must repeat them until they earn at least a C.

SOC 211	Introduction to Sociology	3
SOC 300	Social Statistics (STAT 291-292, PSY 311, or QM may be substituted.)	3
SOC 451	Introduction to Social Research	3
SOC 452	Senior Project	3
SOC 490	Sociological Thought	3
SOC 491	Sociological Theory	3
SOC or ANTH	Upper-division Electives	12

Minor Requirements: SOC 211 and 15 hours of upper-division Sociology courses.

Bachelor of Science Degree In Social Work

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
BIO 101, 101L	3	BIO 102, 102L	3
MATH 111	3	ART 133 or MUS 131	3
SOC 211	3	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100B	1		
	17		15

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SW 201	2	SW 210	3
ENG 211C	3	ENG 212C	3
EC 211	3	EC 212	3
SPCH 220	3	PHIL 201	3
PSY 201	3	PISI 221	3
SOC 230	3	SOC 360	3
	17		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SW 340	3	SW 335	3
SW 330	3	SW 345	3
SOC 300	3	SW 350	3
PSY 351	3	PSY 321	3
PISI 420	3	ENG 310S	3
Free ELECTIVE, 300/400 LEVEL	3	SW Elective	2/or 3
	18		17 or 18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SW 360	3	SW 385	2
SW 380	3	SW 410	10
SW ELECTIVE	2 OR 3	SW 420	3
ELECTIVES, 300/400 LEVEL	6	SW 490	1
	14 OR 15		16

Bachelor of Science Degree In Sociology

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SOC 211	3	CS 121	3
ENG 101	3	ENG 102	3
HIST 201, 202, OR 341	3	HIST 201, 202, OR 341	3
MATH	3	HUMANITIES	4-6
ASOR 100B	1	PE, AERO, OR MUS 306A	1
PE, AERO, OR MUS 306A 1			
	14		14-16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 211	3	ENG 212	3
SCIENCE AND LAB	4	SCIENCE AND LAB	4
SOCIAL SCIENCE	9	SPCH 220 OR 230	3
		ELECTIVES, ANY LEVEL	6
	16		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SOC 300	3	SOC 451	3
SOC 490	3	SOC, 300/400 LEVEL	6
SOC, 300/400 LEVEL	6	ELECTIVES, 300/400 LEVEL	9
ELECTIVES, ANY LEVEL 6			
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SOC 452	3	SOC, 300/400 LEVEL	3
ELECTIVES, 300/400 LEVEL	12	ELECTIVES, ANY LEVEL	15
ELECTIVES, ANY LEVEL	3		
	18		18

Course Descriptions

Social Work (SW)

Courses marked with an asterisk (*) are required for Social Work majors. Courses marked with an M are limited to Social Work majors only.

***SW 201 Introduction to Social Work (2).** Introduction to the general method of social work practice and the profession of Social Work. This course will help students develop a more authentic understanding and appreciation of the profession. Students will be exposed to what social workers do and the importance of considering the environmental context that surrounds all decisions.

***SW 210 Social Work Interviewing Skills (3).** Introduction to Social Work generic interviewing skills, essential facilitative qualities, and professional integrity. Emphasis on working with culturally and psychologically diverse, and oppressed client systems. Prerequisite: SW 201

***(M)SW 330 Human Behavior and the Social Environment I (3).** A descriptive and analytical examination of individuals, families, groups, communities, and organizations as they affect and are affected by the social environment. Prerequisites: SW 201, 211, SOC 230, PSY 201. Co-requisite: PSY 351

***(M)SW 335 Human Behavior and the Social Environment II (3).** A description and analytical examination of families, groups, communities and organizations as they affect and are affected by the social environment. Prerequisite: SW 330

***(M)SW 340 Social Welfare Policy (3).** Examination of the development and evolution of social welfare practices, policies, and programs from 1952 to the present. Prerequisite: SW 320. Offered fall semester only. Enrollment limited to Social Work majors only. Prerequisites: SW 201, HIST 210 & 202, PHIL 201, SOC 230

***(M)SW 345 Social Welfare Policy Analysis (3).** A critical analysis of contemporary social policies and programs for social work practitioners. Emphasis is on developing and using a practical method for analyzing and interpreting current programs and policies directed at meeting human needs. Prerequisite: SW 340. Offered spring semester only. Enrollment limited to Social Work majors only.

***(M)SW 350 Social Work Practice I (3).** A comprehensive study of the general method of social work practice, using the stages of engagement, data collection, assessment, intervention, evaluation, and termination. Students write practice questions for evaluating outcomes. Prerequisites: SW 301, 320, PSY 351. Enrollment limited to Social Work majors only.

***(M)SW 360 Social Work Practice II (3).** Systematic use of the general method of social work practice and experiential use in working with individuals, groups, communities, and organizations from diverse populations, using the NASW code of ethics in social work methods of intervention. Prerequisite: SW 350. Enrollment limited to Social Work majors only.

***(M)SW 380 Social Work Research I (3).** The rationale, principles, ethics, goals, methods, and techniques of the scientific research process in social work. Prerequisites: SW 350, MATH 111, SOC 300, CS 121 and BIO 101 & 102.

***(M)SW 385 Social Work Research II (2).** Implementation of a practice-related research design. Emphasis is on data collection, data analysis, and reporting of data collected in field placement. Prerequisite: SW 380. Co-requisites: SW 410, 420.

SW 400 Social Work Intervention in Health (3). A course designed to acquaint the student with the symptoms, etiology, and physical and emotional aspects of acute and chronic diseases, illnesses, and disabilities, with the development of comprehensive medicine involving the whole person in his or her milieu. Emphasis is placed on acquiring knowledge regarding social aspects of illness, as well as use of community resources for the continuation of preventive methods. One hour per week is devoted to participatory observation at a health-related agency. Prerequisite: admission to upper division.

***(M)SW 410 Field Instruction (10).** Field instruction to provide the student with the opportunity to apply and integrate academic content and to develop skills that meet the requirements for entry-level professional social work practice. Supervision in the field is provided by a qualified practitioner committed to undergraduate social work education. Students are required to spend a minimum of 450 clock hours in an educationally oriented field practicum. Seniors are admitted after the completion of a formal admission process, including recommendation by the student's advisor. Prerequisites: completion of general education core, SW 301, 320, 330, 340, 345, 350, 360, 380, SOC 300. Co-requisites: SW 385, 420. Enrollment limited to senior Social Work majors only.

***(M)SW 420 Field Instruction Seminar (3).** A course to give students in field instruction an opportunity to discuss and share agency experiences and to relate social work theory to direct field practice. Discussion in the Seminar moves from the level of personal experiences to abstraction. Co-requisites: SW 385, 410. Enrollment limited to Social Work majors only.

SW 440 Case Work Services for Children and Youth (3). General knowledge of the basic concepts of social work principles and practice as a method of helping children and adolescents with their social problems. Course acquaints students with the social agencies and the social welfare system and their roles in providing services to children and youth. The course also increases the student's understanding of the adolescent peer group, family relationships, emotional and physical development, and role. Prerequisite: admission to upper division.

SW 446 Intervention in Child Abuse and Neglect (3). Course designed to identify behaviors common to abusive and neglectful parents and children who have been abused. Specific emphasis is placed on the development of interventive skills for working with the families. Knowledge of the law in child abuse and neglect is one of the foci. Prerequisite: admission to upper division.

SW 460 Ethnic and Minority Concerns in Social Work (2). A course designed to emphasize the general method of social work practice with

ethnic minorities. Focus is on the African-American community and the issues of multiculturalism. Prerequisite: admission to upper division.

SW 470 Gerontological Social Work (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 is used in dealing with these aspects to enhance and enrich the understanding of the life process. Prerequisite: admission to upper division.

***(M)SW 490 Senior Seminar in Social Work (1).** A course designed to: (1) initiate areas of interest through discussion; (2) emphasize new trends and contributions to the field; and (3) familiarize students with the various examinations and other techniques for gaining employment and admission to graduate school. Offered in spring semester only. Enrollment limited to Social Work majors only.

(M)SW 495, 495A Readings and Research (3, 3). Independent study and research under faculty guidance for students who desire to do special projects. Prerequisites: junior or senior standing and permission of instructor.

Sociology (SOC)

SOC 211 Introduction to Sociology (3). Introduction to sociology as a scientific discipline. Subject matter includes sociological concepts, sociological processes, and social institutions, including family and education. Course satisfies University social science requirement. Required of all Social Work and Sociology majors.

SOC 211H Honors Introduction to Sociology (3). Honors version of SOC 211. Enrollment limited to students in the University Honors Program.

SOC 230 Social Problems (3). A course which teaches students to assess critically social issues and problems which negatively affect institutions, groups, and individuals. The thrust is to discuss and analyze these issues and problems using the major theories in sociology.

SOC 240 Courtship and Marriage (3). A critical approach to problems of courtship, marriage, and the family, with emphasis on mate selection, marital roles and adjustment, economic problems, women and the family, and parent-child relationships.

SOC 300 Social Statistics (3). Introduction to elementary statistics, with emphasis on analysis and interpretation of social survey data. Required of all Social Work and Sociology majors.

SOC 305 Using the Computer in Social Sciences (3). A course designed to familiarize the student with equipment, programs, and procedures for processing and interpreting the large volumes of data used in the social sciences. Students are introduced to basic social science programming and to SPSS (Statistical Package for the Social Sciences). The course also supports Senior Project research. Both PCs and the University mainframe are employed.

SOC 310W Sex, Gender, and Social Interaction (3). An examination of the difference between sex as a biophysical attribute of human beings and gender as a set of normatively-assigned attributes; sources and interpretations of the differences between sex and gender; and the relationships among sex, gender, and the way human beings participate in social roles. A writing-intensive course.

SOC 320 Anthropology (3). The nature of culture and society. Focus is on concepts and theories relating to social structure, social organization, ecology, changes, and the role of the individual.

SOC 335 Sociology of Health (3). Examination of the social and psychological implications of illness from inception to termination. Materials are drawn from the relevant literature of the behavioral sciences that relate to health.

SOC 345 Cultural and Social Aspects of Health (3). A study of the effects of the social and cultural milieu on the level of health of the community, including the nature, accessibility, and availability of health care services. Prerequisites: HCA 202 and SOC 211.

SOC 350 Social Psychology (3). Analysis of the social act. Topics include socialization, symboling systems, social status and social role, personality, and small-group analysis and research.

SOC 355 Social Movements (3). Development, organization, and function of social movements, especially ideology, leadership, and organization of political, religious, and other types of social movements.

SOC 360 The Family (3). Development and change in the family as a social institution, examined through the use of cross-cultural materials. Topics include the development of family expectations and roles, cultural conditioning and learning, emotional interaction, mate selection, and family unity. Attention is paid to changes currently affecting the American family. Required of all Sociology majors.

SOC 370 Minority Group Problems (3). Examination of the problems, relationships, and adjustments of racial, cultural, and ethnic minorities. Emphasis is on the nature of these phenomena as they occur in the American social setting.

SOC 375 Sociology of Sports (3). Examination of social mobility, environmental adjustments, and problems of male and female athletes. Attention is paid to such factors as race, cultural background of ethnic groups, and other factors involved in apparent group superiority in some sports.

SOC 380 Industrial Sociology (3). The human relations of modern business and industrial organization, the interdependence of technological and social factors, and implications for the individual as employee and citizen.

SOC 385 Political Sociology (3). Sociological analysis of the American political system. Attention is given to the concept of power, elitist-pluralist controversy, end-of-ideology debate, and related topics.

SOC 395 Racism: A Sociological Analysis (3). In-depth analysis of the historical development and perpetuation of racism in the society and examination of the influences of racism on the social institutions within the black community.

SOC 400 Criminology (3). An examination of the problems of crime and criminals, the making of the criminal, the theories of crime and punishment, machinery employed in dealing with the criminal, penal and correctional institutions, and programs of correction. Case studies and visits to institutions serve as aids in enriching understanding. Prerequisite: admission to upper level.

SOC 410 Juvenile Delinquency (3). Examination of theories of juvenile delinquency, the problems, causes, punishment, and correction of the delinquent. The course considers the machinery employed in dealing with the delinquent. Visits to institutions are made available. Prerequisite: admission to upper level.

SOC 415 Sociology and the Future. (3). Methodologies for studying the future and their application to trends in population, organization, environment, technology, and the media. Alternative visions of the future are developed and evaluated. Prerequisite: admission to upper level.

SOC 420 Population Problems (3). Growth and change in the composition and distribution of population in the world and in the United States. The course studies basic demographic concepts, theories of population growth and decline, and population policies. Prerequisite: admission to upper level.

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, and the community. Designed to acquaint prospective teachers and majors in Sociology with the influences of social institutions upon the child's total development. Prerequisite: admission to upper level.

SOC 440 Rural Sociology (3). A cross-cultural examination of rural life in the past and the present, focusing on change and its processes. Prerequisite: admission to upper level.

SOC 445 Sociology of Religion (3). Interrelationship of society, culture, and religion. Prerequisite: admission to upper level.

SOC 451 Introduction to Social Research (3). Study of the theory and methods of social research. Topics include the formulation of hypotheses; techniques of collecting data, such as interviews, questionnaires, and surveys; and the computer analysis and interpretation of research data. Prerequisites: SOC 211 and 300 and admission to upper level. Required of all Sociology majors.

SOC 452 Senior Project (3). Designed to orient the student toward the systematic application of sociological knowledge and experience to a specific problem. The project-writing must be in one of the three following areas:

Option A Supervised content analysis involving a critical, systematic examination and survey of literature dealing with one or more social problems. The outline of the problem to be examined must be approved before initiating the analysis. Prerequisites: SOC 300 and 451.

Option B Supervised internship program in which students conduct social research in conjunction with local community agencies. The purpose is to provide field experience in research related to urban organizations. Prerequisites: SOC 300, 451, and 460.

Option C Supervised analytical project involving the critical examination of operations and functions of two or more community service agencies, private or public, for dealing with specific or multiple social problems within the framework of group dynamics; (2) survey of individuals' or groups' attitudes toward a social situation or problem. Research design must be developed and approved before project is initiated. Prerequisites: SOC 300 and 451.

SOC 452 is required of all Sociology majors. Prerequisite: admission to upper level.

SOC 460 Urban Sociology (3). Growth of urbanism throughout the world, including internal structure of the city, metropolitan areas, urban fringe and suburban areas, and analysis of social institutions in urban and metropolitan areas. Prerequisite: admission to upper level.

SOC 465 Complex Organizations (3). Structure and function of formal organizations and the interrelationships of organizational variables, such as power, authority, influence, efficiency, hierarchy, and stability. Prerequsite: admission to upper level.

SOC 470 Social Stratification (3). A study of social, sexual, and racial inequalities and their causes and consequences. Topics include class and ethnic ranking, discrimination, power, status, and social mobility in American society. Prerequisite: admission to upper level.

SOC 475 Introduction to Medical Sociology (3). A survey of the major concerns of medical sociology and social psychiatry. Emphasis is placed on such topics as distribution of disease in society, the organization of the health professions, social change and health care, death and dying, stress and disease, and social factors affecting health services and their utilization. Prerequisite: admission to upper level.

SOC 480 Collective Behavior (3). Analysis of a wide variety of collective groupings and movements, including their origin, organization, membership, leadership, and dissolution. Course includes analysis of such social phenomena as audiences, publics, crowds, mobs, fads and fashions, and mass movements such as social unrest and reform. Prerequisite: admission to upper level.

SOC 490 Sociological Thought (3). An introductory survey of the development of the field of sociology during the nineteenth and early twentieth centuries. Major emphasis is placed on the intellectual traditions which gave rise to sociology as a separate discipline. Theorists include Comte, Marx, Weber, Durkheim, and others. Prerequisites: 12 hours of sociology or permission of instructor. Required of all Sociology majors. Prerequisite: admission to upper level.

SOC 491 Sociological Theory (3). A survey and analysis of the development of sociological theory in the twentieth century, with emphases on theory construction and theory in American sociology. Prerequisite: admission to upper level.

SOC 492 Black Thought: Social Theory I (3). Introductory theory course for students of all disciplines. Course deals with black thought and social theory from ancient to contemporary times. Provides knowledge of the contributions of black thinkers and theoreticians to sociological thought.

SOC 493 Black Thought: Social Theory II (3). A continuation on SOC 492, an introductory theory course for students of all disciplines. Course deals with black thought and social theory from ancient to contemporary times. Provides knowledge of the contributions of black thinkers and theoreticians to sociological thought.

SOC 495, 495A, 495B, 495C, 495D Independent Studies and Reading (3, 3, 3, 3, 3). Courses designed to allow students to work independently or in groups on topics of special interest not covered in depth in course offerings. Work may be done in a tutorial relationship with an individual faculty member or in a seminar. Prerequisites: admission to upper level and permission of instructor.

Anthropology (ANTH)

ANTH 210 Human Prehistory (3). Introduction to the prehistory of man—findings and methods with special attention to the biological and cultural development of man up to the beginning of writing.

ANTH 230 Introduction to Cultural Anthropology (3). The nature of culture and society. Content includes concepts and theories of social structure, social organization, ecology, change, and the role of the individual. Course may be used to satisfy the University requirement in social science.

ANTH 235 Principles of Cultural Anthropology (3). Basic concepts and objectives in study of culture, including the range of cultural phenomena and approaches to its study. Prerequisite: ANTH 230. Formerly ANTH 330.

ANTH 310 Comparative Social Structures (3). Principles of organization of persons into kinship, political, ritual, and other groups. Course includes analysis of rights and duties of persons according to institutional context. Prerequisite: ANTH 230.

ANTH 340 Religion of Primitive Peoples (3). Religions of non-literate peoples, including the place of religion in their social and cultural systems.

ANTH 380 Language and Culture (3). Relationship between linguistic categories and patterns of culture. Prerequisite: ANTH 230.

ANTH 400W Special Topics (3). Student- or faculty-generated course. Scope of subject matter is determined by students and instructor. Prerequisites: admission to upper level and permission of instructor. A writing-intensive course.

ANTH 410 Indians of the Southwest United States (3). Survey of Southwestern Indian cultures with emphasis on Pueblo society. Course examines the lifeways of Southwestern Indians before and after European contact. Prerequisites: admission to upper level and ANTH 230 or consent of instructor.

ANTH 455 Indians of the Southeast United States (3). Survey of Southeastern Indian cultures, with emphasis on aboriginal adjustment to environment and lifeways of Southeastern Americans prior to Euro-American contact. Prerequisites: admission to upper level and ANTH 230 or permission of instructor.

THE COLLEGE OF BUSINESS

Tilden Curry, Ph.D., Dean
Avon Williams Campus

GENERAL STATEMENT

Vision

Our vision is to be broadly recognized for the high quality of our academic program, graduates that compete successfully in the global marketplace, a strong teaching and research faculty, and important outreach services to the business community.

Mission

Our mission is to provide an academic program of overall high quality with a value added approach to student learning and a synergistic combination of teaching, research and service focused on contemporary business operations and small business development.

The mission is guided by an appreciation of the institutional history of Tennessee State University and the obligations of a state university located in the heart of a growth oriented and economically vibrant metropolitan area. This calls for the College to serve qualified students from a broad spectrum of society, to offer an appropriate array of sound baccalaureate and graduate degree programs and to develop as one of the engines of economic development for its urban region.

Instruction

The strong credentials of the full-time faculty, tenured or tenure-track, are exemplified by the fact that 100% hold a doctoral degree and the majority have practical business experience. Instruction is further strengthened by average class sizes of approximately thirty students. The instructional program is designed to provide both traditional and innovative teaching approaches, and the integration of business ethics, international business, and computer applications throughout the curriculum.

Research

The responsibility of each faculty member is to remain current in his or her academic field and to contribute to its advancement. The College of Business has a strong overall record in research productivity. Support for mission related research specifically as related to urban business and economic development issues, is provided through the Office of Economic Research.

The College has two approved Chairs of Excellence. The Frist Chair of Excellence in Business provides impetus for entrepreneurial research, activities and alliances in the community. The TSU Chair of Excellence in Banking and Financial Services, scheduled to be filled by fall 2003, will serve as a catalyst for enhancing the College's curriculum in the area of banking and financial services. The Chair will also strengthen alliances with the banking and financial services community.

Public Service

Public Service has been a traditional strength of the College of Business. Services to the business community are provided through the:

Management Development Institute — Provides relevant programs of high quality to managers in the Nashville area. The Institute was created through an endowment from Aladdin Industries.

Nashville Business Incubation Center — Entrepreneurs are provided below market rental rates within the Incubation Center for up to five years, as well as managerial and administrative support. The Center is the result of collaborative efforts between TVA, EDA, TSU, and Growth Enterprises Nashville, Inc.

Small Business Development Center — Provides one-on-one business counseling, as well as workshops and seminars, for several hundred small business clients each year. An extensive resource center, formerly known as the Small Business Resource Center of the Bank of America in Nashville, is an operational unit of the SBDC.

Office of International Business Programs — Strengthens the international dimension of the College of Business through establishing linkages with foreign institutions, international lecture series, student internships and study abroad opportunities, as well as curricula enhancements. Currently linkages with L'viv Institute of Management in the Ukraine and the Malawi Institute of Management, together with the Windows onto the World Lecture Series, are particularly noteworthy.

Women's Institute for Successful Entrepreneurship — Especially addresses the needs of women who have started and grown their firms to a significant level of success and desire to acquire skills and knowledge to further advance their businesses.

Additionally, business majors share their growing knowledge of the business world by providing community service through:

Junior Achievement — Through hands-on activities, TSU students, faculty and staff help elementary school children better understand the relationship between what they learn in school and their successful participation in our economy.

Students in Free Enterprise (SIFE) — Involves the community in the free enterprise system through public awareness campaigns and classroom activities with school-age children.

Student Small Business Consulting Services — Senior and junior level students enrolled in MG 324 and 325 form teams to provide in-depth research and insight pertaining to the specific concerns of the small business owner.

ACCREDITATION

The College of Business is accredited at both the undergraduate and graduate levels by the prestigious AACSB-The International Association of Management Education.

ADVISEMENT

General advising in the College of Business is available Monday through Friday in two advisement centers, Avon Williams Campus, Suite H-1, (615) 963-7138 and Main Campus, Holland Hall, Room 103, (615) 963-5145. It is recommended that students visit one of these offices each semester to ensure that they are informed about current requirements and procedures. Students desiring career and academic advisement should contact the department appropriate to their major for the assigned faculty advisor. (A student handbook is available as a source of information.)

The College of Business Student Development Center (SDC), located in Holland Hall on the Main Campus, is established to enhance academic achievement and career success for business majors. The Center maintains a hands-on approach with students and guides them through the matriculation process. The SDC provides easy access to information about College of Business policies, internships, career opportunities, professional development and student organizations. The Center also produces the College of Business Student Handbook, a guide to College of Business policies and matriculation requirements.

STUDENT ORGANIZATIONS

The College of Business encourages its students to participate in extracurricular activities. To complement the total educational experience and to provide leadership opportunities, the following business student organizations are available: Beta Gamma Sigma; National Honor Society in Business; The Accounting Club; Advertising Club; Association of Information Technology Professionals; Phi Gamma Nu; Phi Beta Lambda; Society for Human Resource Management; The National Association of Black Accountants; The Finance Investment Club; and Students in Free Enterprise. For information on these professional organizations, contact the Student Development Center at (615) 963-5145 in the College of Business located on the Main Campus in Holland Hall, Room 103.

SCHOLARSHIPS

A limited number of scholarships and academic awards are available for College of Business majors. The awards are based on academic excellence, civic achievements, course of study or other specific criteria developed by the sponsor. The scholarships and awards are sponsored by business, industry, individuals and professional organizations. For more information and/or applications, contact Ms. Mildred Walters at (615) 963-7137 in the Office of Public Service, Avon Williams Campus, Room K-5.

RESOURCES

In a broad sense, the entire business community of Nashville offers an ideal laboratory for student development. The College of Business is situated in the heart of downtown Nashville where faculty and students alike have ready access to sources of business and government information and relationships. Special resources of the College of Business of particular interest to undergraduate students are:

Accounting CPA Exam Tutorial

Office of Business and Economic Research

Microcomputer Labs

Frist Chair of Excellence in Business

Networking Lab

Chair of Excellence in Banking and Financial Services

Database Lab

Hassan Adamu Distinguished Professorship

Small Business Development Center

Student Development Center

Statistical Tutorial

Nashville Business Incubation Center

Office of International Business Programs

TEACHING LICENSURE

Business majors who wish to become certified to teach business and data processing courses in grades 7 through 12 may pursue their BBA degree with a Business Information Systems Education concentration. Certification requirements are taken in addition to BBA requirements. Admission and retention procedures for teacher education appear under the Department of Business Information Systems and under the College of Education section of this catalog.

MAJORS IN BUSINESS

Four undergraduate majors are offered in the College of Business. The curriculum for each of these majors (see below) is presented under the section describing each of the four academic departments of the College of Business.

Departments	Majors	Degrees
Accounting & Business Law	Accounting	BBA
Business Administration	Business Administration*	BBA
Business Information Systems	Business Information Systems**	BBA
Economics and Finance	Economics and Finance	BBA

*Within the major of Business Administration, a student may concentrate in any one of the four following areas: General Business, Management, Marketing, or Real Estate Urban Development.

**Within the major of Business Information Systems, a student may follow the industry or teacher education concentration.

MINORS IN BUSINESS

The minor affords a traditional, well-accepted way to recognize that a student has completed a significant body of work outside the major field. Students may wish to follow up on long time personal interests, to satisfy intellectual curiosity generated by introductory courses, to enrich their undergraduate experience, to differentiate their individual program of study from those of fellow students, or to enhance their opportunities for employment or for admission to graduate or professional schools.

College of Business students pursuing the Bachelor of Business Administration degree are encouraged to obtain minors offered by the College of Business or other colleges. Students outside the College of Business may apply for a minor in Business Administration; however, the college offering the major is responsible for graduation certification.

General Business Minor

For the General Business minor, students need to select at least 18 hours of business courses which meet their objectives for taking the minor. If courses selected have prerequisites, these must be satisfied. Only juniors and seniors may enroll in 300 or 400 level business courses. AC 211, ECON 2010, and MG 301 should be included in all business minors. Other suggested courses for a minor in general business are listed below:

BIS 323	3
BISE 315	3
MG 403 or BISE 430	3
MK 301	3

Minor in Entrepreneurship

A proposal for a business minor in Entrepreneurship is under review for approval. It is designed for students who desire a course of study in the creation and operation of small business enterprises. A major focus will be on the creation and development of new business ideas, innovation and the management of such enterprises.

Graduate Degree Preparation

The following courses are useful in preparing for a graduate business degree. For more information, see the graduate catalog of the school of your choice.

Accounting Principles	6	AC 211, 212
Business Finance	3	FN 330
Economic Principles	6	ECON 2010, EC 212
Information Systems	6	BIS 215, BIS 323
Legal Environment	3	BL 300
Mgt. & Org. Behavior	3	MG 301
Marketing Principles	3	MK 301
Quantitative Methods	3	QM 201

International Business Minor

A minor is available in International Business. It is open to both business and non-business majors. This minor is designed to provide a broad interdisciplinary background of the cultural, social, economic, political, and business environment of the world. The purpose is to prepare more globally competent men and women to function productively in the world economy. The specific curriculum requirements are listed below:

1. Required Courses	
EC 410 International Economics	3
MG 480 Internship/International	3
2. Guided Electives (Business Majors, Choose 3	
Non-business Majors, Choose 4)	
MG 412 International Business Management	
MK 435 International Marketing	3
FN 470 International Finance	3
AC 425 International Accounting	3
EC 415 Economic Development	3
3. General Electives for Business Majors (Choose 1)	
PISI 360 Intro.To Comparative Govt. & Politics	3
PISI 393 Political Economy	3
PISI 363 International Relations	3
4. Area Studies (Consent of Advisor Needed)	3
Total	21

5. Other Requirements
   a. All students are required to complete two years of college language studies. Students proficient in a foreign language may test out of this requirement through an exam arranged by the Department of Languages, Literature and Philosophy.
   b. Only students with an overall GPA of 2.5 at the end of the sophomore year, as well as in ECON 2010-EC 212 and AC 211-212, will be allowed to declare a minor in International Business.
   c. All students are expected to meet the prerequisites for each course taken. Any exceptions, based on the background of any given student, must be approved in writing by an advisor in the Office of International Business Programs and a student's department head.
   d. Business majors may apply restricted and unrestricted business electives in the major area towards satisfying the International Business minor.

ADMISSION, RETENTION AND GRADUATION

Students pursuing the Bachelor of Business Administration (BBA) degree must make application to the College of Business through their respective department head for admission to the Upper Division. Admission is required in order to receive degree credit for 300 and 400 level business courses.

1. The College's policy is not to recognize for degree purposes credits earned in upper division (300 and 400 level business courses) prior to a student's Tentative or Full Admission to the Upper Division of the College of Business. It is the student's responsibility to have his/her status verified before registering for upper division business courses.

2. Administrative Withdrawal. A student may be administratively withdrawn from any College of Business course when the student is not eligible to be enrolled in the course. A student shall, upon request, be accorded an appropriate hearing prior to a final decision concerning his or her continued enrollment in the course at issue.

3. Transfer students should consult their department head regarding core course requirements if they are transferring in business courses or to determine the acceptability of upper division business courses earned at other institutions.
4. a. Up to 12 hours of approved upper division business credits may be used for degree purposes by students classified as undergraduate special students. However, all upper division business credits earned prior to becoming a special student count towards the 12 hour maximum. These students must meet prerequisites for the courses in which they wish to enroll. All upper division business credits earned as a special student (up to the 12 hour maximum) may be counted upon becoming a degree seeking student.
   b. A maximum of 36 total semester hours (lower division plus upper division credits) may be completed at TSU as a special student. All college course credits earned prior to becoming a special student count towards the 36 hour maximum. All course credits earned as a special student (up to the 36 hour maximum) may be counted upon becoming a degree seeking student.

Tentative and Full Admission to the College of Business

Business majors who have completed all except nine hours of the required lower division courses (100 and 200 level courses) with a cumulative GPA of at least 2.00 and a lower division business core GPA of at least 2.00, may apply for tentative admission to the upper division of the College Business. Admission to the upper division is required to gain approval to take 300 and 400 level courses. The lower division core is made up of the following courses: EC 101, QM 201, ECON 2010, EC 212, AC 211, AC 212, and BIS 215. Eligible students will be granted tentative or full admission. Others will be informed in writing what requirements must be met for admission.

Tentative admission is valid only for the semester for which it is issued. While holding tentative admission, students must be enrolled in all remaining required lower division courses. If all lower division course requirements are not successfully completed the first semester of tentative admission, students must reapply for tentative admission. The maximum number of upper division business credits that can be approved for degree purposes while a student holds tentative admission is 24 hours.

To gain full admission to the College of Business, all lower division requirements must be successfully completed with a GPA of 2.00 or higher for both the lower division core courses and for all lower division required courses.

Credit Hours Required for Graduation

Credit hours required for the Bachelor of Business Administration degree total a minimum of 129 semester hours for all College of Business majors and concentrations except for the BISE-Teaching concentration which requires a minimum of 131 semester hours.

Degree Credit for Business Internship, Independent Study, and Practicum Courses

A maximum of six semester hours credit earned in a business internship, independent study and practicum (combined) may be applied to degree requirements. Approval of the appropriate department head is required to enroll in internship and independent study courses. These courses are AC 480, AC 499, BIS 480, BIS 490, BIS 499, EC 498, EC 499, MG 480, MG 481, MG 499.

Specific College of Business Graduation Requirements

1. Business majors must maintain an overall TSU cumulative GPA of at least 2.00 (not including remedial and developmental courses), a GPA of at least 2.00 in the lower division business core courses, a GPA of at least 2.00 in the upper division business core, and a GPA of at least 2.00 in the eleven courses (33 hrs) being used to satisfy the major field plus upper division business elective course requirements.

2. Business majors may not have more than two D's in the eleven courses being used to satisfy the major field plus upper division business elective course requirements. D's and F's in additional (extra) elective courses will not count toward determining whether the student is in violation of the 2-D policy.

3. At least 50 percent of the business credit hours required for the business degree must be earned at Tennessee State University, including MG 450 (Business Strategy).

4. The general education component of each student's undergraduate curriculum shall comprise at least 50 percent of the student's four-year program.

5. Graduation applications will be received only from students who have been admitted to the upper division in the College of Business and have at least an overall 2.0 g.p.a.

6. All business majors are required to review degree requirements with the Office of Undergraduate Studies at least one full semester (before the end of the registration period) prior to the semester in which graduation is anticipated. Only students who are eligible will be permitted to remain enrolled in MG 450 (Business Strategy). It is the responsibility of the student to schedule an appointment for his/her senior transcript review.

7. Business majors must complete 24 of their final 30 hours in residence at TSU.

8. Students are to participate in performance evaluation measures (taking various tests, responding to inquiries) designated by the College or University.

9. All business degree electives taken in the junior and senior years must be 300 or 400 level courses.

Transfer of Credit Policy

1. The specific credit for work done at other institutions which will apply toward the BBA degree is determined by the Office of Admissions and Records and the appropriate department head in the College of Business. Allowance of transfer credit by the Office of Admissions and Records does not mean necessarily that all of such credit will be applied toward the BBA degree.
2. a. The College of Business reserves the right to test the proficiency of any student in course work transferred from other colleges or universities and the right to disallow transfer credit in such course work if the student cannot demonstrate acceptable proficiency.
   b. Courses transferred from community and junior colleges may not be used to meet 300/400 level business course requirements unless they are validated either by (1) the successful completion of an acceptable CLEP or DANTES examination or (2) the successful completion of a departmental examination.

3. Transient Status: BBA students who wish to attend another institution as "transient" or "visiting" students to take upper division business courses for degree credit must get written approval in advance from their department head. Approval is not automatic. MG 450 (Business Strategy) must be taken at TSU.

4. Re-enrollment after Transferring Elsewhere: BBA students who enroll at another institution as regular students (as opposed to transient or visiting status) will be considered as having transferred to that institution. If such students later re-enroll in the BBA program, regardless of the length of the absence, they will be subject to the curricular degree requirements in effect at the time of their re-enrollment. Such students are encouraged to discuss their transfer to the other institution with the Office of Undergraduate Studies in advance if they intend to apply this work towards the BBA degree.

5. The College of Business subscribes to the philosophy that a student's undergraduate program below the junior year should include no advanced, professional level courses. This philosophy is based on the conviction that the value derived from these advanced courses is materially enhanced when based upon a sound foundation in the liberal arts.

Requirements for the BBA Degree

General Education

MG 100	Business Orientation	1
ENGL 1010-1020	Freshman English	6
ENGL 2010	Literature	3
ENGL 2020 or Humanities	Literature/Humanities	3
HIST 2010-2020	American History	6
MATH 1010,1030	College Algebra, Basic Calculus	6
NAT. SCIENCE	Natural Science	6
NAT. SCI. LAB	Natural Science Lab	0
HUMANITIES	Humanities	3
HPER/AERO/BAND	(Taken as two 1-hour courses)	2
Lower Division Non-Business Electives*		9
Upper Division Non-Business Electives*		9

*Nine hours in freshman and sophomore years (100/200 level); 9 hours in junior and senior years (300/400 level); all 18 hours must consist of non-business courses.

Business Core

The Business Core, which consists of 42 hours, is common to all BBA degree students. The freshman and sophomore years are common for all students majoring in Accounting, Business Administration, Business Information Systems and Economic/Finance. A four–year curriculum pattern for BISE majors appears under the Department of Business Information Systems.

AC 211-212	Principles of Accounting	6
BIS 215	Microcomputer Applications	3
BIS 323	Management Information Systems	3
BISE 315	Business Communication	3
BL 300	Legal Environment of Business	3
EC 101	Business Principles	3
ECON 2010-EC 212	Principles of Economics	6
FN 330	Business Finance	3
MG 301	Mgt. Organization Theory and Behavior	3
MG 450*	Business Strategy	3
MK 301	Basic Marketing	3
QM 201	Intro. to Statistical Analysis	3

* MG 450 may not be taken until all other business lower division and upper division core courses have been satisfactorily completed.

Major Requirements

All BBA students must complete a minimum of 33 hours of 300/400 level business courses to constitute their major as indicated on the following pages.

Freshman and Sophomore Years (All Accounting, Business Information Systems*, Business Administration, and Economics/Finance Majors)

*Students following the teacher education concentration should follow the four-year curriculum frame-work for BISE teacher certification.

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
MG 100	1		
ENGL 1010	3	ENGL 1020	3
MATH 1010	3	MATH 1030	3
NAT. SCI. W/LAB	3	NAT. SCI. WITH LAB	3
HIST 2010	3	HIST 2020	3
HPER/AERO/BAND	1	HPER/AERO/BAND	1
EC 101	3	NON-BUSINESS ELEC. (LD)	3
	17		16

SOPHOMORE YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
AC 211	3	AC 212	3
BIS 215	3	EC 212	3
ECON 2010	3	ENGL 2020/Humanities	3
ENGL 2010	3	NON-BUSINESS ELEC. (LD)	3
HUMANITIES	3	QM 201	3
NON-BUSINESS ELEC. (LD)	3		
	18		15

Department of Accounting and Business Law

G. R. Cluskey, Jr.
DBA, CPA, Head
K-18, Avon Williams Campus

Faculty: R. Banham, B. Cluskey, R. Hayes, L. Laska, K. Lea, R. Reynolds, H. HassabElnaby

General Statement: Consistent with the missions of Tennessee State University and the College of Business, the mission of the Department of Accounting and Business Law is student learning – to attract, retain, educate, and then graduate qualified students, to offer a curriculum that satisfies the educational content requirements for CPA licensing in the State of Tennessee, to ensure a positive atmosphere for student matriculation, to deliver a quality educational opportunity that prepares graduates for entry into professional and managerial careers at the local, regional, and national level, and to provide students with a well-rounded education that improves their lives and the communities in which they live.

Philosophy: The Department of Accounting & Business Law prepares students to meet the challenges of public, government, commercial, and not-for-profit accounting as part of a state supported, urban and comprehensive university. Graduates should be productive, act ethically, and be responsible citizens in the community. The graduate program further enhances a professional accountant's career. We believe that professional interaction among faculty and students furthers the education of students, that experiential opportunities are a vital part of the accounting education experience, and that academic and professional advising is one of the important functions of faculty. Students, faculty, and staff should treat one another with respect; and all members of the Department should display high standards of honor, integrity, and responsibility.

Major in Accounting

Major in Accounting: 129 semester hours for the BBA degree.

Admission, Retention, and Graduation:

1. Only students with an overall University GPA of 2.5, having full admission to the College of Business, and having completed the Rising Junior Exam will be allowed to declare a major in Accounting for the Public or Industry Tracks (2.0 GPA is required for General Track).

2. Students must earn at least a grade of "C" in each course used to complete the Accounting Major.

3. See College of Business section on Admission, Retention, and Graduation for additional requirements.

Major: (In addition to courses listed below, see College of Business Freshman and Sophomore years, and Business Core.) Admission to the upper division of the College of Business is required to receive degree credit for 300 and 400 level business courses. Admission to the University does not constitute admission to the College of Business. See section on Admission, Retention, and Graduation for admissions procedure.

Requirements for Professional Certification: The bachelor's degree provides the educational background for many entry-level accounting positions. Students with this degree will have the necessary educational requirements for the CMA and CIA exams. Students will also have earned at least 130 hours of the 150 hours needed to sit for the CPA exam in those states requiring 150 credit hours. Students may earn the remaining hours needed for the CPA exam by obtaining a Master of Science in Accounting degree or other graduate degree, such as a Master of Business Administration, or by taking additional undergraduate classes. Students should consult with their advisors and their State Boards of Accountancy for the exact requirements. In Tennessee graduate course hours count 150% toward meeting the 150 hour requirement.

Internship and Co-op Programs: Opportunities are available for qualified students to obtain paid on-the-job experience in either industrial or public accounting through internship and Co-op programs. The programs involve multiple work experiences and are generally started during the student's sophomore or junior year. Students interested in the programs should contact the College of Business Assistant Director for Placement as early as possible.

DEPARTMENT OF ACCOUNTING & BUSINESS LAW UNDERGRADUATE CURRICULUM

GENERAL EDUCATION		**66**
BUSINESS CORE		**30**
ACCOUNTING MAJOR CORE		**24**
AC 311	Intermediate I	3
AC 312	Intermediate II	3
AC 313	Intermediate III	3
AC 314	Cost AC	3
AC 307	Federal Income Tax I	3
AC 320	AC Information Systems	3
AC 423	Auditing Theory	3
BL 323	Business Law I	3

(Accounting majors must take 9 hours from one of the following three tracks.)

Students have the option of three tracks within the accounting major. Two of the three tracks are designed to provide the student with the basic educational background requirements for professional certification. The first track focuses the student's education on public accounting and toward becoming a Certified Public Accountant (CPA). The second track focuses the student's education on industry accounting and toward becoming a Certified Management Accountant (CMA) and/or Certified Internal Auditor (CIA). The third track allows the student the freedom to design his/her major to meet other career objectives in accounting. NOTE: In order to receive the maximum benefit from each of the tracks, students should consult with the Accounting Faculty on all upper-division electives.

ACCOUNTING TRACKS

I.	Public Accounting Track (Students need 150 college semester hours to take the CPA Exam in Tennessee.)		9
	AC 401	Advanced AC I	3
	AC 403	Governmental/NFP	3
	BL 324	Business Law II	3
II.	Industry Track		
	AC 419	Advanced Cost	3
	AC 416	Internal Auditing	3
	AC/Business Elective		3
III.	General Accounting Track		
	AC 403	Governmental/NFP	3
	AC 417	Federal Income Tax II	3
	AC/Business Elective		3
	TOTAL		129

Accounting Electives

AC 303*	Principles NFP/Fund	3
AC 305*	Financial Information for Entrepreneurial Ventures	3
AC 401	Advanced Accounting	3
AC 403	Governmental/NFP AC	3
AC 416	Internal Auditing	3
AC 417	Federal Income Tax II	3
AC 419	Advanced Cost	3
AC 422	Accounting Theory	3
AC 424	Advanced Auditing	3
AC 425	International Accounting	3
AC 480	Accounting Internship	3
AC 495	Accounting Topics	1-3
AC 499	Independent Study	1-3

*Non-Accounting Majors

NON-BUSINESS ELECTIVES

100/200 level	Freshman/Sophomore years	9
300/400 level	Junior/Senior years	9

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BIS 323	3	FN 330	3
MG 301	3	BL 300	3
MK 301	3	AC 312	3
AC 311	3	AC 320	3
AC 314	3	Non-Bus. Elective	3
BISE 315	3		
	18		15

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BL 323	3	AC Track Course*	3
AC Track Course*	3	AC 423	3
AC 307	3	MG 450	3
AC 313	3	AC Track Course*	3
Non-Bus Elective	3	Non-Bus Elective	3
	15		15

*Students should consult with Accounting Faculty Advisor before selecting the major track.

Department of Business Administration

Festus O. Olorunniwo, Ph.D., Head
K-6, Avon Williams Campus

Faculty: L. Carr, T. Curry, P. Flott, M. Hsu, M. Lownes-Jackson, A. Miller, L. Miller, B. Pennington, S. Thach, and B. Tucker.

General Statement: Consistent with the missions of Tennessee State University and the College of Business, the Department of Business Administration, by intergrating instructional technology in the classroom, offers practical and innovative graduate and undergraduate programs, which expose students to current information concerning the study and practice of business. This information aids students in developing managerial skills and responsible ethical alertness that differentiates them in the marketplace, advance their careers, and enable them to compete effectively in the world of business.

Program Objectives: The curriculum in business administration provides students with general education requirements, core requirements in the various disciplines of business, and strong background in the areas of management, marketing, or real estate and urban development. The Department of Business Administration offers the BBA in general business as well as concentrations in management, marketing, and real estate and urban development.

Admission, Retention, and Graduation: See College of Business section on Admission, Retention, and Graduation.

Major in Business Administration with Concentration in General Business

Concentration in General Business, 129 hours required for the BBA degree.

General Education Requirements: See College of Business General Education Requirements.

Major: This concentration is designed for students who prefer to acquire broad undergraduate training in business, rather than specializing in a specific area.

Concentration

MG 302 - Operations Management	3
RE 313 - Principles of Real Estate and Urban Development	3

General Business Electives: 21 hours of 300 and 400 level courses from the following disciplines: Accounting, Business Law, Economics, Finance, Management, Business Information Systems, Marketing, Real Estate, Quantitative Methods. 21
Distribution is not restricted.

Guided Electives

Management	3
Economics or Finance	3

General Electives (Non-Business)

100/200 level Freshman/Sophomore years	9
300/400 level Junior/Senior years	9

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BISE 315	3	MG 302	3
BL 300	3	BIS 323	3
MG 301	3	*GENERAL BUS. ELECTIVES	6
MK 301	3	FN 330	3
RE 313	3		
NON-BUS. ELECT (UD)	3		
	18		15

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
EC or FN ELECTIVE	3	*GENERAL BUS. ELECTIVES	6
*GENERAL BUS. ELEC.	9	NON-BUS. ELECTIVES (UD)	6
MG ELECTIVE	3	MG 450	3
	15		15

*General Business majors elect 21 hours of 300/400 level business courses-according to their career objectives-to constitute their major.

Major in Business Administration with Concentration in Management

Concentration in Management, 129 hours required for the BBA degree.

General Education Requirements: See College of Business General Education Requirements.

General Statement: The management program provides students with the opportunity for professional preparation applicable to the management of private and public sector organizations. Examples of employment areas are: administration management, personnel administration, industrial relations, production management, and other assignments in small, medium, and large businesses, as well as government agencies, foundations, hospitals, and other service organizations.

Concentration

MG 302	Operations Management	3
RE 313	Principles of Real Estate and Urban Development	3
MG 404 or MG 405	Organization Theory or Organization Behavior	3
MG Electives	Electives	15

Guided Electives

Economics or Finance	3
Business	6

General Electives (Non-Business)

100/200 level Freshman/Sophomore years	9
300/400 level Junior/Senior years	9

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BISE 315	3	MG 302	3
BL 300	3	BUSINESS ELECTIVES	6
MG 301	3	FN 330	3
MK 301	3	MG ELECTIVE	3
BIS 323	3		
RE 313	3		
	15		18

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
MG ELECTIVES	6	EC or FN ELECTIVE	3
MG 404 or 405	3	MG ELECTIVES	6
NON-BUS. ELECTIVES (UD)	6	MG 450	3
		NON-BUS. ELECTIVE (UD)	3
	15		15

Major in Business Administration with Concentration in Marketing

Concentration in Marketing: 129 hours required for the BBA degree.

General Education Requirements: See College of Business General Education Requirements.

General Statement: Marketing includes all activities concerned with ascertaining and satisfying the needs and desires of individual and organizational buyers/consumers. It is consequently a function of prime importance in all forms of organizations. The marketing program is designed to facilitate both entry into marketing and long-term professional advancement. Course emphasis is placed on marketing management.

Those who choose marketing as a career will be involved in product development and improvement, consumer research, pricing, promotion, sales, and distribution. Professional careers are open to marketing students in advertising firms, research organizations, retail and wholesale firms, and other service organizations, as well as a wide range of manufacturing, service and non-profit groups devoted to supplying goods or services to meet the needs of the customer/buyer.

Students who choose a marketing concentration will have the option of three tracks, namely – Consumer Marketing, Organizational Marketing, and Logistic Marketing. Consumer Marketing focuses on consumer behavior and purchasing characteristics; Organizational Marketing focuses on business to business and industrial purchasing; and Logistic Marketing deals with distribution of goods throughout the supply chain.

Concentration (all tracks)

AC 314	Cost Accounting	3
MK 330	Applied Marketing Research	3
MK 455	Marketing Strategies	3

Track I: Consumer Marketing

MK 320	Sales Management	3
MK 405	Consumer Behavior	3
MK 415	Promotional Management	3
MK 425	Retailing Management	3
MG Elective		3

Plus any two courses from the following:

MK 340	Environmental Issues in Marketing	3
MK 435	International Marketing	3
MK 450	Service and Nonprofit Marketing	3

Track II: Organization Marketing

MG 302	Operations Management	3
MK 320	Sales Management	3
MK 350	E-Marketing	3
MK 410	Organizational Marketing Management	3
MK 420	Distribution Management	3

Plus any two courses from the following:

MK 340	Environmental Issues in Marketing	3
MK 435	International Marketing	3
MK 450	Service and Nonprofit Marketing	3

Track III: Logistics Marketing

MG 302	Operations Management	3
MK 350	E-Marketing	3
MK 402	Quality Issues in Marketing	3
MK 410	Organizational Marketing Management	3
MK 420	Distribution Management	3
MK 430	Organizational Purchasing	3
MK 435	International Marketing	3

Guided Electives (all tracks)

Business	6
Economics or Finance	3

General Electives (Non-Business, all tracks)

100/200 level Freshman/Sophomore years	9
300/400 level Junior/Senior years	9

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BISE 315	3	MG 302 or MG ELECTIVE	3
MG 301	3	MK 330	3
BL 300	3	MK Track Courses*	6
MK 301	3	AC 314	3
BIS 323	3		
FN 330	3		
	18		15

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
EC or FN ELECTIVE	3	MK 455	3
MK Track Course*	3	MK Track Courses*	6
MK Track Course*	3	NON-BUS. ELECTIVE	3
NON-BUS. ELECTIVE (UD)	6	MG 450	3
	15		15

* Students should consult with Marketing faculty advisor or the Head of the department before selecting their tracks.

Major in Business Administration with Concentration in Real Estate and Urban Development

Concentration in Real Estate and Urban Development, 129 hours required for the BBA degree.

General Education Requirements: See College of Business General Education Requirements.

General Statement: The curriculum for the concentration in Real Estate and Urban Development is designed for those students who are interested in fields concerning the allocation of urban land resources; accordingly, students are trained for employment in both the private and public sectors. Fields of study include real estate brokerage, appraisal, law, finance, marketing, property management, land-use planning and development, and public and private policies applicable to real estate and urban development. The curriculum is structured to provide students with an understanding of (1) the specific activities involved in urban land development, (2) the forms of economic, social, physical, and legal services that arise from land use activities, (3) the optimum distribution of residential, commercial, industrial and other specialized land uses, (4) the activities in which real estate business people are engaged, and (5) public and private policies and actions that are designed to improve our urban environment.

Concentration

MG 302	Operations Management	3
RE 313	Real Estate Principles	3
RE 320	Urban Land Resource Analysis	3
RE	Electives	12

Guided Electives

Accounting	3
Business	6
Economics or Finance	3

General Electives (Non-Business)

100/200 Freshman/Sophomore years	9
300/400 Junior/Senior years	9

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BISE 315	3	MG 302	3
MG 301	3	RE 320	3
BL 300	3	BUSINESS ELECTIVE	3
MK 301	3	FN 330	3
RE 313	3	REAL ESTATE ELECTIVE	3
AC ELECTIVE	3		
	18		15

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BIS 323	3	BUSINESS ELECTIVE	3
EC or FN ELECTIVE	3	REAL ESTATE ELECTIVE	3
REAL ESTATE ELECTIVES	6	NON-BUSINESS ELECTIVES (UD)	6
NON-BUS. ELECTIVES (UD)	3	MG 450	3
	15		15

Department of Business Information Systems

James A. Ellzy, Ed.D., Head
H-4, Avon Williams Campus

Faculty: A. Bankhead, G. Marquis, G. Udo, A. Kamssu

General Statement: The BIS major is designed to prepare graduates of four-year collegiate programs for entry-level positions that involve the analysis, design, implementation, and evaluation of information technologies. It provides the foundation essential for progress in an information systems career path in business, industry, non-profit organizations or an educational setting. Since technology and business needs continue to change, the BIS major is a flexible program whereby students can pursue an emphasis in structured programming, office systems, networking, telecommunications, training, or certification to teach at the secondary level in the basic business/data processing area.

The next decade will involve continued explosive growth in the use of information technology, and the impact of this technology on organizations and markets will be even more profound. Every organization—including the Tennessee secondary schools—will need individuals who understand the value-added benefits of information technology and how technology can be utilized to enhance learning objectives.

Moreover, the major is designed to challenge the undergraduate to understand their dynamic role from both an organizational viewpoint and from the perspective of the needs of the individuals they support. Interpersonal skills, teamwork, communication skills, international awareness; and ethical considerations are developed and practiced throughout the course work.

Information on requirements for individual or group endorsements in business teacher education and admission to the teacher education program is available through the office of the Department Head.

Admission, Retention, and Graduation: See College of Business section on Admission, Retention, and Graduation.

General Education Requirements: See College of Business General Education Requirements.

Major: (In addition to courses listed below, see the College of Business Freshman and Sophomore years, and Business Core.) Admission to the College of Business is required to receive degree credit for 300 and 400 level business courses. Admission to the University does not constitute admission to the Upper Division of the College of Business. See section on Admission, Retention, and Graduation for admissions procedure.

Business Information Systems Major: 129 hours required for the **Business Information Systems-Industry Concentration** and 131 hours required for the **Business Information Systems-Teaching Concentration.**

BIS-Industry Concentration

Required Courses

BISE 335	Business Research and Report Writing	3
BIS 316	Business Application Development	3
BIS 326	Object-Oriented Programming	3
BIS 415	Database Systems	3
BIS 423	Analysis, Design, and Implementation	3
BIS 424	End User Computing Development	3
BIS 490	Practicum	3
		21

Guided Electives

BIS/BISE	Upper Division BIS/BISE Courses	6
	Business	
Electives	Any Upper Division Business Courses	6
		12

No credit is given for Special Topics or Internship courses taken outside the BIS Department.

General Electives (Non-Business, LD & UD)

100/200	Freshman/Sophomore years (Lower Division)	9
300/400	Junior/Senior years (Upper Division)	9
		18

In selecting 100/200 non-business electives, the department **highly** recommends that the BIS (industry concentration) student consider CS 211 and CS 212 or CS 211 and CS 240. These courses would not only strengthen the student's programming background but also allow more options, if you desire to enroll in additional upper division computer science offerings. (Course pre-requisites must be adhered.)

Business Information Systems Education (BISE) Concentration

Required Courses

BIS 316	Business Application Development	3
BIS 326	Object-Oriented Programming	3
BIS 436	PC Network Systems	3
BISE 335	Business Research & Report Writing	3
BISE 371	Instructional Strategies & Methods	
OR		
BIS 426	Training Strategies for BIS Professionals	3
BISE 472S	Student Teaching in BIS	12
		27

Guided Electives

No guided electives in BIS/BISE or in other business courses are available for the BISE-Teacher Concentration because of the need to incorporate the required education courses.

Restricted Electives (Non-Business)*

100/200 Freshman/Sophomore years	6
300/400 Junior/Senior years	20
	26

*The 6 hours of restricted non-business electives are EDCI 201 and PSY 242. The 20 hours of restricted non-business electives are PSY 312, EDCI 301, EDCI 387, EDSE 333, EDCI 400, EDRD 491 and EDCI 470A.

Business Information Systems Industry Concentration

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BIS 316	3	BIS 326	3
BIS 323	3	BISE 335	3
BISE 315	3	FN 330	3
BL 300	3	Business Elective	3
MG 301	3	MK 301	3
Non-Business Elective (UD)	3		
	18		15

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BIS 415	3	BIS 423	3
BIS 424	3	BIS 490	3
BIS/BISE Elective	3	MG 450	3
Business Elective	3	BIS/BISE Elective	3
Non-Business Elective (UD)	3	Non-Business Elective (UD)	3
	15		15

Guided Electives

Six hours of guided BIS/BISE electives may be selected from the following list for the BIS-Industry Concentration.

BIS 361	Introduction to Rational Databases
BIS 362	Rational Data Administration
BIS 425	Decision Support Systems
BIS 426	Training Strategies for BIS Professionals
BIS 430	Business Telecommunication
BIS 436	PC Network Systems
BIS 480	Internship
BIS 481/482	Seminar in Information Systems
BIS 499	Independent Study
BISE 340	Desktop Presentation Tools
BISE 400	Information and Media Management
BISE 430	Administrative Office Management

Four-year curriculum framework for the Business Information Systems Education (Teaching Concentration)

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
MG 100	1	ENGL 1020	3
Nat. Sci. with Lab	3	Math 11030	3
ENGL 1010	3	HIST 2020	3
HIST 2010	3	Nat. Sci. with Lab	3
MATH 1010	3	HPER/AERO/BAND	1
HPER/AERO/BAND	1		
Humanities	3	EC 101	3
	17		16

SOPHOMORE YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 2010	3	ENGL 2020/Humanities	3
AC 211	3	AC 212	3
ECON 2010	3	EC 212	3
EDCI 201	3	QM 201	3
BIS 215	3	PSY 242, 312	6
	15		18

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BISE 315	3	BL 300	3
MG 301	3	FN 330	3
BIS 316	3	EDCI 387	3
MK 301	3	BIS 326	3
EDAD 301	2	EDSE 333	3
BIS 323	3		
	17		15

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
BISE 335	3	EDCI 470A	3
BIS 436	3	BISE 472S	12
MG 450	3		
BISE 371	3		
EDCI 400	3		
EDRD 491	3		
	18		15

TEACHING LICENSURE WITH ENDORSEMENTS IN BUSINESS AND OFFICE EDUCATION—GRADES 7 - 12

Admission and retention requirements for the Teacher Education Program appear in the College of Education section of this catalog. All secondary admission and retention requirements, including Enhanced Student Teaching, are applicable to students seeking endorsements in business and office education.

All BISE students must complete *BISE 371, Instructional Strategies and Methods* or *BIS 426, Training Strategies for BIS Professionals*. Students should consult the teacher education advisor in the College of Business during their first semester of enrollment at the University.

ENDORSEMENTS

Students seeking licensure (secondary) with endorsements in business and office education are advised to follow the Business Information Systems Education (BISE) teaching concentration. All students must meet the requirements for the endorsement in basic business/accounting and data processing and may add endorsements in other areas, i.e., keyboarding:

Basic Business/Accounting. The business core required for the BBA degree satisfies all business content requirements for the basic business/accounting endorsement except knowledge of keyboarding.

Data Processing. A minimum of six semester hours of course work in data processing—must include at least one programming language. Some states required more hours to be certified in information systems. Hence, the requirement of 18 hours in BIS should adequately prepare the secondary business teacher for certification in most every state.

Office Technology. Students who choose a concentration in Business Information Systems Education need to check with a faculty advisor on the process of obtaining endorsement in this area.

Typewriting/Keyboarding. Students who desire this endorsement must complete the requirements for the basic business/accounting/data processing endorsement as well as BISE 121 (or the equivalent) or demonstrate proficiency in keyboarding.

ELIGIBILITY OF CERTIFIED PROFESSIONAL SECRETARIES FOR DEGREE CREDIT

Credit is available for certain courses at Tennessee State University for the passing of the complete CPS examination. Before this credit can be granted, the CPS must have already received credit in at least 9 hours at Tennessee State University. Credit for the following courses will be recorded as "EP" (examination passed) if credit has not already been received for such courses:

AC 211	3
BISE 430	3
BL 323	3
EC 101	3
ECON 2010	3
BISE 121	3
TOTAL HOURS	18

Upon receipt of formal application and payment of an appropriate fee, verification will be made of CPS status and credits already received from Tennessee State University.

This acceptance of the CPS examination is subject to change (1) whenever the content of the CPS examination is revised so that it does not correspond with the content of the courses now designated for credit or (2) if the courses at Tennessee State University are revised substantially so as to achieve the same result.

Department of Economics and Finance

G. Bruce Hartmann, Ph.D., Head and M.B.A. Coordinator K-24, Avon Williams Campus

Faculty: J. Hasty, W. Perry, C. Weis, A. Wahid

General Statement: The Department of Economics and Finance offers a program of instruction for those who expect to pursue careers in either economics, finance, or insurance and provides service courses for business and non-business majors. The program is aimed at helping students acquire: (1) an understanding of the objectives, functions, and institutions of a private enterprise economy, (2) a fundamental and rigorous tool kit for analysis, and (3) the ability to integrate economic and finance principles with various areas of business administration.

Admission, Retention, and Graduation: See College of Business section on Admission, Retention, and Graduation.

Major in Economics and Finance

Major in Economics and Finance, 129 hours required for the BBA degree.

General Education Requirements: See College of Business General Education Requirements.

Major: (In addition to courses listed below, see College of Business Freshman and Sophomore year, and Business Core.) Admission to the College of Business is required to receive degree credit for 300 and 400 level business courses. Admission to the University does not constitute admission to the College of Business. See section on Admission, Retention, and Graduation for admissions procedure.

Major

EC 311	Intermediate Microeconomic Theory	3
EC 312	Intermediate Macroeconomic Theory	3
FN 340	Financial Markets and Institutions	3
QM 302	Introduction to Statistical Analysis II	3
FN 360	Investment Theory	3
QM 300	Introduction to Quantitative Methods	3

Guided Electives

Economics & Finance Electives	12
Business Elective	3

General Electives (Non-Business)

100/200 level Freshman/Sophomore years	9
300/400 level Senior/Junior years	9

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
EC 311	3	EC 312	3
FN 330	3	FN 340	3
BIS 323	3	BISE 315	3
QM 302	3	BL 300	3
MG 301	3	EC or FN ELECTIVE	3
MK 301	3		
	18		15

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
EC or FN ELECTIVE	3		
FN 360	3	BUSINESS ELECTIVE	3
QM 300	3	EC or FN ELECTIVE	3
EC or FN ELECTIVE	3	NON-BUSINESS ELECTIVES	6
NON-BUS. ELECTIVE	3	MG 450	3
	15		15

Course Descriptions

Please refer to the Graduate Catalog for graduate course listings. For degree and admission requirements, contact the MBA Director, Avon Williams Campus, (615) 963-7121.

Tentative or Full Admission to the Upper Division of the College of Business is required of all College of Business majors for enrollment in all 300 and 400 level business courses.

Accounting (AC)

AC 211 Principles of Financial Accounting I (3). Accounting as a system of communicating to owners, creditors, governmental bodies, and others the financial results of the operation of business entities. Concepts, theories, and conventions underlying measurement, processing of business activities, and reporting of the financial results of those activities. An introduction to the basic concepts of accounting, the accounting cycle, accounting systems including ethical consideration, and components of the financial statements. Prerequisite: MATH 1010.

AC 212 Principles of Managerial Accounting II (3). An analysis of financial data, forms of business organizations in our legal environment, departmental accounting, manufacturing, basic cost accounting, cost-volume-profit analysis, and managerial decisions. Use of accounting data for internal managerial decision-making and analysis, including accounting for planning and control; relevant cost and contribution approaches to decisions and capital budgeting. Prerequisite: AC 211.

AC 303 Principles of NFP/Fund (3). An introduction to Not-for-Profit Accounting. Application of the theories for recording and reporting in non-corporate forms of organization as applied to government. AC 303 may be used by accounting majors for AC/Business elective only. Prerequisite: AC 212.

AC 305 Financial Information for Entrepreneurial Ventures (3). Introduces principles and procedures relating to financing small business ventures and uses of accounting information. Topics will include accounting control systems, preparation and analysis of financial statements, traditional and non-traditional sources of financing, and budgeting. AC 305 may be used by accounting majors for AC/Business elective only. Prerequisites: AC 212

AC 307 Federal Income Tax I - Individual (3). (Formerly AC 411) Determination of taxable income, and other aspects of tax accounting are emphasized. Particular attention is given to preparation of federal income tax return for individuals following the Internal Revenue Code (IRC). Tax research methodology is introduced. Prerequisite: AC 212.

AC 311 Intermediate Accounting I (3). Broad theoretical structure of accounting including underlying environmental assumptions, expanded review of the accounting cycle and components of financial statements. Emphasis is placed on the accounting process and future and present value concepts. Theory and practice of accounting, emphasizing need for and use of accounting information in measuring and evaluating entity's business income and financial status. Prerequisite: AC 212.

AC 312 Intermediate Accounting II (3). A discussion of property, plant, and equipment, intangibles, and corporate debt and equity capital structure. In-depth application of accounting concepts to liabilities and investments, income taxes, earnings per share, and cashflows. Prerequisite: AC 311.

AC 313 Intermediate Accounting III (3). Emphasis in placed on special problem areas in accounting including incomplete data, pension, leases, price-level accounting, entities in financial difficulty, circumstances unique to SEC reporting. In-depth discussion and analysis of financial statements. Prerequisite: AC 312.

AC 314 Cost Accounting (3). Use of accounting data to: identify cost/managerial accounting concepts; explain cost functions, cost classifications, relevant costs, cost-volume profit analysis, and cost allocations. The use of accounting data for cost control, profit planning, operational and capital budgeting, performance evaluation, and managerial decision making. Prerequisite: AC 212.

AC 320 Accounting Information Systems (3). Principles underlying the establishment of effective accounting systems in business enterprises. Basic concepts and problems in the consideration of accounting as an information system. Theoretical and pragmatic tools for analysis of accounting systems. Prerequisites: AC 311, AC 314, BIS 323 (BIS 323 may be taken concurrently).

AC 401 Advanced Accounting - Consolidation (3). In-depth application of accounting concepts, theories, and conventions to recording and reporting of problems arising from business combinations, branch operations, as well as business operations in foreign countries. Consolidated balance sheets, income statements, and retained earnings statements. Home office and branch accounting, foreign exchange, foreign subsidiaries, segment and interim reporting, partnerships, joint ventures, consignments, and installment sales. Prerequisite: AC 312.

AC 403 Governmental/NFP ACCOUNTING (3). Application of accounting concepts, theories, and conventions to recording and reporting of problems arising from the use of non-corporate forms of organizations, business combinations, special types of sales contracts, and public-sector accounting as applied to government. Prerequisite: AC 311.

AC 416 Internal Auditing (3). Theory and principles of internal audit practice and procedures in accordance with Standards for the Professional Practice of Internal Auditing. The course includes a study of the development of the profession, techniques, purpose, objectives, and administration of internal auditing. Audit reports furnishing management with analyses, appraisals, recommendations, counsel, and information concerning activities review are also required. Prerequisite: AC 320 and AC 312.

AC 417 Federal Income Tax II - Corp/Part/Fiduciary (3). (Formerly AC 412) Corporate, Partnership, Gift, Estate, and Trust federal tax returns are analyzed based on research of the IRC, Treasury Regulations, etc. Prerequisite: AC 307.

AC 419 Advanced Cost Accounting (3). (Formerly AC 315) Advanced managerial accounting concepts and techniques for decision making. Capital budgeting, transfer pricing, decision models, inventory management, behavioral accounting, inventory systems, and yield/mix models of profit maximization. Prerequisite: AC 314.

AC 422 Accounting Theory (3). (Formerly AC 420) A study of propositions, axioms, theories, controversial accounting concepts, authoritative statements, research studies of professional organizations, and professional problems. Critical evaluation of concepts, assumptions, principles, and analytical methodologies of accounting and their application to factual situations. Prerequisite: AC 312.

AC 423 Auditing Theory (3). (Formerly AC 413) Theory and principles of audit practice and procedures in accordance with generally accepted auditing standards, the auditor's professional code of ethics, the legal liability of the auditor, audit reports, and other accounting services and reports. Prerequisite: AC 320 and AC 312.

AC 424 Advanced Auditing (3). (Formerly AC 414) A course which emphasizes the student's ability to apply knowledge of audit theory and principles, generally accept auditing standards, and generally accepted accounting principles to actual documented audit situations through the case study method. Written analysis of cases is required. Completion of a computerized practice set emphasizing preparation and documentation of working papers is also required. Prerequisite: AC 423.

AC 425 International Accounting (3). Introduction to international accounting standards and a survey of foreign accounting standards. Major international issues of financial accounting, currency transactions and translations, transfer prices, and management planning and control. Prerequisite: FN 330.

AC 480 Accounting Internship (3). Internships are designed to provide accounting students supervised practical learning experiences in public, industry, governmental, or not-for-profit entities. Work experience enhances theory and classroom studies. Student activity and progress must be monitored and evaluated by an assigned senior department faculty. Prerequisites: Consent of Department Head and full admission to the College of Business.

AC 495 Accounting Topics (1-3). Provide the opportunity for outstanding accounting students to explore, update and expand the core knowledge of accounting theory, financial, managerial, auditing, taxation, and business law using professional problems. Prerequisites: AC 423 or consent of Department Head.

AC 499 Independent Study (1-3). A course which allows outstanding accounting students to investigate, in depth, approved accounting topics of the student's choice. Studies will be coordinated by a senior department faculty. Prerequisites: Consent of Department Head.

Business Information Systems (BIS)

BIS 215 Microcomputer Applications (3). Provides an introduction to the Windows environment, word processing, spreadsheet, database, and other business applications including the Internet. The course provides the background necessary to design and develop computer-based solutions to business problems using current software tools. Prerequisite: Keyboarding Proficiency or BISE 121.

BIS 316 Business Application Development (3). Covers the development of programs to address business needs utilizing sequential and random access file structures and processing techniques. Emphasis on modular program design and construction using COBOL. Prerequisite: BIS 215

BIS 323 Management Information Systems (3). This covers the fundamental principles and issues of managing information technology as a corporate resource. The primary purpose is to provide an awareness of the future role of information technology in business organizations. Major concepts, developments and managerial implications involved in computer hardware, software, communications, and other computer-based information systems will be discussed using specific business case examples. The challenges and methods of managing information systems, technologies, and resources from an assoc-technical approach will provide the conceptual framework for the course. Prerequisite: BIS 215

BIS 326 Object-Oriented Programming (3). [Formerly BIS 314] Provides an introduction to programming in business environment using Visual Basic. Students will create user interfaces by selection and placement of objects on the user screen, set priorities on those objects, refine their appearance and behavior, and write code procedures to react to events that occur in the user interface. Prerequisite: BIS 316

BIS 361 Introduction to Relational Databases (3). This course provides an introduction to the design, organization, and use of a relational database. Additionally, students will learn the standard database access language, SQL. Prerequisite: BIS 323.

BIS 362 Relational Data Administration (3). This course includes topics on database administration. Specifics include the creation of database objects, backup and recovery, and performance monitoring. Prerequisite: BIS 361.

BIS 415 Data Base Systems (3). Study of data concepts, planning, database management, database design, current trends, and commercial products. Topics included are: Database models, Structured Query Language (SQL), Entity-Relationship Modeling (E-R), and normalization. Students will develop a single-user database system. Prerequisite: BIS 316 and BIS 323 (or Consent of the Instructor).

BIS 423 Analysis, Design, and Implementation (3). Use of information systems techniques to solve managerial and organizational problems of limited complexity. The course includes discussion of various System Development Life Cycles. Students will use a SDLC approach for the analysis and design of a semester long project. Includes the role of CASE tools in implementing information systems solutions to business problems and opportunities. Prerequisite: BIS 415 and BIS 323.

BIS 424 End-User Computing Development (3). Development and implementation of microcomputer-based business applications are emphasized. Dominant operating systems and productivity software tools that reflect the market demand are addressed at an advanced level. Business process, as well as evaluation, selection, and acquisition of information technologies, are reviewed with emphasis given to strategies for deploying the technology into the workplace. Prerequisite: BIS 326

BIS 425 Decision Support Systems (3). Key technical and managerial issues in the development and use of decision support systems in organizations are addressed. Strategic management decision making and the role of DSS in the process are explored. Contemporary topics including Expert Systems, Executive Information Systems, data warehousing, data visualization, and Group Decision Support Systems are reviewed. Prerequisite: BIS 415

BIS 426 Training Strategies for BIS Professionals (3). Designed to provide BIS undergraduate student exposure to training and development theory as it relates to the adult learner. The role of the technical trainer in providing information systems concepts will be investigated. Needs analysis and methods for developing appropriate training as a practitioner are investigated. Prerequisite: BIS 323

BIS 430 Business Telecommunications (3). Provides a broad overview of the telecommunications field as well as the implications for business and industry. Prerequisite: BIS 323

BIS 436 PC Network Systems (3). Principles and specific implementation of a local area network system including predominant networking product methodologies. Includes extensive network administration exercises. Prerequisites: BIS 323

BIS 480 Internship (3). Designed to provide BIS students the opportunity to obtain supervised information systems related-work experience. Theory and reading assignments complement work experience. Student activity and progress must be monitored, evaluated, and graded by an assigned full-time BIS faculty member. Prerequisites: Consent of Department Head and Full admission to the Upper Division.

BIS 481/482 Seminar in Information Systems (3/3). Provides an in-depth study of current BIS Topics. Extensive readings/research on current information system developments are reviewed and discussed Prerequisites: BIS 415 and Consent of Department Head.

BIS 490 Practicum (3). Provides the senior BIS student an opportunity to gain hands-on experience with computer hardware and network wiring including trouble shooting and repair. The student will be given experience in assisting users in resolving user/system software related problems. Students will meet periodically with the instructor to discuss problems and issues relevant to the course work. Prerequisite: BIS 323 and Consent of Department Head.

BIS 499 Independent Study in BIS (3). Provides the outstanding student the opportunity to investigate in-depth, an approved information systems topic. A senior faculty member of the department will coordinate the work of each individual student. Prerequisite: BIS 323 and Consent of the Department Head.

Business Information Systems Education (BISE)

BISE 121 Microcomputer Keyboarding (3). Provides touch mastery of the keyboard for individuals who need proficiency in entering and retrieving data from computers. It also develops basic skills in the preparation of typewritten documents. Instruction will be on microcomputers.

BISE 222 Word Processing Concepts and Applications (3). Provides a comprehensive overview of word processing concepts, language, equipment, and procedures. The course includes a review of business language skills, refines keyboarding skills and develops operational techniques on selected word processing software. Prerequisite: BISE 121 or keyboarding proficiency of 40 words a minute.

BISE 315 Business Communications (3). Study of principles, practices, and mechanics of writing in modern business, and the ability to compose and edit business correspondence; managerial and interpersonal aspects of oral and written communication. Factors affecting international communication in business are studied. Prerequisite: BIS 215

BISE 335 Business Research & Report Writing (3). Designed to help students develop a clear, concise, and correct research writing style; to help students collect, analyze, organize, interpret, and present business data in MLA style. Prerequisite: BISE 315

BISE 340 Desktop Presentation Tools (3). Designed to develop skill in preparation of computer processed reports and data presentation using software technology. The course emphasizes the use of the computer as a tool for drafting composing, and generating slide shows. Instruction includes planning, formatting, and presenting multimedia presentations. Prerequisite: BIS 215

BISE 371 Instructional Strategies and Methods (3). Designed to assist the teacher with appropriate instructional strategies and methods for teaching basic business, accounting, and information systems related courses. Course coverage includes an investigation of the classroom materials, methods, and current trends in the teaching of basic business, accounting, information systems and office technology courses. Prerequisite: Admission to Teacher Education program.

BISE 400 Information and Media Management (3). Provides a detailed treatment of information and media management. Media is defined as the information storage format, and includes paper, micro-records, electronic, video, and other forms of information generation, recording, and storage. Students will develop an understanding of the information life cycle, information value, and how information serves as a critical organizational asset. Legal and ethical issues, information resource management, and varying cultural conventions governing information Management are presented. Prerequisite: BIS 215.

BISE 430 Administrative Office Management (3). Designed to help students develop an understanding of the complexities associated with systems, methods, and procedures for efficient office management. Prerequisite: BIS 215.

BISE 472 Student Teaching in Business (12). Actual classroom experience in secondary schools (grades 7-12) under the charge of expert business teachers in cooperating schools. Prerequisites: All Methods and Professional Core Courses.

Business Law (BL)

BL 300 Legal Environment of Business (3). A study of the legal aspects of the business environment and the legal rights and potential liabilities of business persons. The presentation of law as an expanding social and political institution in the environment of business. Includes the development and nature of the legal system; business crimes; the law of torts; constitutional limitations on regulatory powers; legislative, judicial, and administrative control of business activity through tax laws, antitrust laws of employment, labor laws, and consumer and debtor protection laws. Prerequisite: AC 212.

BL 323 Business Law I (3). A study of the legal rights and potential liabilities of business persons, includes an introduction to the nature of the legal system; the basic law of contracts. Uniform Commercial Code, sales, secured transactions, and bankruptcy. Prerequisite: BL 300.

BL 324 Business Law II (3). A study of the legal rights and potential liabilities of business persons, includes the basic legal principles of agency; partnership; corporations and securities; personal property and bailment; real property and environmental controls; U.C.C. and commercial paper. Prerequisite: BL 300.

Economics (EC)

EC 101 Introduction to Business & Economics (3). The structure of American business; contemporary economic environment; survey of the fundamental principles of business organizations (For freshman business students and students in other fields.)

ECON 2010 Principles of Economics I (3). Methodology of economics, fundamentals of macroeconomics, fiscal policy, and fundamentals of monetary policy. Prerequisite: Math 1010.

EC 212 Principles of Economics II (3). Economic growth, and microeconomics, some domestic and international applications, economics and comparative economic systems. Prerequisite: ECON 2010.

EC 311 Intermediate Microeconomics Theory (3). The price system and allocation of resources; economic analysis of demand and production. Prerequisite: EC 212.

EC 312 Intermediate Macroeconomic Theory (3). Aggregate demand, aggregate supply, and equilibrium level of employment; the price level, inflation, and deflation. Prerequisite: EC 212.

EC 320 Money and Banking (3). Nature and functions of money; analysis of monetary systems; money creating role of commercial banks and the Federal Reserve System; determinants of money supply and demand; monetary theory and policy. Prerequisite: EC 212

EC 330 Principles of Labor Economics (3). A study of the labor market; American labor movement; union history, structure and philosophy; labor problem analysis; industrial disputes and labor legislation. Prerequisite: EC 212.

EC 410 International Economics (3). Introduction to the tools and techniques of international economic analysis concerning the basic theory of free trade, tariffs, and commercial policy as well as international monetary analysis. Prerequisite: EC 212.

EC 415 Economic Development (3). A basic study of the general nature of the economic development problem, some simple theories of economic growth and underdevelopment, as well as development policies. Prerequisite: EC 212.

EC 452 Urban Economics (3). Urban history, location theory, city growth, and urban problems. Prerequisite: EC 212.

EC 470 Managerial Economics (3). Application of economic theory to business decision making, emphasis on profit objectives, measurement and forecasting demand, and costs and capital budgeting. Prerequisite: EC 212.

EC 480 Current Economic Problems (3). Examination of key economic issues. Such major objectives as economic progress, and economic justice provide a general framework for analyzing economic growth, inflation, unemployment, public debt, income maintenance, agriculture, and international economic affairs. Prerequisite: EC 212.

EC 498-499 Independent Study (3,3). A course which allows outstanding students to investigate in depth approved topics of the students choice. Individual studies will be coordinated by a senior member of the departmental faculty. Prerequisite: EC 311, EC 312.

Finance (FN)

FN 330 Business Finance (3). Financial goals, ratios, sources and uses of funds, asset management, capital budgeting, leverage, cost of capital, dividend policy, valuation, mergers and reorganizations, financial performance evaluation. Prerequisite: AC 212.

FN 340 Finance Markets and Institutions (3). Operating characteristics, regulation, flows of funds, intermediation, major sectors of money and capital markets and the institutions operating therein. Prerequisite: FN 330.

FN 360 Investment Theory (3). Theory of investment value, investment media and strategies, risk returns, price behavior, investment techniques, portfolios, Prerequisite: FN 330.

FN 445 Commercial Bank Management (3). Organization, administration of commercial banks, balance sheet management, loans and investments. Prerequisite: FN 330.

FN 450 Corporate Finance (3). Optimizing sources and uses of funds, corporate asset and financial structure management and strategies, sophisticated techniques of analysis. Prerequisite: FN 330.

FN 460 Security Analysis and Portfolio Management (3). Fundamental and technical techniques analysis, security valuation, capital asset pricing model, portfolio analysis and management, advanced models, theories, and techniques of analysis. Prerequisite: FN 360.

FN 470 International Finance (3). Problems in international finance; the balance of international payments; financing international trade; foreign departments of banks; foreign exchange markets; the impact of international financial problems on business. Prerequisite: FN 330.

Management (MG)

MG 100 Business Orientation (1). Business Orientation is designed to assist the student in adjusting to the University Community and to acquaint the student with the business environment as an integral part of educational development.

MG 301 Management and Organization Behavior (3). Effective management is a key success factor in commerce. This course focuses on the principles of managing both organizations and employees in today's global environment. Course topics range from planning for effectiveness to the implementation of the plans, and include: organization goals, organization structure, motivation, leadership, communication, group dynamics, ethics, and managing change. Prerequisite: EC 212

MG 302 Operations Management (3). An overview of the basic principles, concepts, and analytical tools involved in the design, operation, and control of operations that produce goods and services, with an emphasis on the efficient use of resources. Prerequisite: Junior Standing; QM201; MG 301.

MG 303 Management of Service Organizations (3). Decision making in service operations such as health care and delivery, food/restaurant, hotel/motel, banking and finance, transportation, leisure, and government. Both conceptual framework and application of management techniques to problems peculiar to service organizations. Prerequisite: MG 301.

MG 304 Introduction to Management Science (3). Application of quantitative methods used in business decision making. Topical application areas will be drawn from all areas of business, industry, and government, including: accounting, finance, information system, investment portfolio analysis, human resources management, production of goods and services in manufacturing and service operations, and quality management. Prerequisite: QM 201, MG 301.

MG 320 Entrepreneurship-New Venture Creation and Management (3). Managerial and business theory functions and processes applied to small business. Emphasis will be given to problems and practices peculiar to the establishment and operation of small business enterprises. Opportunities, hazards, strategies, and objectives will be analyzed from broad managerial and specific functional aspects. Case studies, research, selected presentation by small business owners and other teaching methodologies will be used. Prerequisites: Senior standing; completion of core junior level business courses; MG 301.

MG 324-325 Business Consulting and Entrepreneurship I and II (3,3). Opportunities for consulting with small business or generating prospects and plans for new enterprises. Provides experience that extends and solidifies what is learned in the classroom and allows students trial and error experiences in a relatively protected environment. Lectures and discussion, but emphasis on problem solution by the student. Prerequisite: Approval of instructor, MG 301, MG 320. (MG 324 is prerequisite to MG 325).

MG 350 E-Commerce (3). This course is a survey of the dynamic marketing issues surrounding the development and emergent patterns of the electronic commercialization in the global marketplace. The uses of new technologies in transforming organizational and consumer behavior, information dissemination, globalization, changes in marketing and financing functions, ethics, control, infrastructure and manpower issues are addressed. Prerequisite: MK 301, MG 301. Cross-listed with MK 350

MG 402 Applied Operations and Quality Management (3). An in-depth study of the design, operation, and control, of integrated systems for producing goods and services. The study will emphasize the continuous improvement process, as well as the design, establishment, evaluation, and improvement of an organization's quality systems. Issues on Quality System Certification to meet industry and international standards shall also be addressed. Cross-listed with MK 402. Prerequisites: MG 302.

MG 403 Human Resources Management (3). A course which focuses on an analysis of the policies, procedures, practices, and regulations relevant to attracting, retaining, and directing a competent work force. Topics include employee recruitment and selection, job analysis, training and development, compensation and benefits, performance appraisal, and labor relations. Special attention will be paid to the relevant federal laws and regulations. Prerequisite: MG 301

MG 404 Organization Theory (3). Theoretical foundations for the study and analysis of organizations including theory development and important research findings. Examines aspects of various systems and behavior. Emphasis will be on the dynamics, efficiency and effectiveness of organizational systems. Prerequisite: MG 301.

MG 405 Organization Behavior (3). Theoretical foundations for the study and analysis of human behavior in complex social organizations and of related managerial problems and challenges. A study of management and behavioral science concepts. Techniques and research as applied toward increasing human productivity and individual and group satisfaction in organizational settings. Prerequisite: MG 301

MG 406 Special Topics in Management (3). Research into selected areas of management. Prerequisite: MG 301 and Approval of the instructor.

MG 407 Industrial Relations (3). Labor relations, federal legislation, and the collective bargaining process; case studies and arbitration cases in public and private sectors; impact of collective bargaining on the economy, union-management problems and opportunities in both the public and private sector. Prerequisite: MG 301

MG 409 Human Resource Planning and Evaluation (Manpower Management Practices) (3). Forecasting future human resource needs based on organizational strategies and personal objectives. Performing management and other job audits to assess strengths and weaknesses of organizational posture formulating and administering basic policies in human resources management and development; development of comprehensive administrative processes, decision making systems, and evaluation processes. Prerequisite: MG 403.

MG 410 Compensation Administration (3). Research, review, and application of job evaluation and other methodologies as a basis for establishing and controlling personnel, equitable wage, salary, and benefit programs. Included will be a review of relevant theories, methods, and practices; case analysis; review of current and pending legislation and projection of future compensation plans. Prerequisite: MG 301, MG 403.

MG 411 Operative Supervision (3). Operation (goods and services supervision with emphasis on objectives, planning, organizing, scheduling, directing, and controlling work operations. Learning theory, employee development and training, use of resources, methods performance measurement, evaluation, and human problems will be stressed. Prerequisite: MG 301.

MG 412 International Business Management (3). Analysis of managerial and business theory functions and processes practiced by multinational firms. A study of the products and services, strategies, objectives, policies and organizational structures of enterprises operating in various social, economical, political, and cultural environments. Cases, research, and other teaching methodologies will be employed. Prerequisites: Senior Standing; MG 301

MG 417 Seminar-Contemporary Management Innovations and Entrepreneurship (3) This course examines selected contemporary topics, management innovations, controversial issues and problem areas related to management and entrepreneurship in a global business environment. Research and review of key creative managerial innovations that revitalize dying enterprises, create new enterprises, greatly enhance products, service, profitability and growth. Prerequisite: MG 301 and Senior standing.

MG 419 Collective Bargaining (3). Analysis of collective bargaining processes, procedures, legislation in private and public sector organizations. Review of current and future implications for management. Prerequisite: EC 212.

MG 425 Leadership (3 hrs). This course is a broad survey of theories of leadership with primary focus on contemporary models and the specific contexts within which leadership behaviors occur. It will examine the different mix of personal, interpersonal, technical, and conceptual skills and competencies required of leaders (a) at the supervisory, managerial, and executive levels, (b) within different organizational frameworks such as industry, academia, governmental, non-profit, and the military, and (c) within the context of the rapidly changing 21st century political, economic and technological environment. Prerequisite: MG 301

MG 450 Business Strategy and Policy (3). A course which integrates the student's knowledge of business functional area disciplines into analysis and solution of managerial and business problems. Corporate strategies, objectives, policies, ethical dilemmas, business problems, functional areas and managerial decision making are examined utilizing case studies. Particular emphasis is placed on operating in a global business environment. Prerequisites: Satisfactorily completed all other core business courses.

MG 480 and 481 Internship (3, 3). College of Business Internships are designed to provide students supervised practical learning experiences in government, business or industry. Formal proposals, project objectives, and learning plans must be reviewed and approved by the department head. Student activity and progress must be monitored, evaluated and graded by an assigned full-time faculty member. Each course is three credit hours. **Prerequisites:** Students must be approved by the department head to enroll in each course and must have full admission to the upper division in the College of Business. Specific course requirements are available from the College's Office of the Associate Dean.

MG 499 Independent Study in Business (1-3). A course which allows outstanding students to investigate, in depth, approved business topics of the students' choice. Studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Approval by Department Head before registering.

Marketing (MK)

MK 301 Basic Marketing (3). A comprehensive overview of the process employed by profit and nonprofit organizations of marketing goods, services, and ideas. The modern marketing objective is customer satisfaction at a profit (or other measure of success) through product, distribution, promotion, and price. This study of basic marketing concepts and terminology is set in the real-world context of the organization, competition, the economy, regulation, culture/society, and technology. Prerequisites: Junior standing and EC 212.

MK 320 Sales Management (3). The course covers the nature of the basic selling function as well as salesperson selection, training, compensation, supervision, motivation. In addition, this course touches on how to determine sales budgets, quotas, territory designs, and sales analysis. Prerequisite: MK 301

MK 330 Applied Marketing Research (3) This course examines the role of information in decision making with special emphasis on the applied techniques and methods used to identify marketing opportunities or solve marketing problems. The completion of an actual research project is generally required. Prerequisite: MK 301

MK 350 E-Commerce (3). This course is a survey of the dynamic marketing issues surrounding the development and emergent patterns of the electronic commercialization in the global marketplace. The uses of new technologies in transforming organizational and consumer behavior, information dissemination, globalization, changes in marketing and financing functions, ethics, control, infrastructure and manpower issues are addressed. Prerequisite: MK 301, MG 301. Cross-listed with MG 350

MK 340 Environmental Issues In Marketing (3). Ethical, legal, and human relations dimensions of the business and nonprofit environments. Prerequisite: MK 301

MK 350 E-Commerce (3). This course is a survey of the dynamic marketing issues surrounding the development and emergent patterns of the electronic commercialization in the global marketplace. The uses of new technologies in transforming organizational and consumer behavior, information dissemination, globalization, changes in marketing and financing functions, ethics, control, infrastructure and manpower issues are addressed. (Cross-listed as MG 350). Prerequisite: MK 301, MG 301

MK 402 Quality Issues in Marketing (3). An integrated study of quality issues in the entire supply chain. The study will emphasize the continuous improvement process, as well as the design, establishment, evaluation, and improvement of the quality systems of the firms in a supply chain. Issues on Quality System Certification to meet industry and international standards shall also be addressed. Cross-listed with MG 402. Prerequisites: MG 302.

MK 405 Consumer Behavior (3). An examination of the social, psychological, and decisional aspects of the buying process of individuals and households. Application of this knowledge is made via the selling organization's service of consumers by better satisfying their needs. Prerequisite: MK 301

MK 410 Organizational Marketing Management (3). Roles, relationships and structures of organizational buying and selling with particular emphasis on the economic and social influences. Managing the marketing and channel structures is a major theme. Prerequisite: MK 301

MK 415 Promotional Management (3). This course focuses on the issues related to promotional management, and hence is not oriented towards the creative part of the advertising/communication process. Integrated marketing communication, planning implementing, evaluation and control of promotion are studied. Emphasis may be placed on learning through the application of textbook knowledge in projects. Prerequisite: MK 301

MK 420 Distribution Management (3). This course looks at the logistics environment, supply chain management, and the global nature of contemporary logistics. Information, physical distribution, inventory, storage, and the strategic importance of logistics are the focus of the course. Prerequisite MK 301.

MK 425 Retailing Management (3). This important industry employs one out of eight people in the U.S. workforce. Exciting and challenging career opportunities are available to business graduates, plus the study of retailing creates better informed and wiser consumers. Since the retail store is a complete business, every aspect of business is brought to bear plus those unique to the field. Prerequisite: MK 301

MK 430 Organizational Purchasing (3). All organizations purchase for use and some(middlemen) purchase for both use and resale. A multitude of buying principles has developed separately for each of these purposes but will be studied together in this unique course. Buying in both instances is designed to satisfy the needs of other than the one(s) doing the buying. Organizational and customer need satisfaction act as the motivations for buyers who must serve well in order to succeed. Prerequisite: MK 301

MK 435 International Marketing (3). Global trade and consumption patterns; alternative methods for international exchange; managerial and marketing issues raised by the inclusion of multiple social, cultural, and political structures in the marketing environment. Prerequisite: MK 301

MK 450 Service & Non-profit Marketing (3). This course undertakes the dual task of examining the service sector, which comprises an ever-increasing proportion of GNP, as well as the diverse set of organizations which operate under special governmental dispensation for the purpose of serving society with objectives other than achieving profit. While the basic marketing principles apply in both cases, special emphasis will be given to operational differences between these two important categories of marketers and their goods/profit-oriented counterparts. Prerequisite: MK 301

MK 455 Marketing Strategy (3). This is a capstone course in Marketing(to be taken near graduation). It focuses on strategic planning and operations, which integrates various topics such as the marketing concept, market segmentation, brand building, consumer attitudes, marketing research, and integrated marketing communication. A computer-based marketing simulation as well as business plan is required. Prerequisites: 9 hours of Marketing (including MK 301) and permission of Department Head

Quantitative Methods (QM)

QM 201 Introduction to Statistical Analysis I (3). Elementary statistical techniques with emphasis on applications to business problems. Topics covered include descriptive statistics, probability, random variation, probability distributions, and statistical inference. Prerequisite: Math 1010.

QM 302 Introduction to Statistical Analysis II (3). A continuation of QM 201. Topics covered include linear regression and correlation: multiple regression, the analysis of variance, elements of time series sis, forecasting models, and survey sampling. Prerequisite: QM 201.

QM 300 Introduction of Quantitative Methods (3). An introduction to quantitative methods of the management scientist with applications to economic and industrial problems. The course is designed to introduce the student to the use of mathematics, statistics, economics, and accounting as tools in management decision making. Prerequisite: QM 201 and EC 212.

Real Estate And Urban Development (RE)

RE 313 Principles of Real Estate and Urban Development (3). Introduction to the social, economic, financial, ad legal systems and processes involved in the development and use of real property. A survey of Real Estate Brokerage, Finance, Appraisal, Management, Law, Investment Principles. Prerequisite: ECON 2010 and Junior Standing.

RE 320 Urban Land Resource Analysis (3). A survey of the changing patterns of urban development and processes of urban growth. An examination of the structure of the real estate market, characteristics of land resources, location and analysis, and the importance of urban land economics in public and private land use decisions. Prerequisite: RE 313.

RE 330 Real Estate Finance (3). A study of institutional and government funds for financing real estate transactions. Legal instruments of finance, flow of mortgage funds into local markets, and financial packaging of real estate transactions. Prerequisite: RE 313.

RE 340 Real Estate Law (3). A survey of the legal environment of real estate. Emphasis on real property law, contract law, law of agency, brokerage, license law, and mortgage law. Prerequisite: RE 313.

RE 350 Real Estate Appraisals (3). Economics theories of value applied to real estate; valuation methods, analysis of evidences of values; appraising residential properties. Prerequisite: RE 313.

RE 410 Urban Planning and Public Policy (3). Processes of and use regulations including the organization of public planning, planning methodology, zoning, subdivision regulations, and other governmental impacts on real estate. Prerequisite: RE 313.

RE 420 Development of Residential and Commercial Real Estate (3). The processing of developing single-family subdivisions, multi-family housing projects, office buildings, shopping centers, recreational facilities and industrial parks. Included are market analysis, legal constraints, site selection, financial analysis, design and construction procedures, marketing methods, and case studies. Prerequisites: 9 hours of Real Estate or consent of instructor; RE 313 and 330.

RE 430 Income Property Appraisal (3). Financial theories and methodologies used in estimating the value of income producing properties, i.e., apartments, office buildings, and shopping centers. Prerequisite: RE 313.

RE 440 Real Estate Investment Analysis (3). Analysis of real estate equity, and ownership, including sole proprietorship, partnership, limited partnership, real estate investment trusts, sub-chapter S and public real estate securities. Computer-assisted analysis of federal income taxation on investment, development, equity yields and risks. Prerequisites: 6 hours of Finance, Economics, Accounting; consent of instructor, and 9 hours of Real Estate.

RE 449 Independent Study in Business (3). A course which allows the outstanding student to investigate, in depth, approved business topics of the student's choice. Individual studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Permission of the Department Head.

THE COLLEGE OF EDUCATION

Franklin B. Jones, Ed.D., Dean,
R. E. Clay Education Building

Mission Statement

General Statement:

The College of Education is a professional school consisting of a community of scholars, both faculty and students, engaged in a common pursuit of knowledge. Our mission is to be facilitators of learning: to prepare competent and caring professionals with a multicultural perspective. Aware that education and learning are life-long experiences, the College addresses the needs and demands of a changing clientele and society. Teaching, research (both basic and applied), and service are all part of our function.

Among our objectives are the following:

1. To prepare elementary, secondary, and special education teachers; counselors; supervisors; administrators; school psychologists; counseling psychologists; and recreation workers.
2. To provide opportunities for students to pursue research and its uses in solving the problems of education.
3. To assist graduates in finding teaching and other positions after they have had experience in their profession.
4. To provide student with opportunities for knowledge and understanding of the multicultural society in which they live and their relation to and responsibility in such a society.
5. To provide a sound program of guidance and to work cooperatively with other departments and schools of the university in implementing the program.
6. To offer basic and advanced courses, laboratory and other experiences designed to give students a knowledge and understanding of the data, theories and methods of psychology.

The professional education component provided by the College of Education is designed to develop the competencies necessary for beginning teachers, which are:

1. To develop knowledge and understanding of the principles and processes of human growth, development and learning, and the practical application of this knowledge to teaching all children.
2. To develop an understanding of instructional methods, materials and media as they apply to facilitating learning in the student's field of specialization.
3. To utilize materials, methods, and resources in order to plan and teach effectively and to work ethically and constructively with pupils, teachers, administrators and parents.
4. To develop an understanding of the historical, philosophical and social foundations underlying the development and practices of public education of this country.
5. To develop an understanding of purposes, organization, administration and operation of the total educational program of the school.
6. To develop an understanding of the total instructional process through planned field based experiences that involve direct observation and participation in teaching under supervision.
7. To develop instructional skills and strategies through a wide range of laboratory, clinical and student teaching experiences.
8. To provide experiences designed to enable the student to utilize and apply psychological data and evaluation procedures in measuring the progress of students.
9. To integrate current research of effective teaching and schooling into curricular offerings so that graduates will be on the cutting edge of professional knowledge and practice.

Basic goals of the College of Education regarding multi cultural education may be summarized as follows:

1. Involve learners in experiences that will allow them to examine their own cultures.
2. Expose learners to diversity through experiences, literature and discussion.
3. Encourage the development of positive and supportive attitudes about ethnic/cultural diversity.
4. Involve learners in situations that will provide opportunities for direct contact with individuals who differ from them.
5. Provide instruction in the design, implementations, and evaluation of educational materials which are appropriate for multi cultural settings.
6. Guide learners in the development of teaching strategies that consider multi cultural perspectives.
7. Maintain a diverse faculty as well as a diverse student body.

Accreditation and Memberships

Teacher preparation for undergraduate and graduate programs for the preparation of teachers and related professionals are accredited by the National Council for Accreditation of Teacher Education. The College of Education also holds membership in the American Association of Colleges for Teacher Education, the Association of Colleges and Schools of Education in State Universities and Land Grant Colleges and Affiliated Private Universities, Teacher Education Council of State Colleges and Universities, the Tennessee Association of Colleges for Teacher Education, and the National Association of Multicultural Education.

Office of Public Services

Throughout the year, the College of Education receives requests for services from local, county, and state agencies. In an effort to meet those requests, the following services are provided: (1) cooperation with the state in-service program in conducting short courses and summer work-conferences, (2) consultative services on local problems to school personnel through the State by university staff members, (3) development and distribution of material to school personnel, (4) establishment and coordination of

off-campus classes and programs; and (5) cooperation with the State Department of Education.

Office of Student Services and Teacher Education

The College of Education also provides pre-service field experiences in order to afford opportunities for students to correlate theoretical information with real life situations through observations, one-to-one and small group participation; and finally, student teaching. The Office of Student Services and Teacher Education accepts placement requests for these field-based activities from teacher education faculty and students for the purpose of making appropriate placements. Upon approval of each request, including applications for student teaching, these data are submitted to the appropriate school districts to which our students will be assigned.

Curriculum Laboratory

The Curriculum Laboratory is a center for instructional materials and other resources in teacher education. It is designed for students and teachers in the professional core courses in education, the specialized professional courses, and student teaching. The laboratory is a hands-on facility where students and alumni come to create and carry out research. The laboratory serves as a depository for the state of Tennessee textbook collection (grades K-12). The laboratory director offers workshop experiences for our undergraduate students in materials and manipulatives. The laboratory is located in the Clay Hall Education Building.

Professional Education Council

The Professional Education Council is the coordinating body for the Teacher Education Program. Its principal objectives are:

1. To help provide and perpetuate an instructional climate favorable to the healthy growth of the Teacher Education Program.
2. To develop and administer policies which will ensure that competent candidates with professional promise are prepared and recommended for entry into the teacher profession. The Council develops policies relating to admission, retention, counseling, records, curricula and standards for completion of a program in Teacher Education.

The Council is composed of the following appointed members:

1. Dean of the College of Education, Chairperson
2. Director of Student Services and Teacher Education
3. Dean of the Graduate School
4. One member from the Department of Speech Pathology and Audiology
5. One member from the College of Business
6. One member from the School of Agriculture and Home Economics
7. Six members from the College of Arts and Sciences, one from Social Studies, one from Languages, Literature and Philosophy, one from Sciences, one from the Arts, and the Elementary Education advisor
8. One member from the College of Education representing the off-campus programs
9. Four members from the College of Education, one each from Educational Administration, Teaching and Learning and Psychology
10. Four practitioners (two principals and two teachers)
11. Two students (one each graduate and undergraduate)
12. Two representatives of the community

Organization of the College of Education

The College of Education is composed of four (4) departments as follows: The Department of Educational Administration, the Department of Human Performance and Sport Sciences, the Department of Psychology, and the Department of Teaching and Learning. The College of Education has established cooperative agreements with the Metropolitan Nashville-Davidson County school system and other school systems in Tennessee to assist with the student teaching program.

General Information On The Teacher Education Program

The Office of Student Services and Teacher Education screens 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 which includes *passing the Rising Junior Examination.* The Director informs the departmental representative for each Teacher Education curriculum concerning the students approved for the program.

The departmental Teacher Education representatives inform the Director of the Office of Student Services and Teacher Education through their respective Deans of those students in their departments who are maintaining the Teacher Education Program's retention standards. S/he will notify the students who are not meeting the retention requirements that they have one semester to remove their 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 Student Services and Teacher Education in the second semester of the sophomore year *after the Rising Junior Examination has been passed*;
2. Each student will submit documentation that s/he has:
   a. Completed at least 50 semester hours of course work, including: 1) ENGL 1010, 1020, 2) PSY 242, 3) EDCI 201 and 4) an appropriate sequence of freshman mathematics and freshman science;
   b. Earned a grade of C or better in each of the following courses: ENGL 1010, 1020, PSY 242, EDCI 201;
   c. Maintained a C average in all freshman level mathematics and sciences courses;
   d. Earned a 2.75 GPA on a 4-point scale in all previous college work;
   e. Passed the Rising Junior Examination.
3. Each student will provide official records that indicate s/he has:
   a. Performed satisfactorily on the speech-screening test;
   b. Earned acceptable scores on the Pre-Professional Skills Test (P-PST), Computer-based Test (CBT), PRAXIS ACT composite, Enhanced ACT or combined SAT; students

who fail the P-PST or CBT after having taken it twice and are within two (2) points of the required score may appeal to the Director of Student Services and Teacher Education if additional criteria of appeal are met (see *Freshman Level Teacher Education Handbook*);

c. Received from University professors three positive recommendations on the Behavioral Rating Scale;
d. Received a positive recommendation from her/his interviewing committee.

Students who have not been admitted to the Teacher Education Program and students who do not have a permanent or a provisional certificate will not be permitted to enroll in the following courses: EDAD 301, EDCI 387, EDAD 400, EDRD 491, EDRD 424, EDSE 333, PSY 312, and all methods courses.

RETENTION

To remain in the Teacher Education Program, the student must:

1. Maintain a cumulative GPA of 2.75 or above;
2. Continue to exhibit professional growth characteristics essential to becoming an effective educator;
3. Meet all criteria for admission to student teaching at the appropriate time.

Admission To Student Teaching

As part of the University's retention requirements in the Teacher Education Program, each student must be formally admitted to student teaching. Thus, each student must:

1 Meet all Teacher Education requirements to date;
2 Document passing scores on the Praxis II examinations;
3. Apply for student teaching through the Teacher Education advisor; submit the completed application to the Director of Student Services and Teacher Education in the first semester of the senior year;
4. Maintain a cumulative GPA of 2.75 or better;
5. Exhibit professional growth characteristics essential to becoming an effective educator;
6. Complete the prescribed prerequisite professional education courses and all courses in one's major area of specialization with a grade of C or better;
7. Supply documentation that a physician certifies that one is free from communicable diseases;
8. Supply documentation of professional liability insurance.

In accordance with State Board of Education Policy, all students are limited to a maximum of fifteen (15) semester hours, twelve (12) hours in student teaching and three (3) hours in educational seminar during the semester in which they do student teaching. Dual placement will be a part of the fifteen-week student teaching experience. Students who are awarded a grade of C or D in student teaching may graduate from the University but will not be recommended for certification.

NOTE: A student must complete a minimum of six (6) approved semester hours at Tennessee State University prior to student teaching/practicum regardless of her/his previous studies. The Director of Student Services and Teacher Education must approve the courses of students affected by this policy.

Certification Recommendation Requirements

In order to be recommended for certification, the student must:

1. Meet all teacher education requirements to date;
2. Complete all graduation requirements;
3. Earn a grade of B or better in student teaching;
4. Maintain a cumulative GPA of 2.75 or above;
5. Present acceptable score(s) on each test required in Tennessee, currently the Praxis II Examinations: Principles of Learning and Teaching (PLT) and appropriate Specialty Area test(s).

NOTE: A student who already holds a bachelor's degree and is seeking an institutional recommendation for certification in Tennessee must meet all institutional requirements for certification. Any student teaching/internship/practicum experience required for an institutional recommendation for certification/licensure by the Tennessee State Department of Education must be completed at Tennessee State University regardless of one's previous studies.

Department of Educational Administration

Janet M. Finch, Ed.D., Head
103 Education Building (Clay Hall)

Faculty: R.L. Boone, J. Cornelius, D. Dunbar, K. Gundi, P. Harquail, F.B. Jones, B. Nye, K.L. Stevens, A.A. Thompson, R. Wiemers.

General Statement: The Department of Educational Administration offers instruction designed to prepare individuals for the principalship, supervisory positions and the superintendency. The programs sponsored by the department lead to a degree of Master of Arts in Education, Master of Education, Specialist in Education, or Doctor of Education. The department's courses, seminars, studies, and other programs are primarily intended for graduate students. Interested students should see the Graduate Catalog for more information. The department offers two undergraduate courses.

COURSE DESCRIPTIONS

Educational Administration

EDAD 301 School Organization, Management and Community Relations. (2) A course that 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. Field experience required.

EDAD 400 Professional Rights and Responsibilities. (3) A course that examines the legal and ethical foundations of education. Teachers are made aware of their ethical responsibilities as professionals and knowledgeable of their legal rights and those of their students. Prerequisite: Admission to Teacher Education. Field experience required.

Department of Human Performance and Sport Sciences

Deborah Kim Freeland, Ph.D., Head
332 Gentry Complex
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Faculty: J. Bass, H. Beamon, B. Culbertson, H. Foreman, K. Freeland, J. Gentry, J. James, T. Jones, R. Miller, E. Overall, F. Sawyer, C. Starks, G. Steimling.

Note: The programs in this department are under revision, and approval will be sought before the end of the period covered by this Catalog.

General Statement: An important purpose of the Human Performance and Sport Sciences Department is to require students to become knowledgeable and consciously aware of the need to maintain physical fitness and wellness. Consequently, all students in this discipline should acquire and appreciate (a) an understanding of the importance of physical fitness maintenance, (b) an understanding of rhythmic patterns, patterns and designs of music, and other cultural expressions through rhythmic movement, (c) methods used to achieve potential in overall body development through gymnastics, dance, aquatics, and other motor activities, (d) a knowledge of how to develop skills for successful and enjoyable participation in games and sports, and (e) an understanding of the principles of skill acquisition and body control.

The departmental objectives are:

1. To provide instruction to all students and/or develop appreciation for a variety of physical activities for a twofold purpose: (a) development of physical skills and achievement of a balance in the demands of college life, (b) knowledge and appreciation of leisure time activities for immediate and later use.
2. To provide health instruction to all students so that they may be knowledgeable as health consumers and improve their quality of life.
3. To prepare prospective teachers in the area of health instruction and physical education in addition to preparing the physical education professional with the necessary skills for athletic coaching responsibilities.
4. To prepare recreation specialists for positions as leaders and/or directors in public and/or private agencies.
5. To prepare physical educators in non-teacher certification in dance and other fitness related areas.
6. To provide leadership services to the University and the community in the areas of health instruction, physical education and recreation.
7. To prepare prospective athletic trainers for the National Certification Examination and for entry-level athletic training positions in the public and private sector.

Degree Programs: The department offers four (4) undergraduate options leading to a Bachelor of Science degree and two (2) Master's degree options. (See Graduate Catalog for graduate options).

Departmental Requirements for Bachelor of Science
General Education Requirements must be met.

Major Core: (Physical Education, K-12 option) A minimum of 40 semester hours including HPER 101, HEA 206, PE 301, 302, 310, 232, 313, 314, 315, 331, 334, 335, 420-426, HPER 304, 402, 403, 450, REC 303. Professional Education: EDCI 201, EDAD 301, EDCI 387, EDAD 400, EDCI 419, EDRD 491, EDSE 333, PE 371, 470, 472 E & S.

Major Core: (Health Instruction, K-12 Option) A minimum of 40 semester hours including HPER 101, HEA 300, 303, 305, 206, 307, 409, HPER 304, 402, 403, 450, PE 232, 313, 314, 331. Professional Education: EDCI 201, EDAD 301, EDCI 387, EDAD 400, EDCI 419, EDRD 491, EDSE 333, HEA 371/H, EDCI 470A or B, HEA 472.

Major Core: (Physical Education, Without Certification Option) A minimum of 40 semester hours including HPER 101, PE 202, 312, 313, 314, 331, 332, 334, 420-426, HEA 303, 305, 206, HPER 304, 402, 450, REC 303.

Major Core: (Recreation option) A minimum of 53 semester hours including HPER 101, PE 203-214, 308, 310, 232, 313, 314, 315, 332, 434, HEA 206, HPER 402, 403, 450, REC 302, 303, 353, 473, 481.

Departmental Requirements for minor

Minor Requirements: (Physical Education) A minimum of 18 hours including: HPER 101, HEA 206, PE 222A or 222B or 227 or 326, 201,214, 331, 334, 403.

Minor Requirements: (Health Instruction) A minimum of 18 hours including: HPER 101, HEA 300, 303, 305, 206, 307, 409, PE 232.

Minor Requirements: (Recreation): A minimum of 18 hours including: HEA 206, HPER 101, PE 201-227, 310, or HPER 403, 434, REC 303, 353, ART 300-400.

Minor Requirements: (Dance) A minimum of 18 hours including: HEA 206, HPER 101, PE 15, 46, 222A or 222B, 312, 326, 326A, 326B, 326C, ELECTIVES-PE 227 or 323 or THEA 402.

Bachelor of Science in Health, Physical Education and Recreation
Physical Education (K-12 Option)

Suggested Four-Year Plan:

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010 or 2030	3	HIST 2020 or 2030	3
MATH 1010 or above	3	HUMANITIES ELEC	3
HPER 101	2	HUMANITIES ELEC	3
HPER 1010-1053 / AERO/MUSC 2010	1	HPER 1010-1053/ AERO/MUSC 2010	1
2nd FIELD	1-3	2nd FIELD	1-3
2nd FIELD	2-3	CS 121	3
	15-18		17-19

SOPHOMORE YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
NATURAL SCI/Lab	3	NATURAL SCI/Lab	3
ENGL 2010 or 2020	3	2nd FIELD	3
EDCI 201	3	PSY 242	3
HEA 206	3	PE 227	2
PE 302	2	PE 301	2
PE 315	2	PE 335	2
		REC 303	2
	16		17

Note: Rising Junior Exam must be passed before enrolling in upper division courses.

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
PE 310	2	PE 313	3
PE 232	3	PE 331	3
HPER 304	2	HPER 403	3
HPER 402	3	PE 334	3
EDAD 301	2	PE 420-426	2
EDAD 400	3	EDCI 387	3
EDCI 419	3		
	18		17

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
PE 314	3	PE 470 or EDCI 470 A or B	3
HPER 450	3	PE 472 E & S	12
PE 371	3		
2nd FIELD	3		
EDSE 333	3		
EDRD 491	3		
	18		15

NOTE: All students should develop a 2nd teaching field.

Bachelor of Science in Health, Physical Education, and Recreation Health Instruction (K-12 Option)

Suggested Four-Year Plan:

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010 or 2030	3	HIST 2020 or 2030	3
MATH 1010 or above	3	ELECTIVE - HUM	3
HPER 101	2	ELECTIVE - HUM	3
ELECTIVE - HUM	3	HPER1010-1053/AERO/ MUSC 2010	1
HPER 1010-1053/AERO/ MUSC 2010	1	CS 121	3
2nd FIELD	3		
	18		16

SOPHOMORE YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
NATURAL SCI/Lab	3	NATURAL SCI/Lab	3
ENG 2010 or 2020	3	HEA 206	3
EDCI 201	3	PSY 242	3
2ND FIELD	3	2ND FIELD	3
HPER 304	3	HEA 305	2
		PE 312	3
	15		17

Note: Rising Junior Examination must be passed before enrolling in upper division courses.

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
HEA 300	3	PE 333	3
HEA 303	3	HPER 403	3
PE 313	3	EDCI 387	3
PE 314	3	2ND FIELD	3
HEA 409	3	HEA 307	3
EDAD 301	2	EDSE 333	3
	17		18

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
HPER 402	3	HEA 472E&S	12
HPER 450	3	HEA 470 or EDCI 470A or B	3
HEA 371H	3		
EDRD 491	3		
EDCI 419	3		
EDAD 400	3		
	18		15

NOTE: All students should develop a 2nd teaching field.

Bachelor of Science in Health, Physical Education, and Recreation Physical Education (Non-Certification Option)

Suggested Four-Year Plan:

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010 or 2030	3	HIST 2020 or 2030	3
MATH 1010 or above	3	SOC SCI ELECTIVE	3
HPER 101	2	ELECTIVE - HUM	3
ELECTIVE - HUM	3	HPER 1010-1053/AERO/ MUSC 1010	1
HPER 1010-1053/ AERO/MUSC 1010	1	CS 121	3
ELECTIVE-HUM	3		
	18		16

SOPHOMORE YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 2010 or 2020	3	2nd FIELD	3
NATURAL SCI/Lab	3	NATURAL SCI/Lab	3
HEA 305	3	ELECTIVE - HUM	3
HPER 304	3	ELECTIVE - HUM	3
2nd FIELD	3	2nd FIELD	3
		PE 202	1
	15		16

Note: Rising Junior Examination must be passed before enrolling in upper division courses.

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
PE 232	3	PE 313	3
HEA 303	3	PE 332	2
HEA 206	3	PE 334	3
PE 420-426	3	2nd FIELD	3
ELECTIVE (Upper Div)	1-3	2nd FIELD	3
2nd FIELD	3	ELECTIVE (Upper Div)	3
	16-18		17

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
PE 314	3	PE 331	3
HPER 402	3	REC 303	2
HPER 450	3	ELECTIVE (Upper Div)	3
ELECTIVE (Upper Div)	3	ELECTIVE (Upper Div)	3
ELECTIVE (Upper Div)	3	ELECTIVE (Upper Div)	3
ELECTIVE (Upper Div)	3	ELECTIVE (Upper Div)	3
	18		17

NOTE: This option requires an 18-hour minor for graduation.

Bachelor of Science in Health, Physical Education and Recreation (Recreation Option)

Suggested Four-Year Plan:

FRESHMAN YEAR

FALL SEMESTER Course	HR	SPRING SEMESTER Courses	HR
ENGL 1010	3	ENGL 1020	3
HIST 2010 or 2030	3	HIST 2020 or 2030	3
EDCI 101	1	ELECTIVE - HUMAN	3
NATURAL SCI/Lab	3	NATURAL SCI/Lab	3
ELECTIVE - HUMAN	3	HPER 1010-1053/	
HPER 1010-1053/AERO		AERO/MUSC 1010	1
/MUSC 1010	1	CS 121	3
ELECTIVE	3		
	17		16

SOPHOMORE YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 2010 or 2020	3	ELECTIVE	3
MATH 1010 or above	3	ELECTIVE	3
SOC SCI ELECTIVE	3	HEA 206	3
ELECTIVE - HUM	3	PE 203-214	1
PE 203-214	1	ELECTIVE - HUM	3
PE 203-214	1	PE 332	2
ELECTIVE	3		
	17		15

Note: Rising Junior Examination must be passed before enrolling in upper division courses.

JUNIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
2ND FIELD	2-3	PE 308	3
PE 310	2	PE 313	3
PE 232	3	2ND FIELD	3
PE 314	3	REC 302	2
2ND FIELD (Upper Div)	3	REC 303	2
2ND FIELD (Upper Div)	3	REC 353	2
	16-17		15

SENIOR YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
HPER 402	3	REC 473	9
HPER 450	3	REC 481	2
PE 315	3	PE 434	2
2nd FIELD (Upper Div)	3	HPER 403	3
2ND FIELD (Upper Div)	3	2ND FIELD (Upper Div)	3
	15		19

COURSE DESCRIPTIONS

Health (HEA)

HEA 151 Health and Wellness (3). A course concerned with placing emphasis on health through a consideration of various conditions which affect health. It includes a comprehensive coverage of important trends on major health areas such as communicable diseases, drugs, nutrition, and those involving the psychological or adjustive processes and those of a psychological or biological nature. A requirement for students fulfilling the core in general education.

HEA 300 The School Health Program (3). A course designed to give a general knowledge of those procedures established to determine the health status of the child and to relate ways and means of enlisting the cooperation of pupils, teachers, parents,, and others in health protection. Special emphasis is placed on the functions of all school personnel. Prerequisite: 151.

HEA 303 Environmental Sanitation (3). A course concerned with placing emphasis 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 industry, but drug abuse, pollution control and the utilization of citizens for total community participation.

HEA 305 Family Health (3). A course designed to acquaint the student with the important individual, family, and community factors essential to healthful living. The significance of heredity, nutrition, and housing in effective family living is emphasized. Stress is placed upon the provision and use of health services for maternal and child care and for the prevention of illness. The mental, physical, and emotional aspects of family health are also considered.

HEA 206 First Aid and Cardio-Pulmonary Resuscitation (3). A course designed for demonstration and practice of general first aid care for emergencies resulting from physical trauma or acute illness. Special attention is also given to preventing and administering to injuries. CPR is also offered in this course. Two Red Cross Certificates are awarded for successful completion of the course.

HEA 307 Health Instruction for the School (3). A course designed to familiarize the students with the basic principles and concepts of constructing unit and lesson plans in health education, and utilizing materials and aids in grades K-12 from the conceptual approach to curriculum design.

HEA 371H Methods and Material of Health Education (3). A course focused on the curriculum and content of health education program with consideration given to procedures, techniques and equipment used in teaching. Study, discussion, and experience in planning and conducting health lesson are provided. Field experience required. Prerequisites: Admission to Teacher Education Program.

HEA 409 Drug Education (3). A course designed to present general and specific knowledge of the avoidance, use and abuse of substances. This course includes substance effects, dependence, habituation, addiction, abuse, classification of abused drugs, treatment of alcoholism and drug addiction.

HEA 470 Student Teaching Seminar (3). A course designed to provide information on the basic course content of student teaching. The course will provide the students with opportunities to enhance their teaching experiences through a study of current issues and research. Class is taken concurrently with HEA 472.

HEA 472 Student Teaching in Health (K-12) (12). A course designed to provide an opportunity for students to use methods, techniques and materials of instruction in health in a classroom setting. Prerequisites: specific courses as established for the program, plus at least a C in Methods.

Health and Physical Education (HPER)

HPER 101 Introduction to Health, Physical Education and Recreation (2). A course which introduces freshmen to the field of health, physical education, and recreation. It includes information on effective academic performance, a review of objectives and concepts in HPER, opportunities in employment and preparation of professional personnel in the field.

HPER 304 Elements of Safety (2). A course designed to foster a safe environment through awareness of hazards, accidents and emergencies and through the concepts of prevention, intervention, and maintenance of your surroundings.

HPER 340 Prevention and Care of Athletic Injuries (3). A course which introduces the student to the basic concepts of prevention of athletic injuries, injury recognition and assessment, and treatment procedures necessary for the management of athletic injuries. The laboratory sessions in this class will involve injury assessment procedures, preventive/supportive taping techniques, and various hands-on experiences related to the prevention and care of athletic injuries: Prerequisites: PE 312 (Anatomy and Physiology).

HPER 402 Administration of Health, Physical Education, Recreation, Athletics, and Intramurals (3). A course which aims to provide instruction in organizational, administrative, supervisory, and leadership procedures utilized in HPER. Basic Skills and techniques required to prepare students to administer programs in schools, parks, health agencies, intramurals,

and athletics are emphasized. It is required of all PE K-12 Licensure, Recreation, and Health K-12 Licensure majors.

HPER 403 Health, Physical Education and Recreation for the Handicapped (3). A course designed to assist students in acquiring the necessary knowledge, skills and competencies to enable them to provide physical education programming for handicapped children in the least restrictive environment. Students are required to travel to off-campus sites for practicum experiences.

HPER 440 Advanced Assessment of Athletic Injuries (3). An advanced course designed to further develop knowledge and skills related to the recognition, assessment, treatment, and appropriate medical referral of athletic injuries to the upper and lower extremities, thorax, abdomen, head and neck, and genitalia. Assessment of common dermatoses and communicable disease will also be discussed. Activity sessions are designed to assist in the development of clinical skills necessary to accurately assess the above-mentioned pathologies. Prerequisites: HPER 340 (Prevention and Care of Athletic Injuries), HEA 306 (First Aid and CPR).

HPER 450 Senior Project Writing (3). A course designed to instruct students in basic independent research skills. Students are to select an area of interest, select a method of investigation, gather and analyze data, and state conclusions based on the information obtained from the study in a written terminal project. It is required of all HPER majors.

Physical Education (PE)

Service Courses - This section contains required and elective physical education courses for the general student body.

HPER 1010 Physical Fitness Activities (1). A course designed so that students participate in exercises and various physical activities that can improve strength, flexibility and cardiovascular endurance. It is a required course for freshman students.

HPER 1011 Elementary Swimming (1). A course designed to make individuals reasonably safe, while in, on, or around water-a fitness component.

HPER 1012 Modern and Ballet Dance (1). An introduction to modern dance technique and ballet technique as well as elementary composition. The first half of the semester will be spent covering modern dance, the last half covering ballet. No prerequisites.

HPER 1013 Badminton (1). An elective course designed to teach the basic skills and strategies of badminton.

HPER 1014 Volleyball (1). An elective course designed to teach the basic skills, rules and regulations and strategies regarding power volleyball.

HPER 1015 Soccer (1). A course designed to provide students a variety of drills, skills and rules to play the game of soccer or appreciate the sport as a spectator.

HPER 1016 Golf (1). A course designed to teach elementary aspects of the game of golf. Special attention is placed on fundamentals and application of swing, strategies, rules, golf etiquette and other phases of golf.

HPER 1017 Bowling (1). A course to acquaint the student with the history, rules, courtesies and fundamental skills to play and appreciate bowling.

HPER 1018 Basketball (1). A course that introduce each student to rules, regulations and basic skills necessary to participate in basketball and to improve understanding of basketball and team concept.

HPER 1019 Folk and Square Dance (1). A course designed to acquaint the student with the basic skills and techniques of folk and square dancing. Emphasis is placed on the educational and recreational aspect of folk and square dance.

HPER 1020 Softball (1). A course designed to teach the rules, strategies, fundamentals and other aspects of the game of softball.

HPER 1021 Tennis (1). A course designed to teach students the basic skills, rules, strategies, court safety and etiquette as it applies to the game of tennis.

HPER 1022 Social Dance (1). An elective course exploring different types of social dance from an educational, recreational and sociological standpoint that can serve as a carry-over of values for all ages.

HPER 1023 Touch Football (1). An elective course presenting the modified form of football. Emphasis is on fundamental skills necessary for participation.

HPER 1030 Weight Training (1). A course designed to teach the rudiments of movement using weights. Emphasis is on muscular endurance, muscular tonicity, and muscular strength.

HPER 1031 Racquetball (1). A course designed to give instruction in the basic techniques and skills of racquetball. Conditioning drills for agility, stamina, hand-to-eye coordination essential to all sports will be incorporated.

HPER 1032 Beginning Yoga (1). A course designed for instruction in the basic knowledge and skills with emphasis on yoga postures.

HPER 1033 Wrestling (1) . A course designed to teach the basic fundamentals and knowledge of freestyle and Greco-Roman wrestling, so that the students can appreciate the aesthetic values of this combative activity.

HPER 1034 Archery (1). A course designed to provide the student with a knowledge of and a practice in the basic skills of archery. Emphasis will be placed on rules, safety and proper equipment.

HPER 1035 Stunts and Tumbling (1). A course designed to teach the basic tumbling skills with emphasis on balance, rolls in sequence, rotations and a variety of movements unique to the student.

HPER 1040 Track and Field (1). A course designed to introduce students to rules, regulations and basic techniques. Emphasis will be placed on various jumps, throwing events, stride techniques, relays, sprint and distance racing.

HPER 1041 Karate (1). An elective course that studies the basic movements of Oriental Martial Art. Emphasis on theory and practice of the mental and physical discipline related to the activity. It is taught as a sport and for self defense.

HPER 1042 Beginning Jazz and Tap Dance (1). A course designed to give the basic fundamental movements, steps and patterns of jazz and tap dance as well as to incorporate the style and the history. No prerequisite.

HPER 1043 Scuba Diving (2). A course designed to teach safety, theory, and practice of scuba diving.

HPER 1044 Intermediate Yoga (2). A course designed for students with a foundation in basic yoga body work. Instructor's approval is required.

HPER 1050, 1051, 1052, 1053 Adapted Physical Education (1 Ea.). Elective for those students who have conditions that require limited physical activity. **NOTE:** Students limited to taking 1 class per semester. Limited to students who have been certified as disabled by the Office of Disabled Student Services.

MAJOR COURSES

PE 201 Fundamentals and Techniques of Football (1). A course designed to develop student's ability to demonstrate the fundamental skills of football with proficiency as well as recognize problems related to the introduction and review of these skills in teaching situations.

PE 202 Theory of Aquatics (1). A course which develops proficiency through the intermediate level of water skills. Emphasis is also given to the theoretical aspects, performance and teaching of aquatic activities.

PE 203 Fundamentals and Techniques of Badminton (1). A course designed to develop proficiency in advanced mechanics, skills, and strategies of the game. Emphasis is on providing majors with elements of teaching techniques.

PE 204 Fundamentals and Techniques of Basketball (1). A course which concentrates upon development of proficiency in the performance of fundamental skills in basketball with some emphasis upon recognizing problems of the teacher in introducing and/or reviewing the skills involved.

PE 205 Fundamentals and Techniques of Tennis (1). A major course which teaches a racquet activity, for perfection of skill and for an understanding of teaching elements.

PE 206 Fundamentals and Techniques of Track and Field (1). A major course concerned with the student's development of performing skills and teaching point awareness in the activities involved.

PE 207 Fundamentals and Techniques of Golf (1). A major course in which students learn to perform better and to understand the theory of the activity to the extent that they may instruct more effectively. Students frequently will be required to travel to off-campus sites for laboratory experiences.

PE 209 Fundamentals and Techniques of Volleyball (1). A required course for majors which discusses fundamentals and techniques of the activity and prepares the student in methods of organizing, strategy in competition, conditioning, and related matters for instructional purposes.

PE 210 Fundamentals and Techniques of Bowling (1). A course designed for majors to acquire knowledge of and develop skills in the game of bowling.

PE 211 Fundamentals and Techniques of Archery (1). A major course in which the skills of archery are sharpened and awareness of teaching concerns explored.

PE 212 Fundamentals and Techniques of Softball (1). A course designed to develop the skills and knowledge of participating in softball.

PE 213 Fundamentals and Techniques of Soccer (1). A course designed to develop the skills and techniques of the sport of soccer.

PE 214 Fundamentals and Techniques of Handball and Racquetball (1). A course designed to prepare the student for teaching the sport of racquetball.

PE 222A Survey of Dance Forms: Folk and Square (2). A course which deals with the history, some personalities associated with (past and present) fundamental techniques, and experiences related to folk and square dance.

PE 222B Survey of Dance Forms: Modern (2). A course which deals with the study of the history, some personalities associated with (past and present), fundamental techniques and experiences related to modern dance.

PE 222C Survey of Dance Forms: Jazz and Social Dance (2). A course which deals with the study and skill development in selected social dances. The effort is to understand and develop skill in the continuum of movements in the activity.

PE 222D Survey of Dance Forms: Tap Dance (2). A course which deals with the development of basic skills and understanding of related historical elements associated with the dance.

PE 227 Fundamental Rhythms and Music for Dance (2). A course which provides an understanding of music in its relationship to dance; offers an experience 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 301 Gymnastics and Apparatus Work (2). A course which deals with the acquisition of skill and the development of intermediate to advanced techniques in gymnastics and apparatus work.

PE 302 Movement Exploration (2). A course designed to teach application of theoretical and practical experiences in the problem-solving method of teaching motor activities. The course includes study and analysis of implications of the exploratory method for teachers at preschool, primary, and intermediate levels of instruction.

PE 308 Officiating Techniques (2). A course designed to teach the techniques of officiating in selected sports and provide practical experiences through officiating in selected activities.

PE 310 Play and Lead-Up Games (2). A course 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 232 Anatomy and Physiology (3). A basic course in gross anatomy and physiology designed to provide instruction in the study of the structure and function of the human body, and all that it implies. Laboratory experiences will also be provided to augment concepts to be covered.

PE 313 Kinesiology (3). A course concerned with motion of the human body, its segments and their mechanical functioning in games, sports, and other physical education activities, required of HPER majors.

PE 314 Physiology of Exercise (3). A course designed to combine several science disciplines, neuromuscular activities, circulation and respiratory, metabolism, environmental aspects of exercise, fatigue and training, health and physical fitness. The course will describe and explain the functional responses and adaptations that accompany single and repeated bouts of physical exercise. Laboratory experiences will also be provided to augment concepts to be covered.

PE 315 Teaching Individual, Dual and Team Sports (2). A course in which the implications of the fundamental and technique experiences are focused on teaching of all activities. Methods of planning and presenting skills to be learned in the most effective manner are explored.

PE 319 Fitness and Wellness Activities (2). A course to establish concepts about health-related physical fitness and to establish, through contemporary research evidence, the connection between physical fitness and wellness. Wellness is a global concept that emphasizes self-responsibility for achieving an optimal state of health and well-being. This course will focus upon the role of physical fitness in a wellness lifestyle of all age levels.

PE 323 Modern Dance: Techniques and Composition (2). A course which includes intermediate to advanced modern dance techniques and an introduction to the choreography process. Elective for majors and non-majors with previous experience in modern dance.

PE 324 Tap Dance: Technique and Choreography (2). A course which includes intermediate and advanced experiences. Elective for majors and non-majors with previous experience in tap dance.

PE 325 Square Dance Calling and Modern square Dance (2). A course which involves techniques for calling square dance introduced with laboratory experiences for developing individual styles; participation in square dance experiences which involve the modern and up-to-date figures and innovations.

PE 326 Rhythmic Performance Groups (2). This course involves the 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.); Prerequisites: PE 15, or PE 46, or PE 222B.

PE 326A Rhythmic Performance Group (2). A course which is designed to give the student intermediate and/or advanced techniques in tap; as well as prepare them for theory and training related to dance performances. Prerequisites: PE 15, or PE 46, or PE 222B.

PE 326B Rhythmic Performance group (2). A course designed to give the student intermediate and/or advanced techniques in modern dance as well as prepare them for theory and training related to dance performances. Prerequisites: PE 15, OR PE 46, OR PE 222B.

PE 326C Rhythmic Performance Group (2). A course designed to give the student intermediate and/or advanced techniques in jazz as well as prepare them for theory and training related to dance performance. Prerequisites: PE 15, OR PE 46, OR PE 222B.

PE 330 Advanced Weight Training (2). A course designed to increase muscle endurance, strength and definition. Prerequisites: PE 30 and approval of the instructor.

PE 331 Measurement and Evaluation in Physical Education (3). A course which acquaints the student with tests available in physical education. It emphasizes the theory, application, and administration of tests for use in evaluating the content and methods of measuring student's achievements, criteria for classification of students and marking. Required of majors in health and physical education.

PE 332 Life Guarding and Advanced Swimming (2). A course designed to review and coordinate styles of swimming, water safety skills, and techniques leading to American Red Cross Life Guarding Certificate. Prerequisite: PE 202 or equivalent.

PE 334 History and Philosophy of Physical Education (3). A basic survey of the history of physical education. It provides orientation in the essential unity of the educational process in the field of physical education, and it provides a foundation for philosophy, principles, curriculum, organization and administration methods and trends of modern physical education.

PE 335 Principles of Perceptual Motor Development (2). A course 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 336 Adaptive Aquatics (3). A course designed to assist students in devising methods and techniques used to teach disabled students to swim.

PE 371 Materials and Methods in Physical Education (3). A course designed to provide information concerning content of the program, methods, procedures, techniques and devices relative in individual and dual sports, team games, rhythms, self-testing activities and related events for boys and girls on the elementary and secondary school levels. Required of majors and minors in physical education. Observation in elementary and secondary schools required. Field experience required. Prerequisite: Admission to Teacher Education Program.

PE 372D Methods of Teaching for Dance (2). This course is designed to provide practical procedures, lead-up activities, planning and conducting the dance lesson with attention to special problems presented at various age-grade levels and under various teaching conditions (folk, square, social, modern, and tap dance).

SOC-PE 375 Sociological implications of Sports (3). A course that 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, for most majors, taught in the Department of Sociology.

PE 420 Coaching of Football (2). A course that provides an examination and study of rules, methods of organizing practice and management of teams, team offense and defense, strategy, and philosophy of coaching football.

PE 421 Coaching of Basketball (2). A course concerned with rules, regulations, and theory of developing basketball teams. The skills and team strategies are examined as parts and wholes.

PE 422 Coaching of Baseball (2). A course concerned with all elements of the game as they concern coaching - the skills, personnel, theory, practice sessions, and team organization are explored.

PE 423 Coaching of Track and Field (2). A course concerned with the presentation and practice of skills associated with coaching and officiating track and field activities. officiating at track meets required.

PE 426 Coaching of Aquatics (2). A course designed to provide the concerns for theory, events, training personnel, etc., of swimming as they are important to coaching a team. The alignment of events in meets is also part of the course.

PE 434 Planning Special Events and Demonstrations (2). A course that 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.

PE 436 Water Safety Instructor (2). A course designed to train instructor candidates to teach effectively the safety procedures, skills and knowledge of the American Red Cross courses in swimming and Life guarding. The prerequisite for this course is a Red Cross Lifesaving Certificate.

PE 470 Student Teaching Seminar (3). A course designed to provide information on the basic course content of student teaching. The course will provide the students with opportunities to enhance their teaching experiences through a study of current issue and research. Class is taken concurrently with PE 472E&S.

PE 472 E&S Enhanced Student Teaching (K-12) (12). A course designed to provide an opportunity for students to use methods, techniques, and materials of instruction on the elementary and secondary levels in physical education. The student will be assigned eight (8) weeks of student teaching at a K-7 school and eight (8) weeks at a 7-12 school. Prerequisites - specific courses as established for the program, plus a minimum grade of C in Methods.

Recreation (REC)

REC 302 Group, Table and Adult Games (2). A course designed to acquaint students with procedures and techniques of supervision and participation in group and table games. Emphasis is placed on program planning, current recreational trends, effective leadership, and teaching principles. It is required of all Recreation majors.

REC 303 Camping Skills (2). A course designed to develop practical camping skills through direct experiences including: cooking skills, camp site selection, hiking skills, compass reading, rock climbing, tenting, and aquatic skills. It is required of all Recreation, PE K-12 licensure, and Health K-12 licensure majors.

REC 353 Leadership Principles (2). A course designed to equip the student to manage and supervise recreational programs. It provides the opportunity to apply program planning skills and leadership techniques in a selected leisure service agency. It is required of all Recreation majors.

REC 473 Field Experience (9). A course designed to provide supervised work experience by students in selected recreational agencies. The student is subject to such requirements and responsibilities as evidenced in gainful employment in the area of choice. The course combines theory with practical leadership experiences. It is required of all Recreational majors.

REC 481 Intramural Practicum (2). A practicum course that combines classroom discussions with direct experiences in organizing, conducting, scheduling, and officiating intramural activities. It is required of all Recreation majors.

Department of Psychology

Peter Millet, Ph.D., Head, 300 Clay Hall

Faculty: E. Ascencao, H. Barrett, L. Boyer, J. Chatman, D. Fuller, D. Granberry, R. Jeffries, R. Jones, J. Joyner, L. Knieps, P. Knox, C. Lane, D. Martin, P. Millet, S. Olivas, C. Owens, A. Sibulkin, D. Smith, D. Tucker

General Statement: The philosophy of the Department of Psychology is embodied in the concept that psychology is a discipline that contributes to the understanding of human behavior and experience. The emphasis of the program is on the scientific study of behavior and practical applications of this knowledge. The objectives are to provide undergraduate majors and minors with courses of study and related experiences that provide 1) A general avenue for increased understanding of human behavior, 2) A solid foundation for advanced study leading to careers in the fields of psychology, counseling and guidance, or to study in the health professions, social work, and pupil personnel services 3) Training for bachelor's level entry into careers in mental health services, industry and human services, and 4) the ability to enhance the quality of one's life and to relate more effectively with others.

ADMISSION, RETENTION, GRADUATION

The undergraduate curriculum in psychology terminates in a Bachelor of Science Degree. All majors are required to take PSY 101 Orientation, General Psychology 2010, Psychology of Adjustment 210, Elementary Statistics 211 and 41 additional hours in psychology at the 300/400 level. The 41 hours must include the required courses: Psy 315, 318, 330, 411, 411 A or B, 450, 481 and 490. At least six of the remaining hours of 300-400 level electives must be selected from Group 1 psychology courses (PSY 321, 341, 351, 425, 462), and the remainder from either Group 1 or Group 2 psychology electives. Majors must earn a grade of C or better in all psychology courses counted towards the major. Majors who receive a grade of D or F in a required psychology course must repeat and pass the course with a grade of C or better. When a course is a prerequisite for another psychology course, a grade of C must be earned in the course before taking the psychology course for which it is a prerequisite.

Majors are required to participate in performance evaluation measures (taking various tests, responding to inquiries) designated by the Department, College or University.

Bachelor's Level Employment

Students who plan to seek employment in the Mental Health field with the Bachelor's Degree in Psychology should enroll in Field Placement, Psy 436, after completing prerequisites.

Students should seek information on the educational requirements for various careers in Mental Health. Mental Health and other careers in Psychology are discussed in the Undergraduate Student Handbook.

Social Science Concentration

A student may elect to pursue a social science major with a concentration in psychology (see Arts and Science Interdisciplinary Degree Program in this catalog for a detailed description). Students in this program may design a course of study comparable to the educational background provided through the psychology major while at the same time tailoring it to their specific goals and interests.

DEPARTMENTAL REQUIREMENTS FOR BACHELOR OF SCIENCE IN PSYCHOLOGY

Total 130 Semester Hours

All majors in Psychology must take the following courses.

GENERAL EDUCATION CORE (39-41 hours) The General Education Requirements for the Bachelor of Science degree in Psychology are the same as the University Requirements. The following courses and hours are required: English Composition (6), English Literature (3), Humanities (7), Natural Sciences (6-8), Math (3), American History (6), Social Science (3), Computer Literacy (3) and Physical Education (2).

MAJOR REQUIRED CORE (33 hours) PSY 101, 2010, 210, 211, 315, 318, 330, 411, 411 A or B, 450, 481,and 490.

GUIDED ELECTIVES IN PSYCHOLOGY (18 hours). At least 6 semester hours are required from **Group 1** Basic Courses and the remaining 12 hours are required from either **Group 1** or **Group 2.**

Group 1 courses include PSY 321, 341, 351, 425, and 462. **Group 2** courses include PSY 310, 323, 331, 336, 352, 353, 414, 424, 436, 437, 440, 451, and 455.

GENERAL ELECTIVES (44-46 hours) These electives must include at least 12 hours of 300 and 400 level courses. Electives can include PSY courses as well as courses from other departments. The advisor can recommend and will approve such electives.

UPPER DIVISION ADMISSION Upper Division Admission is granted in the semester in which the student has completed or will complete all General Education Courses and PSY 101, 2010, 210 and 211. A grade of C or higher must be made in the psychology courses. Upper Division Admission is an official action taken by the psychology department and the student will be notified in writing that admission has been granted. The following psychology courses require that the student has been given Upper Division Admission status before being permitted to enroll in them: PSY 315, 318, 330, 411, 411A/411B, 425, 436, 437, 450, 451, 455, 462, 481 and 490. Students must also meet any University testing or other requirements necessary for upper division admission (*see advisor regarding Rising Junior Examination*).

REQUIREMENTS TO TEACH PSYCHOLOGY IN SECONDARY SCHOOLS

Students seeking endorsement to teach Psychology at the high school level must:

1. Be licensed in a specialty area of Social Studies (Admission to Teacher Education Program is required;(see section on Teacher Education Admission and Retention in this catalog)
2. Major in History or Political Science;
3. Minor in Psychology (PSYC 2010 and 202 plus 18 Upper Division Hours in PSY);
4. Have the enhanced student teaching experience in the secondary school and middle school (Documentation of current professional liability insurance is required.)
5. Successfully pass the Praxis II Series Examinations: Principles of Learning and Teaching Test (PLT 7-12) and Specialty Area Test for Psychology.

MINOR REQUIREMENTS

General Psychology 2010 and Psychology 210 plus 18 additional semester hours of 300 and 400 level psychology courses are required for a minor.

BACHELOR OF SCIENCE DEGREE IN PSYCHOLOGY

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER Courses	Hr	SPRING SEMESTER Courses	Hr
ENGL 1010	3	ENGL 1020	3
MATH 1010	3	HIST 2020	3
HIST 2010	3	HUM	3
HPER	1	HPER	1
PSY 101	1	PSYC 2010	3
HUM	3	SOC SCI	3
CS 121	3		
	17		16

SOPHOMORE YEAR

FALL SEMESTER Courses	Hr	SPRING SEMESTER Courses	Hr
ENGL 2010	3	PSY 211	3
NAT SCI 1	4	NAT SCI 2	4
HUM	3	ELEC	9
PSY 210	3		
ELEC	3		
	16		16

JUNIOR YEAR

FALL SEMESTER Courses	Hr	SPRING SEMESTER Courses	Hr
PSY 318	3	PSY 411	3
PSY 330	4	PSY 411 A or B	1
PSY ELEC*	9	PSY 315	3
		PSY ELEC	6
		UPPER DIV ELEC	3
	16		16

SENIOR YEAR

FALL SEMESTER Courses	Hr	SPRING SEMESTER Courses	Hr
PSY 450	3	PSY 490	3
PSY 481	3	ELEC	14
UPPER DIV ELEC	9		
ELEC	3		
	18		17

* At least 6 hours of Psychology Electives must be from Group 1 courses.

COURSE DESCRIPTIONS

Psychology (PSY)

All 300 and 400 level courses have as a minimum prerequisite Psychology 2010 or the consent of the instructor.

PSY 101 Orientation (1). Designed to assist freshmen and new students in their adjustment to university life while providing a historical perspective of the Tennessee State University community. Major emphasis is given to personal adjustment and development, goal-setting, study skills, time management and careers in the area of Psychology.

PSYC 2010 General Psychology (3). The basic course in introductory psychology for majors and non-majors. The course introduces students to the fundamental concepts of psychological methodology, basic psychological processes, learning memory, motivation, and emotions. The course is a prerequisite for all psychology courses.

PSY 210 The Psychology of Adjustment (3). Study of personality development and structure, with major emphasis on personal adjustment and the functional aspects of the psychology of daily living. Topics covered include development of adjustment patterns, individual adjustment to life situations, societal definitions, treatment of the maladjusted, personal appraisal systems, and modification of behavior.

PSY 211 Elementary Statistics (3). An introduction to statistics for the general student, with emphasis on organizing and describing numerical data, probability, sampling distributions, correlation, regression, point estimation, testing hypotheses and distribution-free methods.

PSY 242 Human Growth and Learning (3). A course designed to give the student an understanding of the child as a growing organism, and how behavior is acquired; an introduction to learning theory and its classroom application; and training in the application of psychological principles to various functions of the school. Required in the professional education core. Field experience required.

PSY 312 Meas/Eval/Clrm in Public Schools (3). A course 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 schools; also training is offered in the construction of objective tests. Attention is also given to various tests as they relate to the functions, techniques, and tools of guidance and counseling. Prerequisite: Psychology 242. Required in the professional education core. *Admission to Teacher Education required* for those planning to be teachers. Others enrolled with permission of the Psychology department head.

PSY 315 Principles of Learning (3). A study of classical and operant conditioning (including reinforcement, scheduling, acquisition, extinction, generalization discrimination) and topics in complex human learning (including verbal learning, memory, problem solving, information processing and concept information.) Prerequisite: Upper Division Admission.

PSY 318 Computer Applications and Technical Writing (3). A study of statistical and other software that is relevant to psychology; the use of the Internet in research, and aspects of technical writing in psychology including the use of APA style. Prerequisite: Upper Division Admission.

PSY 321 Abnormal Psychology (3). A descriptive and theoretical survey of the major forms of psychopathology in children, adolescents and adults. The course will examine current trends and research in the field of mental health and psychopathology.

PSY 323 The Psychology of the Black Experience (3). The Psychology of the Black Experience deals with coping strategies of Black families (opposed to current emphasis on pathology of Black families); psychology of the Black female and Black male. Research of Black authors will be emphasized.

PSY 330 Physiological Psychology (3 hrs. lecture 1 hr. lab.) . An introduction to the study of the relationship between bodily processes and behavior. Emphasis is placed upon the basic anatomy and psychology of sensory and motor functions, motivation, emotion, learning and behavior disorders. The laboratory focuses on individual and group experience in these areas. Prerequisite: Upper Division Admission.

PSY 331 Principles of Human Sexuality (3). A study of theories and current research related to psychological and physiological aspects of human sexuality, as well as the effect of sex-roles on sexual interaction.

PSY 336 Introduction to the Delivery of Mental Health Services (3). A course designed to acquaint students with the mental health profession and its delivery of mental health services. The student will observe and interact with mental health workers in various settings, e.g. community mental health centers, crisis call centers, day care centers, etc. to obtain "first hand" knowledge of what mental health service delivery encompasses.

PSY 341 Social Psychology (3). A study of interpersonal behavior including such topics as perceiving others, interpersonal attraction, prejudice, attitude change, social influence, aggression, altruistic behavior, group processes and the psychology of organizations.

PSY 351 Developmental Psychology (3). The growth and development of the human organism from a theoretical perspective: biological, cognitive, social, and emotional development.

PSY 352 The Psychology of Adult Development and Aging (3). A study of the developmental tasks of adulthood. Emphasis will also be given to the search for meaning and the courage to create one's life style.

PSY 353 The Psychology of Death and Dying (3). A study of such topics as the dying person, attitudes toward death, children and death, bereavement, and funeral rites. Emphasis will be placed on individual experience.

PSY 374 problems in Educational Psychology: Classroom Management (3). A course that covers multiple strategies for typical classroom problems as well as general ways to create a motivated and caring community of learners. Admission to Teacher Education required. Others admitted with permission of the Psychology department head.

PSY 411 Foundations of Psychological Investigation (3). PSY 411 A or B Foundations of Psychological Investigation Lab (1) Introduction to methods of behavioral research commonly employed in psychology and education. Topics include methods of observing behavior, measurement, subject selection, design and interpretation of behavioral research, research ethics and conducting and reporting research projects in the behavioral sciences. Prerequisite: PSY 318.

PSY 414 Psychology of Stress Management (3). A study of the nature and sources of stress in modern society. Topics include the various ways our systems react to stress and specific techniques for managing stress.

PSY 424 Behavior Modification (3). A course designed to give the student a firm background in the behavior theory for several discrete methods of behavioral management in the home, clinical settings, and the school. Ethical considerations of manipulating human behavior will be thoroughly explored. Contrast with other techniques and criticism will be documented.

PSY 425 Introduction to Personality Theory (3). A study and analysis of the major theoretical approaches to the personality. Prerequisite: Upper Division Admission.

PSY 436 Field Placement in Psychology (3). Placement experience in a mental health setting. A minimum of nine hours per week at the practicum site is required. Prerequisites: PSY 321, 336 or 437, permission of instructor and Upper Division Admission.

PSY 437 Fundamentals of Counseling (3). The course will emphasize understanding the helping relationship from the viewpoint of both the client and the professional. Students will be introduced to methods of interviewing, observing and gathering information. Issues, problems and values related to the counseling process will be examined. Prerequisite: Upper Division Admission.

PSY 440 Drugs and Behavior (3). A study of the biomedical, psychosocial and mental health aspects of drugs that affect behavior including alcohol. Substance abuse and treatment modalities will also be emphasized.

PSY 450 Senior Project (3). A requirement of all seniors majoring in psychology. A course in which students plan and carry out projects in the area of psychology under the supervision of a faculty person. Prerequisite: PSY 411.

PSY 451 A,B,C Readings and Research in **Psychology (3, 3, 3).** Individual study and research under faculty guidance. Prerequisite 12 hrs. of upper division psychology courses and permission of instructor and Upper Division Admission.

PSY 462 Introduction to Psychological Tests and Measurements (3). A program of study designed to give the basic principles underlying psychological measurement, training in selection and use of psychological tests, and practice in both group and individual testing. This course is an intensive study of individual differences, with emphasis on intellectual, personality, and academic achievement testing. Prerequisite: Upper Division Admission.

PSY 481 History and Systems of Psychology (3). A study of the historical development of psychology as a science and profession and the fundamental concepts of various schools of psychology. Prerequisite: Upper Division Admission.

PSY 490 Advanced General Psychology (3). A review of the major concepts of psychology. A capstone course to facilitate placing psychological learnings into an integrated system. The course will include some preparation for advanced achievement testing in psychology. Prerequisites: Upper Division Admission, Senior Standing and 30 hours of psychology.

Department of Teaching and Learning

Dean B. Roberts, Ed.D., Head, 203 Clay Hall

Faculty: M. Alvarez, F. Cathey, C. Dickens, L. Drummond, M. Dunn, R. Emans, D. Mathis, N. Mays, D. McCargar, B. O'Conner, J. Presley, R. Renfro, L. Simpson, W. Smith, C. Stice.

General Statement: The Department of Teaching and Learning is designed primarily for providing professional education for teachers. It offers undergraduate professional courses for prospective elementary and secondary school teachers and a major in special education. The program of teacher education includes three broad areas of study: general core, academic major, and professional education. The general education programs, required of all departments offering a teacher education program, is described in the general Academic information section of this catalog. The Professional Education core is presented below.

Career Options

The immediate career goal of those studying in the Department of Teaching and Learning is to become a K-12 school teacher. Eventually, however, many students pursue advanced degrees and become principals, counselors, supervisors, superintendents and university professors of education.

Professional Education

The basic pattern of professional education needed for teaching has certain common elements that apply to problems that 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 require 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 (see major for individual licensure requirements).

Core Professional Requirements

In planning the core professional program, attention was given to those areas of study that are considered essential to the development, understandings and competencies needed by all teachers.

These areas include:

1. Historical, philosophical, and sociological foundations of American education.
2. Human growth and development, and the psychology of learning, including an understanding of how children grow physically, emotionally, and mentally, as well as the nurture necessary for wholesome growth. The relationship between growth and learning and new behavior patterns is also included.
3. Understanding 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.

The following courses are required of all persons, except those who major in special education, who are enrolled in the professional teacher education program.

EDCI 201	History and Foundations of Education
EDAD 301	School Organization, Management and Community Relations
EDCI 387	Curriculum Development
EDAD 400	Professional Rights and Responsibilities
EDSE 333	Education of Exceptional Children
PSY 242	Human Growth and Learning
PSY 312	Meas/Eval/Clrm Public Schools

Specialized Professional Education Requirements

The specialized professional education requirements vary according to the area of licensure in which one seeks certification.

The specialized requirements adapted to grades K-8, grades 7-12, grades K-12 include:

1. Materials and methods of teaching appropriate to the level of certification, including reading methodology.
2. Knowledge and understanding of learning and behavioral characteristics of disabled children
3. Supervised student teaching appropriate to an area of endorsement.
4. Specialized requirements as outlined under the area to which they apply.
5. Teacher education admission and retention requirements as specified in the introductory material included under the general heading: The College of Education.

Special Education Program Requirements

1. All students are required to meet the general education requirements for the Bachelor of Science degree in Special Education. (Refer to the general Academic Information section of the catalog.)

2. A total of 130 semester credit hours must be completed. Students on the teacher's certification track must maintain a minimum cumulative grade point average of 2.75.

3. The requirements for the major in Special Education consist of 42 semester hours. A minimum of 33 semester credit hours within the major core must be completed. In addition 9 semester hours of electives in special education or a related discipline must also be completed.

4. Students must successfully pass the Special Education Specialty Test and Principles of Learning and Teaching Test (PLT 7-12 or K-6) of the Praxis II Teachers Examination Series *prior to the student teaching semester.*

Professional Education Requirements (28 semester hours)

EDCI 101	Orientation	1
EDCI 201	History and Foundations of Education	3
EDAD 301	School Organization, Management, and Community Relations	2
EDCI 387	Curriculum Development	3
EDRD 424	Teaching of Reading in Elementary School OR	3
EDRD 491	Reading and Studying in Secondary Schools (Minimum required is 19 semester hours)	3
EDSE 495	Student Teaching	12
EDCI 470A or 470B	Educational Seminar (To be taken concurrently with Student Teaching.)	3

Special Education major Requirements (36 semester hours)

EDSE 333	Education of Exceptional Children
EDSE 336	Characteristics and Needs of Mildly Disabled
EDCI 390A	Methods of Elementary Teaching: Humanities and Social Studies
EDCI 390B	Methods of Elementary Teaching: Sciences and Mathematics
EDSE 454	Theory and Procedures for Teaching Exceptional Children
EDSE 457	Consultation and Collaboration
EDSE 459	Characteristics and Needs of the Gifted OR
EDSE 460	Teaching the Gifted
EDSE 462	Educational and Assessment of Exceptional Child
EDSE 464	Managing Inappropriate Classroom Behavior
EDSE 468	Teaching Academics to the Mildly Disabled
EDSE 469	Managing Transitions Exceptional Persons
EDSE 480	Technology in Special Education and Rehabilitation

Electives in Special Education or Related Discipline

With the advisor's approval students may select 6 hours of electives in a related discipline to complete the special education major. Also with the advisor's consent students may select special education electives.

Curriculum For A Major In Special Education

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
Engl 1010	3	Engl 1020	3
Math 1010	3	HPER 1010-1053/AERO MUSC 2010	1
HPER 1010-1053/AERO /MUSC 2010	1	Humanities electives	3
Humanities electives	3	Hist 2020	3
Hist 2010	3	Biol 1021 or Sci elec	3
Biol 1010 or Sci elec	3	Health 151	3
EDCI 101	1		
	17		16

SOPHOMORE YEAR

Engl 2010	3	Engl 2020	3
CS 121	3	EDAD 301	2
EDCI 201	3	HPER or AERO/ MUSC 2010	1
HPER or AERO or MUSC 2010	1	SCI elective	3
PSY 242	3	Electives	6
Social Studies electives	3		
	16		15

Note: Rising Junior Examination must be passed before enrolling in upper division courses.

JUNIOR YEAR

EDSE 480	3	EDCI 387	3
EDSE 333	3	EDSE 454	3
EDSE 457	3	EDSE 464	3
EDSE 459	3	EDSE 460	3
EDSE 336	3	EDSE 462	3
EDCI 390A	3	EDCI 390B	3
	18		18

SENIOR YEAR

EDRD 424 or 491	3	EDSE 495	12
EDSE 469	3	EDCI 470 A or B	3
EDSE 468	3		
Electives (300-400)	6		
	15		15

Course Descriptions

Curriculum and Instruction (EDCI)

EDCI 101 Orientation (1). A course that provides an orientation both to the University and the field of teaching. It meets the requirement for University orientation. Should be taken the first semester of enrollment. Field experience required.

EDCI 201 History and Foundation of Education (3). A course that includes 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. Field experience required.

EDCI 210-220 Field Study in Education (2-2). A course that presents problems of teachers in active service in the fields of methods of teaching, curriculum materials, school-community relationships and school organization.

EDCI 351-352 Developmental Field Experiences for Teaching (1-1). The course includes field experiences in which students perform tasks related to teaching and teacher roles. The course may be taken separately or concurrently by consent of instructor but must be taken before student teaching. Prerequisite: Admission to Teacher Education. Documentation of current professional liability insurance is required.

EDCI 387 Curriculum Development (3). A course that present a critical study of the reorganization, construction, and administration of the school curriculum in light of modern educational principles and objectives. Prereq-

uisite: Admission to Teacher Education. Field experience required. Documentation of current professional liability insurance is required.

EDCI 390A Methods of Elementary Teaching: Humanities and Social Studies (3). A course that addresses methods of instruction in what are broadly identified as humanities and social science areas: social studies, language arts, art, and music. Knowledge and skills are addressed in special methods associated with these disciplines and recommended practice at the elementary school level. Prerequisite: Admission to Teacher Education. Field Experience required. Course should be taken the semester before student teaching. Documentation of current professional liability insurance is required.

EDCI 390B Methods of Elementary Teaching: Sciences and Mathematics (3). A course that addresses methods of instruction in the areas of science, mathematics, and the instructional use of technology. Knowledge and skills are addressed in the teaching of science and mathematics content areas appropriate to the elementary school learner. The use of technology, especially microcomputers as instructional tools, is incorporated. Admission to Teacher Education. Field Experience. Course should be taken the semester before student teaching. Documentation of current professional liability insurance is required.

EDCI 417 Home Educational uses of Micro-Computers (1-3). A course that deals with various techniques for using the microcomputers in the home.

EDCI 418 Children and Micro-Computer Technology (1-3). A course that deals with computer language and software as it relates to the education of children.

EDCI 419 Technology in the School (1-3). A course that deals with computer introduction for secondary schools.

EDCI 420 Introduction of Word Processing in Elementary Education (1-3). A course designed to explore how word processing can benefit the elementary school student.

EDCI 470A Educational Seminar (3). A course that presents a study of current issues and research in education. Emphasis is placed upon the student's developing a coherent approach to educational theory and practice. Taken concurrently with EDCI 472N, Student Teaching in the Secondary School. Prerequisite: Admission to Teacher Education.

EDCI 470B Educational Seminar (3). A course that presents a study and analysis of the basic course content of courses taught in the elementary schools. Taken concurrently with EDCI 472E Student Teaching in the Elementary School. Prerequisite: Admission to Teacher Education.

EDCI 472M Enhanced Student Teaching in the Elementary School (12). A course that 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 experience are held regularly. This course is open only to seniors and teachers with some experiences. Prerequisite: Admission to Teacher Education. Documentation of current professional liability insurance is required.

EDCI 472N Enhanced Student Teaching in the Secondary Schools, Grades 7 through 12 (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 semester in which the course is to be completed. Required for all students who are following the professional education core that leads to teaching as a career. Prerequisites: EDCI 201, PSY 242, EDAD 301, EDAD 400 EDCI 387, EDSE 333, and the Department's specific methods course. Prerequisite: Admission to Teacher Education. Documentation of current professional liability insurance is required.

EDCI 490 Multicultural Education (3). A course designed to develop awareness, understanding, and sensitivity to the needs and interests of ethnic and cultural groups. The differences and similarities that characterize individuals and groups should be cherished for their worth and cultivated for the benefits they bring all people.

EDCI 495 Practicum (6-9). This course is designed for teacher education candidates who hold teaching positions in approved schools and wish to satisfy the student teaching requirement in their current position. Practicum students are supervised by the school principal designee and the university supervisor.

Special Education (EDSE)

EDSE 305 Parenting Exceptional Children (3). A survey of categories of exceptionality, special needs of exceptional families, community resources, and child advocacy; methods for communicating with parents of exceptional children.

EDSE 333 Education of Exceptional Children(3). A course that explores principles, characteristics, and special needs; local and state programs for diagnosis and care; educational provisions in regular or special classes, home teaching, social and vocational guidance. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDSE 336 Characteristics and Needs of the Mildly Disabled (3). A course that presents characteristics and needs of children who experience learning problems resulting from mental retardation, emotional disturbance, learning disability, traumatic brain injury, or unidentifiable causes.

EDSE 337 Characteristics and Strategies for the Physically Challenged (3). An introduction to learning, behavioral, and medical characteristics of the physically challenged. Strategies for meeting the students needs in the least restrictive environment are demonstrated. Field experience required. Documentation of current professional liability insurance is required.

EDSE 406 Characteristics and Needs of Emotionally Disturbed Children (3). A course that presents characteristics and degrees of severity, possible causes and groups of causes, relationships among personality, developmental factors, and behavior problems.

EDSE 407 Teaching the Emotionally Disturbed (3). A course that deals with needs and educational procedures; methods and materials for special and regular classes; treatment models and perspectives. Field Experience required. Documentation of current professional liability insurance is required.

EDSE 410 Nature of the Learning Disabled Child (3). A course that covers characteristics, identification and diagnosis, relationships to other disabling conditions, issues, and trends.

EDSE 411 Characteristics and Needs of Mentally Retarded Children (3). A course that covers characteristics, degrees of severity, identification, description, possible causes, and needs of the family.

EDSE 412 Teaching the Mentally Retarded (3). A course that deals with needs and educational procedures; methods and materials for special and regular classes. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current liability insurance is required.

EDSE 413 Education of the Learning Disabled Children (3). A course that deals with needs and educational procedures; methods and materials for special and regular classes; treatment models and perspectives. Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDSE 435, 436, 437 Problems in the Education of Exceptional Children (3,3,3). An independent study. Consent of instructor in special education.

EDSE 454 Theory and Teaching Procedures for Exceptional Children (3). A course that introduces behavior modification, cognitive behavior following: diagnostic-prescriptive teaching, contracting, graphing, cooperative learning, peer tutoring, cognitive blend, role play, multicultural concepts, reinforcement and punishment strategies, and more. Prerequisites: Admission to Teacher Education and EDSE 333.

EDSE 455 Characteristics of Young Exceptional Children (3). A course that addresses the characteristics and needs of children with disabilities, aged 0-8. Included are psycho-social and developmental aspects and legal aspects. Field experiences required. Prerequisite: EDSE 333.

EDSE 457 Consultation and Collaboration (3). This course introduces various consultative and collaborative models of teaching, including strategies enhancing interactions between regular and special educators, and community partnerships which enhance educational services provided in schools. Field experiences are required. Prerequisites: Admission to Teacher Education, EDSE 454. Documentation of current professional liability insurance is required.

EDSE 459 Characteristics and Needs of the Gifted (3). A course that addresses the characteristics and needs of gifted children, including special needs of minority gifted youngsters. Cognitive, affective, and psychosocial domains will be covered, as well as an array of alternatives for the provision of special education services. Research and field-based experiences required. Documentation of current professional liability insurance is required.

EDSE 460 Teaching the Gifted (3). A course that covers predominant theoretical approaches, teaching procedures, and education of gifted students; methods and materials for special and regular classrooms and alternative administrative arrangements; application and demonstration; and field experiences. Prerequisite Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDSE 462 Educational Assessment of Exceptional Children (3). A course that deals with administration and interpretation of various educational, cognitive, and social assessment instruments. Prescriptive teaching strategies and behavior management techniques will be developed based on assessment results, and IEP's will be written. Observation and practical experience are required. Prerequisites: 333; 334 and 335. Prerequisite Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDSE 463 Teaching Early Childhood Special Education (3). A study of various team approaches (i.e. interdisciplinary and transdisciplinary), treatment models, and diagnostic-prescriptive teaching strategies. A variety of teaching methods and materials will be applied to the education of young children with disabilities in the areas of language, self-help, cognitive, motor, and social areas. Individual family service plans (IFSPS) will be written and professional responsibilities will be reviewed. Field experiences are required. Prerequisites: Admission to Teacher Education, EDSE 333, 454, 455, and 462. Documentation of current professional liability insurance is required.

EDSE 464 Managing Inappropriate Classroom Behavior (3). A course that presents theories, goals and intervention strategies for serving exceptional learners with mild to severe behavior disorder.

EDSE 468 Teaching Academics to the Mildly Disabled (3). A course that focuses on teaching language arts, health, social studies, science and arithmetic to those with disabilities. The diagnostic-prescriptive model is emphasized, and individual education programs (IEPS) will be developed. Field-based experiences are required. Prerequisites: Admission to Teacher Education, EDSE 333, 336, and 462. Documentation of current professional liability insurance is required.

EDSE 472 Medical Aspects of Exceptionality (3). A survey of the frequently occurring medical problems that impact upon the education of young children with disabilities. Preventing the spread of communicable diseases, procedures for changing ostomy bags, auctioning, CPR, tube feeding, and handling of seizures are among the topics. Field experience required. Prerequisite: EDSE 333.

EDSE 473 Practicum in Special Education (3). The practicum is designed for students who are not seeking teacher certification in Special Education, but desire supervised classroom experience in preparation for working in a non-school setting. Prerequisite: Students must have complete all required course work for the major in Special Education. Documentation of current professional liability insurance is required.

EDSE 480 Technology in Special Education and Rehabilitation (3). An in-depth study of the various technologies utilized in Special Education and Rehabilitation. Theories, goals, and intervention strategies (instructional and therapeutic) for developing and implementing computer based educational environments and aids for the disabled and gifted. Admission to Teacher Education. Field Experience required.

EDSE 483 Seminar in Mental Retardation (3). A survey of emerging professional and ethical issues related to mental retardation The focus is on exploration and clarification of special topics. Prerequisites: EDSE 333 or EDSE 411, 412 and 464.

EDSE 485 Seminar in Learning Disabilities (3). A survey of merging professional and ethical issues related to learning disabilities. The focus is on exploration and clarification of special topics. Prerequisites: EDSE 333, EDSE 460, 413 and 464.

EDSE 495 Student Teaching of Exceptional Children (12). A course that deals with observation and supervised practicum with exceptional children. Experience must be split between two of the following: Elementary and secondary programs for the mildly disabled: Role of consultant, inclusion, and resource teacher; or for the ECE students between home-based, school-based, and hospital based programs. Prerequisite: Students must have completed all required course work for the major in Special Education and all professional education courses. Documentation of current professional liability insurance is required.

Reading Education (EDRD)

EDRD 310 Strategies for Successful Test-taking (1). A course designed for selected students. The major purpose of the course is to provide instruction that will facilitate the development of skills and techniques related to extending competencies in test-taking. Students must complete prescribed laboratory activities.

EDRD 419 Exploring the Language Learning Process (3). A course that covers current theory concerning the nature of reading, language, and learning as well as an overview of school reading-language arts programs.

EDRD 424 Teaching Reading in the Elementary School (3). A course that includes methods, materials and modern practices and trends in the teaching of reading at the elementary school level. Required only for students pursuing teacher certification in grades K-9 or K-12. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDRD 482 Teaching Reading Language Arts to Exceptional Learners (4). A course that covers language characteristics and the special reading-language arts needs attendant with the exceptional learner. The course is designed especially for the regular classroom teacher. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDRD 490 Directed Individualized Study in the Teaching of Reading (1-3). An individualized study. Consent of Instructor. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDRD 491 Reading and Study in Secondary Schools (3). A course designed for all subject matter teachers. Teaching strategies, designs, and materials for teaching comprehension, advanced study skills and vocabulary; formal and informal teaching pupil abilities and interests are covered. Required only for students pursuing teaching certification 7-12. Prerequisite: Admission to Teacher Education. Field experience is required. Documentation of current professional liability insurance is required.

COLLEGE OF ENGINEERING, TECHNOLOGY AND COMPUTER SCIENCE

Decatur B. Rogers, Ph.D., Dean
ET 207 A. P. Torrence Hall

General Statement (College): Engineering is the profession in which knowledge of mathematics and natural science is applied with judgement to develop ways to economically utilize the materials and forces of nature for the benefit of mankind.

The College of Engineering, Technology, and Computer Science offers Bachelor of Science degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, Computer Science and Aeronautical and Industrial Technology. The College offers emphasis in Computers, Environmental Engineering, Facilities Engineering, Manufacturing Engineering.

The College's curricula in these programs are structured to graduate quality students capable of taking their places in the mainstream of the engineering/technology/computer science profession. Students are prepared to satisfy the manpower needs of industry and to tackle the complex engineering challenges facing a technology based society.

The educational goal of the College is to prepare students to think critically, interpret knowledge, and pursue lifelong learning, function effectively and productively as members of a global society, as engineering professionals in the work force.

The educational goals of the College of Engineering, Technology and Computer Science include the following:

1. To familiarize the student with the systematic scientific approach to problem-solving including the use of current technology in engineering, technology and computer science.
2. To provide the student with a strong and broad based foundation in engineering/ technology/ computer science fundamentals.
3. To develop habits of orderliness, carefulness and objectivity.
4. To develop professional attitudes, communication skills, and ethics, including the understanding of the engineering/technology/computer science profession.
5. To develop an understanding and a sensitivity for social and political, economic, and environmental implications of technological systems in the real world.
6. To provide the student with intellectual challenges designed to arouse curiosity and a desire for lifelong learning.
7. To provide students with experiences which will prepare them to function effectively in multi-cultural and multi-discipline groups.

Engineering Design Experience

A major engineering curriculum objective is to provide engineering students with the ability to systematically apply engineering fundamentals to the design of engineering components, systems and processes.

Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision making process (often iterative). The fundamental elements of the design process are the establishment of objectives and criteria, synthesis, construction, testing and evaluation, and should include a variety of realistic constraints, such as economic factors, safety, and reliability, aesthetics, ethics and social impact.

In this regard, the College has in place, a series of required courses with engineering design content, which are integrated throughout the curriculum in each engineering department.

The engineering design experience begins in the freshman year with ENGR 101L Introduction to Engineering II, and continues in the sophomore year with ENGR 201 Thermodynamics (or ENGR 225 Transport Phenomena) and ENGR 211 Statics (or ENGR 213 Combined Statics and Mechanics of materials).

Engineering design continues in the junior year with the required course ENGR 320 Introduction to Design where upper divisions students are once again introduced to the design process in a much more rigorous and comprehensive manner, building upon concepts introduced at the freshman and sophomore levels. Specialization in each department begins in the junior year with departmental design courses. Program specific design courses are listed in each department curriculum. Further specialization takes place in the senior year. Each department offers at least one course which is 100% engineering design. The engineering design sequence is completed with a two-semester discipline specific capstone design course. An integral part of the design experience is the introduction of ethical, economical, social and safety factors required to make a design successful. These concepts are introduced during the freshman year, reinforced during the junior year and integrated into design projects in the junior level and senior level design courses. At each level, a formal written report and a formal oral presentation is required to communicate the design.

Admissions/Retention Requirements: All engineering students who plan to take upper division engineering courses, 300 and 400 level courses, must have passed the Engineering Entrance Examination with a minimum score of 75% on each part (calculus, chemistry, and physics) of the examination.

Engineering Entrance Examination: The eligibility criteria for taking the Engineering Entrance Examination are:

1. Minimum grade of "C" in each of the following courses: CHEM 151, 151L; MATH 1060, 1070; PHY 221, 221L, 222.
2. Minimum cumulative GPA of 2.5 at the time of taking the Engineering Entrance Examination.
3. Completion and submission of the engineering entrance examination eligibility form to the Dean's Office at least one week prior to the examination.
4. A student must earn a grade of **B** or better in several of the following courses: CHEM 151, CHEM 151L, MATH 1060, MATH 1070, PHY 221, PHY 221L, PHY 222, to meet the required minimum cumulative 2.5 GPA requirement.

The Engineering Entrance Examination is given at least five times per year. The dates for the examination may be obtained from the Dean's Office. Each student is allowed three (3) attempts to pass the engineering entrance examination.

After the second unsuccessful attempt, the student is required to repeat at least two of the following courses: CHEM 151; MATH 1060, 1070; PHY 221, 222 before the examination can be taken a third and final time.

Admission of Transfer Students: Transfer students from other institutions of higher education who plan to enter the College of Engineering, Technology and Computer Science must meet University admission criteria. Engineering transfer students must first take and pass the Engineering Entrance Examination before taking 300 and 400 level courses.

Specific College Requirements:

1. No student will be allowed to take any departmental courses, major courses, engineering courses, mathematics and/or science courses without having successfully completed the proper prerequisites for those courses with a grade of "C" or better.

2. Students earning a grade of "D" or lower in mathematics courses, science courses, departmental courses, major courses, or engineering course(s) must repeat that course(s) the very next time the course(s) is offered.

3. All College students must take and successfully complete all components of the Rising Junior Examination during the junior year.

4. Each student must complete a practicum prior to graduation. A practicum may include, but is not limited to, an industrial internship, co-operative education experience, research experience, assistant in an engineering/technology laboratory, and other engineering/technology practical experiences. The practicum must be approved in advance by the student's academic advisor and department head. The practical experience must be at least eight (8) continuous weeks in length. A comprehensive report on at least one practicum is required. The report must be cosigned by a supervisor. The practicum report is to be given to the student's faculty advisor. The Dean's office will assist students in locating a practicum.

Engineering Core Requirements: All engineering students are required to take the following engineering core courses: mathematics (20 semester hours): MATH 1060, 1070, 263, 264, 303, ENGR 340; Science (16 semester hours): CHEM 151, 151L; PHY 221, 221L, 222, 222L, 223; Engineering Science (17 semester hours): ENGR 200, 200L, 201*, 211* 212, 330; Design (3 semester hours): ENGR 320, 450, 451; Humanities (9 semester hours): ENG 2010, 2020, Humanities Elective*** (3 semester hours); Social Science (9 semester hours): HIST 2010, 2020, Social Science Elective** (3); Other (17 semester hours): ENGL 1010, 1020; ENGR 100L, 101L, 115L, 221L or 222L or 223L, 320, 420L***, 490; HPER/AFROTC/BAND (2 semester hours); Total Engineering Core 91 semester hours.

*Electrical Engineering majors will take ENGR 225 and ENGR 213.

**Humanities and Social Science electives must be chosen from an approved list of 300 or 400 level courses with the approval of the academic advisor.

***ENGR 420L is only offered during the fall semester (see graduation requirements).

Aeronautical and Industrial Technology Core Requirements: Mathematics and Physical Science (18 semester hours): MATH 1040, 1050, CHEM 1010, 1011, PHY 211, 211L, 212, 212L; Communication (9 semester hours): ENGL 1010, 1020, SPCH 230; Humanities and Social Science (12 semester hours): HIST 2010, 2020; ENG 2010, 2020; Management Core (6 semester hours): MG 301, 405; Technical Core (24 semester hours): ENGR 100L, 101L, 115L, 450, 451, 490; CS 121, 210, 211, AIT 200, 200L, 220, 220L; Other (6 semester hours) PSYC 2010, HPER/AFROTC/BAND (2 semester hours); Total Technology Core - 75 semester hours.

Computer Science Requirements: Mathematics and Physical Science (19 semester hours): MATH 1060, 1070, PHY 221, 221L, 222, 222L, STAT 311; Communication (9 semester hours): ENGL 1010, 1020, SPCH 230; Humanities (9 semester hours): ENGL 2010, 2020, Phil 250 (Humanities Elective); Social Science (9 semester hours): HIST 2010, 2020, Social Science Elective; Technical (27 semester hours): CS 211, 212, 240, 302, 304, 320, 355, CS 410 or CS 455, ENGR 100L, 101L, 450, 451, 490; Other: HPER/AFROTC/BAND (2 semester hours); Total Computer Science Core.

Graduation Requirements: In addition to the University requirements for graduation, the following specific College graduation requirements must be met by students in the college:

Students may graduate with a maximum of two "D" grades earned in the last two semesters of the senior year. All other "D" grades earned in courses prior to the senior year must be repeated the very next time the courses are offered until a minimum grade of "C" is earned. If a graduating senior earns more than two grades of "D" during the senior year, that senior will not graduate until that senior has only two grades of "D".

Engineering students must take and pass ENGR 420L EIT Review Laboratory and they must take the Fundamental of Engineering Examination the same semester they take ENGR 420L EIT Review Laboratory.

Accreditation: The Bachelor of Science degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, and Mechanical Engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET).

ENGINEERING COURSE DESCRIPTIONS

ENGR 100L, ENGR 101L Introduction to Engineering I and II (1-1). An overview of the College of Engineering, Technology and Computer Science, its academic support services, admission and retention standards, introduction to the engineering profession including engineering economics, probability and statistics, the programming and use of computers for word processing of technical report writing, spread sheets for data processing, and structured programming to aid scientific problem solving. Introduction to all departments including laboratory experiments. Completion of minor engineering design project is required. Corequisite MATH 1040

ENGR 115L Computer Engineering Graphics and Analysis (2). A course is designed to develop the fundamental skills of graphics communication by manual and computer means. Sketching techniques to develop orthographic and pictorial graphics skills, standard technical drawing methods, dimensioning techniques, working drawings development skills, and lettering capability will be the fundamental focus of the course. Corequisite ENGR 100L

ENGR 200, ENGR 200L Circuits I and Lab (3-1). Fundamental concepts of charge, current, voltage and power; passive and active circuit elements, phasors and impedance; mesh and nodal analysis; Thevenin's and Norton's Theorems; superposition; source transformations, natural and forced response of RL, RC, and RLC circuits average and effective values of periodic wave form; polyphase circuits. Prerequisites: ENGR 221L or 222L or 223L, MATH 264, PHY 222. Co-requisite: MATH 303.

ENGR 201 Thermodynamics (4). An introduction to the nature and domain of thermodynamics; the Zeroth Law; properties and states of pure substances; work and heat; the First Law applied to both open and closed systems; 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. Prerequisites: PHY 222, 222L, ENGR 221L or 222L or 223L.

ENGR 211 Statics (4). Statics of particles; statics of rigid bodies in three dimensions; centroids and centers of gravity; friction and moment of inertia. Prerequisites: MATH 1070, PHY 221, 221L, ENGR 100L.

ENGR 212 Dynamics(4). Study of the kinematics of particles, kinematics and kinetic motion of particles; work and energy relationships; impulse and momentum; kinematics of rigid bodies. Introduction to mechanical vibrations. Prerequisite: ENGR 211 or ENGR 213.

ENGR 213 Combined Statics and Mechanics of Materials (4). Statics of Particles, Structures, Force Applications, and Bodies in Equilibrium; Compression and Bending: Shear Elements, Torsion; Truss Analysis; Pressure Vessels; Bending Members, Beam and Design, and MOHR Circle. Prerequisites: Math 1070, PHY 221, 221L, ENGR 100L.

ENGR 221L Engineering Computer Programming Laboratory (1). An introduction to the use of digital computers in the solution of engineering problems; included are familiarization with the architecture of a computer and the design and coding algorithms in one or more programming languages suitable to engineering. The course will include learning to write and read computer programs in the Fortran language. Prerequisite: MATH 1060, ENGR 101L.

ENGR 222L Engineering Visual Basic Programming Laboratory (1). An introduction to the use of digital computers in the solution of engineering problems; included are familiarization with the architecture of a computer and the design and coding algorithms in one or more programming languages suitable to engineering. The course will include learning to write and read computer programs in the Visual Basic programming language. Prerequisite: MATH 1060, ENGR 101L.

ENGR 223L Engineering C++ Programming Laboratory (1). An introduction to the use of digital computers in the solution of engineering problems; included are familiarization with the architecture of a computer and the design and coding of algorithms in one or more programming languages suitable for engineering. The course will include learning to write and read computer programs in the C++ language. Prerequisite: MATH 1060, ENGR 101L.

ENGR 225 Transport Phenomena (4). Unified treatment of the principles of thermodynamics, heat transfer and fluid mechanics. Energy Analysis and the first and second law of thermodynamics. Steady state and transient heat conduction, convection and the thermal radiation process. Fundamentals of fluid flow. Prerequisites: PHY 222, 222L, ENGR 221L or ENGR 222L or ENGR 223L.

ENGR 320 Introduction to Design (3). A course which considers the engineering design process as an interdisciplinary activity. Engineering Statistics, economic decision making and the design process are introduced as is oral and written technical reporting. A Comprehensive design project is required as is a technical report and an oral report of the design. Prerequisites: ENGR 200, ENGR 201(or ENGR 225),ENGR 212,ENGR 221L or 222L or 223L.

ENGR 330 Materials Science (3). An introductory course on properties of materials, selection of materials, structure of crystalline and non-crystalline solids; mechanic behavior; electronics behavior, chemical behavior, stability and failure. Prerequisites: CHEM 151, MATH 1070, PHY 223.

ENGR 340 Numerical Analysis (3). Numerical solution of the system of linear and non-linear equations; numerical differentiation and integration; numerical solution of ordinary and partial differential equations; curve fitting; regression analysis and probability. Prerequisites: MATH 303, ENGR 221L or 222L or 223L.

ENGR 411-A,B,C,D,D,F,G,H Special Topics in Engineering (3). Special subject presented to cover current problems of unique advances in the leading edge of techniques. Prerequisites: Senior standing and consent of instructor.

ENGR 420L Engineer in Training Laboratory (1). A course designed to prepare students for the Fundamentals of Engineering Examination, a partial requirement for obtaining license as a professional engineer. This courses is only offered during the fall semester. Prerequisite: Graduating Senior.

ENGR 423 Legal Ethical Aspects of Engineering (3). Legal principles underlying engineering work; laws of contracts, torts, agency, real property, problems of professional registration and ethics.

ENGR 430 Engineering Economics (3). Economic factors involved in the acquisition and retirement of capital goods in engineering practice, including interest and capitalization methods of depreciation, amortization, sinking funds, cost and rate determination. Prerequisite: MATH 264.

ENGR 440 Probability and Statistics (3). Statistics and engineering; probability; probability distributions; Chebyshev's theorem; norman distribution; applications to operations research; treatment of data; hypothesis testing; method of least squares; regression; and application to engineering problems. Prerequisite: MATH 264.

ENGR 450 Capstone Design Project I (1). An engineering capstone design project I leading to completion of the project in ENGR 451. A written report and an oral defense of the proposed design project are required. Prerequisites: Graduating Senior, ENGR 320.

ENGR 451 Capstone Design Project II (1). A continuation of capstone design project I leading to completion of the project. A written report and an oral defense of the project are required. Prerequisite: ENGR 450.

ENGR 490 Professional Development Seminar (1). Discussion of case studies, professionalism, professional ethics, professional development activities required in industry. Prerequisite: Graduating Senior.

Department of Aeronautical and Industrial Technology

Dr. William L. Anneseley, Department Head
203 Industrial Arts Building

Faculty: Dr. William L. Anneseley, Dr. Rucele Consigny

General Statement: A Bachelor of Science Degree (B.S.) in Aeronautical and Industrial Technology is offered with four (4) Concentrations: Industrial Technology, Industrial Electronics, Aviation Management and Aviation Flight Training.

The department programs draw upon the principles and applications of sound business management, arts and sciences and the latest in technology. These principles are applied in the proper utilization of products, services and the management of equipment and personnel.

The educational objectives for the Department of Aeronautical and Industrial Technology are as follows:

1. To provide the student with the knowledge of physical sciences, mathematics and engineering courses so that he/she has the capability to apply those principles within the aeronautical and industrial sector;
2. To familiarize the student with the systematic scientific approach to the identification and solution of practical problems encountered in the working environment;
3. To guide the student in determining the most effective ways for an organization to use the basic factors of production, people, machines, materials information, and energy in the making or processing a product;
4. To assist the student in developing his/her managerial skills; and
5. To develop professional attitudes, ethical character and a thorough understanding of the individual's role in society from both a national and international perspective.

Elective Courses: In addition to the above concentrations, there are elective courses in the following areas: Aviation Management, Airport Management, Aviation Meteorology, Private, Commercial, Instrument, Multi-engine, CFI, CFII, Theory of Flight and Engines, Aviation Legislation, and Aviation Safety.

The Department of Aeronautical and Industrial Technology is affiliated with the following organizations: The University Aviation Association, The Council on Aviation Accreditation, and the Tennessee Aviation Association.

Additionally, Tennessee State University is designated by the Federal Aviation Administration as an Aviation Education Resource Center.

Departmental Requirements for Bachelor of Science in Aeronautical and Industrial Technology
Airway Electronic Systems **58 Semester hours**

Major Core: A minimum of 58 semester hours including: ENGR 100L, 101L, 450, 451, 490. AIT 250, 200, 200L, 220, 220L, 331, 331L, 395, 312, 332, 332L, 335, 335L, 417, 441, 340, 390, 348, 440, 442, 480.

Core requirements reflect the standards of the Federal Aviation Administration (FAA) and the University Aviation Association (UAA).

Four Year Plan:

Bachelor of Science Degree in Aeronautical and Industrial Technology Aviation Management

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
MATH 1040	3	MATH 1050	3
ENGL 1010	3	CS 121	3
ENGR 115L	2	ENGL 1020	3
ENGR 100L	1	MUS 1010	2
ART 1010	2	HPER / ROTC / BAND	1
HPER / ROTC / BAND	1	CHEM 1010	3
PSYC 2010	3	CHEM 1011	1
		ENGR 101L	1
	15		17

SOPHOMORE YEAR

CS 211	3	MATH 1060	4
PHY 211	3	PHY 212	3
PHY 211L	1	PHY 212L	1
ENGL 2010	3	HIST 2020	3
HIST 2010	3	AIT 220	3
AIT 200	3	AIT 220L	1
AIT 200L	1	ENGL 2020	3
	17		18

JUNIOR YEAR

AIT 250	3	AIT 312	3
AIT 331	3	AIT 332	3
AIT 331L	1	AIT 332L	1
AIT 395	3	AIT 348	3
AIT 335	3	CS 302	3
AIT 335L	1	MATH 1070	4
SPCH 230	3		
	17		17

SENIOR YEAR

MATH 351	3	AIT 417	3
AIT 441	3	AIT 442	3
ENGR 450	1	ENGR 451	1
AIT 340	3	AIT 480	3
AIT 440	3	MG 405	3
MG 301	3	MG 403	3
ENGR 490	1		
	17		16

TOTAL HOURS 132

Departmental Requirements for Bachelor of Science in Aeronautical and Industrial Technology
Industrial Electronics Emphasis **45 Semester hours**

Major Core: A minimum of 45 semester hours including: ENGR 100L, 101L, 450, 451, 490. AIT 200, 200L, 220, 220L, 311, 331, 331L 335, 335L, 348, 332, 332L, 404, 311, 417, 480.

Guided Elective(s):

Core Requirements reflect the standards of the National Association of Industrial Technology (NAIT).

Four Year Plan:

Bachelor of Science Degree in Aeronautical and Industrial Technology Industrial Electronics

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
MATH 1040	3	MATH 1050	3
ENGL 1010	3	CS 121	3
ENGR 115L	2	ENGL 1020	3
ENGR 100L	1	MUS 1010	2
ART 1010	2	HPER / ROTC / BAND	1
HPER / ROTC / BAND	1	CHEM 1010	3
PSYC 2010	3	CHEM 1011	1
		ENGR 101L	1
	15		17

SOPHOMORE YEAR

CS 211	3	MATH 1060	4
PHY 211	3	PHY 212	3
PHY 211L	1	PHY 212L	1
ENGL 2010	3	HIST 2020	3
HIST 2010	3	AIT 220	3
AIT 200	3	AIT 220L	1
AIT 200L	1		
	17		15

JUNIOR YEAR

AIT 331	3	AIT 332	3
AIT 331L	1	AIT 332L	1
ENGL 2020	3	ENG 310E	3
AIT 335	3	AIT 348	3
AIT 335L	1	MG 301	3
AIT 320	3	SPCH 230	3
AIT 311	3		
	17		16

SENIOR YEAR

AIT 404	3	AIT 480	3
Non Tech.Elect (300-400)	3	Non Tech Elect(300-400)	3
ENGR 490	1	ENGR 451	1
Tech Elec (300-400)	6	AIT 417	3
ENGR 450	1	MG 407	3
MG 405	3	Tech. Elect. (300-400)	3
	17		16

TOTAL HOURS 131

Departmental Requirements for Bachelor of Science in Aeronautical and Industrial Technology Computer Integrated Manufacturing Emphasis **53 Semester hours**

Major Core: A minimum of 53 semester hours including: ENGR 100L, 101L, 450, 451, 490. AIT 200, 200L, 220, 220L, 320, 311, 325, 301, 348, 309, 338, 327, 404, 335, 335L, 328, 480.

Core Requirements reflect the standards of the National Association of Industrial Technology (NAIT).

Four Year Plan:

Bachelor of Science Degree in Aeronautical and Industrial Technology Industrial Technology

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
MATH 1040	3	MATH 1050	3
ENGL 1010	3	CS 121	3
ENGR 115L	3	ENGL 1020	3
ENGR 100L	1	MUS 1010	2
ART 1010	2	HPER / ROTC / BAND	1
HPER / ROTC / BAND	1	CHEM 1010	3
PSYC 2010	3	CHEM 1011	1
		ENGR 101L	1
	16		17

SOPHOMORE YEAR

CS 211	3	MATH 1060	4
PHY 211	3	PHY 212	3
PHY 211L	1	PHY 212L	1
ENGL 2010	3	HIST 2020	3
HIST 2010	3	AIT 220	3
AIT 200	3	AIT 220L	1
AIT 200L	1		
	17		15

JUNIOR YEAR

AIT 301	3	AIT 326	3
AIT 325	3	AIT 309	3
ENGL 2020	3	AIT 321	3
AIT 320	3	AIT 348	3
AIT 311	3	ENG 310E	3
MG 301	3	SPCH 230	3
	18		18

SENIOR YEAR

AIT 335	3	AIT 480	3
AIT 335L	1	Non Tech Elec	3
MG 405	3	MG 407	3
ENGR 490	1	AIT 328	3
Non Tech Elect	3	Tech Elec (300-400)	3
Tech Elec (300-400)	3	ENGR 451	1
ENGR 450	1		
	15		16

TOTAL HOURS 132

COURSE DESCRIPTIONS

Aeronautical and Industrial Technology (AIT)

AIT 200, 200L CIRCUITS ANALYSIS (3-1). Fundamental concepts of charge, current, voltage and power, mesh and nodal analysis: Kirchhoff's laws, Thevenin's and Norton's Theorems, superposition, source transformations, natural and forced response of RL, RC, and RLC circuits, transient and steady state analysis of linear circuits. Prerequisites: MATH 1050.

AIT 220, 220L CIRCUITS AND DEVICES (3-1). A course designed to provide a basic knowledge of electronic and electrical devices including their construction and operation. Topics covered include review of network theorems and linear models of diodes. Prerequisite: AIT 200, 200L.

AIT 235 GENERAL AVIATION OPERATIONS (3). Lectures deal with facilities, management, finance, legal and insurance aspects of general aviation. The lectures focus on sales, line service, air taxi, and flight schools. One or more field trips to general aviation operations will be held. A semester project is required.

AIT 250 FLIGHT FUNDAMENTALS (3). An introduction to the aerospace industry including air transportation and manufacturing with emphasis in primary flight principles, aviation meteorology, navigation, and FAA regulations. Weight and balance, engines and airframe overview.

AIT 253L PRIVATE PILOT FLIGHT (1). Flight instruction consisting of dual; and solo flight time necessary for completion of private pilot certification.

AIT 301 STATIC AND STRENGTHF OF MATERIALS (4). Statics of particles and rigid bodies in two and three dimensions. Stress-strain relation, displacements in truss, shafts, and beams. Prerequisite: MATH 1050.

AIT 307 AVIATION MANAGEMENT (3). A study of the basic principals and existing practices used in managing and marketing as applied to the aviation industry. Includes problems, current issues, and future trends related to aviation operations, planning, and economic and resource considerations.

AIT 308 AIRPORT MANAGEMENT (3). Introductory course designed to acquaint the student with basic concept of airport planning and management. A comprehensive survey of a typical community with eye toward present and future business potential is made. This includes the social and economic characteristics, the political and governmental influences, and various stages and types of airport construction.

AIT 309 INDUSTRIAL MATERIALS (3). An overview of the nature, composition, and structure of industrial materials with emphasis on application properties, processing, and the selection and fabrication of materials into products. Prerequisites: CHEM 1010, 1011.

AIT 311 INDUSTRIAL SAFETY (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.

AIT 312 HUMAN FACTORS IN AVIATION (3). A study of the psychological and physiological effects that flight imposes on a pilot and aircrews. Also studied are information processing and display effects on the human being; the ability of flight crews to time-share their cognitive process and react under stress. Included is a study of various control manipulation, sensitivity and ease of movement. Prerequisite: PSYC 2010.

AIT 314 INDUSTRIAL & PRODUCT MANAGEMENT (3). The problems of production, planning, controlling money, personnel, materials, and machines are studied from the viewpoint of modern total quality control. Prerequisite: AIT 338

AIT 320 INTRODUCTION TO ROBOTICS (3). A study of robot structure, kinematics, dynamics, programming interfacing and applications. Two hours lecture and three hours laboratory. Prerequisites: MATH 1050, AIT 200, 200L.

AIT 321 ROBOTICS II (3). A continuation of AIT 320 and a more advanced study of robot structures, kinematics, dynamics, programming interfacing and applications. Two hours lecture and three hours laboratory. Prerequisite: AIT 320.

AIT 325 INTRODUCTION TO CIM (3). A broad-based introduction of the various topics in computer-integrated manufacturing, including general business management, product and process definition, planning and control, factory automation, and information resource management.

AIT 326 CIM II (3). A continuation of AIT 325 and a more advanced study of computer-integrated manufacturing, including general business management, product and process definition, planning and control, factory automation, and information resource management. Prerequisite: AIT 325.

AIT 327 MATERIAL REQUIREMENT PLANNING (3). An investigation of computer based systems, which tie together capacity requirement planning, production planning and scheduling, purchasing inventory management and other processes to control manufacturing operations.

AIT 328 COMPUTER NUMERICAL CONTROL (3). An introductory study of NC, CNC programming, simulation, and tooling. Computer-aided programming and simulations.

AIT 331, 331L BASIC ELECTRONICS I (3-1). A study of basic electronic principles, circuits, devices. Included are diodes, linear models of bipolar and field effect transistors, biasing, small signal models. Prerequisite: AIT 220.

AIT 332, 332L BASIC ELECTRONICS II (3-1). Multistage amplifiers, frequency response, feedback and stability and linear amplifiers are studied. Operational amplifiers and filters are introduced. Prerequisites: AIT 331, 331L.

AIT 334 HYDRAULICS & PNEUMATICS (3). An introductory study of components, circuits and safety of fluid power systems. Basic principals of fluid statics and dynamics. Analysis of functions of components such as distribution systems, pumps, actuators, and valves. Hydraulic and pneumatic circuits design and analysis. Fluid power maintenance and safety. Prerequisite: MATH 1050

AIT 335/335L DIGITAL LOGIC SYSTEMS (3-1). Analysis of digital systems, combinational and sequential circuits, and stored program concepts. Prerequisites: AIT 200,200L.

AIT 338 MANUFACTURING TECHNOLOGY (3). Emphasis on the development of skills in planning manufacturing processes, setting up fixtures and operating various machine tools.

AIT 340 COMMUNICATIONS SYSTEMS TECHNOLOGY (3). Principles of noise, oscillators, modulation, power vacuum tube amplifiers and circuitry. Transmission line and antennas. Prerequisite: AIT 332.

AIT 345 ANTENNAS AND TRANSMISSION LINES (3). The principles of transmitting and receiving antennas, applied electromagnetic theory and transmission lines from a practical communications viewpoint. (An Elective Course)

AIT 348 STATISTICAL QUALITY CONTROL (3). An introduction to the basic statistical methods, control charts, sampling techniques and the implementation of statistical process control programs as relates to today's TQM. Prerequisite: MATH 1050.

AIT 350 RADAR PRINCIPLES (3). An elective course, which examines the principles of radar. Topics include basic radar concepts and installation, radar transmitters and receivers, radar displays, radiation safety, and general maintenance considerations.

AIT 352 INSTRUMENT GROUND INSTRUCTION (3). A study and review of the operations, regulations (FARs) and procedures necessary to perform competently as an instrument pilot. Prepares students for the instrument pilot written examination. Prerequisite: Private Pilot License or AIT 250.

AIT 355 COMMERCIAL GROUND INSTRUCTION (3). Ground instruction covering navigation systems, communications, principals of instrument flying, air traffic control procedures, approach and departure procedures, and FAA regulations. Prerequisite: Private Pilot License.

AIT 356 FLIGHT INSTRUCTOR GROUND (3). Ground instruction on FAA regulations and publications, weather, advanced flight, computer operations, radio navigation, advanced aircraft and engine performance, and fundamentals of instructing. Prerequisite: Commercial Pilot's License with Instrument Rating.

AIT 357L INSTRUMENT FLIGHT LAB (2). Flight and simulator training to perfect complex flight maneuvers using aircraft maximum performance and precision control as necessary to perform under instrument weather conditions. Prerequisite: Private Pilot License.

AIT 358L COMMERCIAL FLIGHT LAB (3). A continuation course of AIT 357, providing the additional flight and simulator training as required to perform as a commercial pilot with a multi-engine and instrument rating.

AIT 359L MULTI-ENGINE FLIGHT LAB (1). A continuation course providing the additional flight and simulator training and practice as required to perform as a commercial pilot with a multi-engine and instrument rating.

AIT 360L CFI FLIGHT LAB (2). A flight training course providing the additional flight, simulator training, and practice as required to perform as a flight instructor for single engine airplane training. Prerequisites: Commercial Pilot License, Instrument Rating.

AIT 370 AVIATION METEOROLOGY (3). Properties and conditions of the atmosphere, landforms, and topography leading to an understanding of weather conditions. Prerequisites: PHY 212/212L.

AIT 374 A & B COOPERATIVE EDUCATION (6). Supervised and approved program and learning experiences undertaken by students in governmental, business or industry setting. Formal proposals, project objectives or learning plans must be reviewed and approved by faculty. Student activity and progress must be monitored, evaluated and graded by an assigned full-time faculty. (An Elective Course) Prerequisite: Consent of the Department Head.

AIT 381 THEORY OF FLIGHT & ENGINES (3). The laws of aerodynamics and nature as applied to aviation. The principals, familiarization and operation of the internal combustion engine and turbine engines.

AIT 384 AIRCRAFT SYSTEMS ANALYSIS (3). Analysis of structure, mechanical, electrical, and hydraulic systems of aircraft. Procedures for inspection, maintenance, and repair. Study of appropriate FARs.

AIT 390 AVIATION LEGISLATION (3). Legal concepts including federal, state, and local legislation related to the operations, contracts, insurance and liability, regulatory statues, and case law.

AIT 395 AVIATION SAFETY (3). Major factors affecting the safe operations of aircraft on the ground and airborne. Major problem areas include: program evaluation, impact of accidents on industry, human factors, accident prevention, basic principles of investigation, case surveys of accidents.

AIT 400 AIRCRAFT STRUCTRUAL FACTORS (3). A detailed examination of aircraft development with emphasis on Manufacturing to include designs, materials selection, modification, maintenance and flight-testing. Additional topics include dynamic and static stress testing procedures, design loading, fatigue and corrosion. Prerequisite: AIT 250.

AIT 404 INDUSTRIAL ELECTRONIC CONTROLS (3). Emphasis on the development of different electronic circuits to interface with or control sensors, transducers, motors, robots, and other types of industrial machinery. Prerequisite: AIT 220, 220L/CS222.

AIT 410 FLUID POWER CONTROL & INTERFACE (3). A study of fluid power system control using microcomputers, microprocessors, and programmable controllers. Prerequisite: CS222, AIT 334.

AIT 417 LINEAR INTEGRATED CIRCUITS (3). Ideal operational amplifiers, biasing, comparitors, oscillators and filters are studied. Phase locked loops are introduced. Prerequisites: AIT 332, 332L.

AIT 420 COMPUTER INTERFACING & PERIPHERALS (3). Applications of microprocessors to equipment with an emphasis on interfacing equipment. Prerequisite: AIT 480.

AIT 421 DATA COMMUNICATIONS (3). An introduction to data communications hardware including synchronous/asynchronous communication, protocol, local area network controllers & modem. Prerequisite: AIT 480.

AIT 430 DIGITAL COMPUTER STRUCTURES (3). Organization and description of computers from the register transfer level through microprogramming, memory organization, and I/O examples of current popular computers. Prerequisites: 335/335L.

AIT 440 INTRODUCTION TO AIR TRAFFIC CONTROL (3). A study of the national air traffic control system to include our basic operation procedures, the role of centers, approach control towers, flight service stations, communications, navigation procedures, radar FAR's operations, and facilities.

AIT 441 AIRCRAFT ELECTRICAL SYSTEMS (3). A course which covers the basic fundamentals of aircraft electricity and deals with the design principles and functional operation of aircraft and aerospace electrical accessories and appliances. The course includes basic theories and simulated functional operation of direct current systems and 400 cycle A.C. systems as used in aerospace vehicles. Prerequisites: AIT 220,220L.

AIT 442 AVIONICS (3). A course which covers the principles of electronics and electronic circuits elements as used in aircraft and aerospace vehicles for communication, navigation, and direction finding equipment. Prerequisites: AIT 340.

AIT 464 CFI INSTRUMENTS (3). A flight and ground school-training course providing training required to perform as an instructor for instrument training. Prerequisite: Commercial License/Instrument Rating.

AIT 467 CFI MULTI-ENGINE (3). A flight and ground school training course providing training required to perform as an instructor for multi-engine training.

AIT 480 INTRODUCTION TO MICROPROCESSORS (3). An in-depth introduction to microprocessors. Topics covered are microprocessor hardware, software and architecture of both eight bit and sixteen bit machines, assembly on-line debugging tools. Prerequisites: AIT 335, AIT 335L.

Department of Architectural & Facilities Engineering

Walter Vincent, Head
ET 242A A. P. Torrence Hall

Faculty: H. Jones, N. Kumar, D. Martin, M. Samuchin

General Statement: The Department of Architectural and Facilities Engineering offers a well rounded diverse program that prepares the student to approach, evaluate and complete the architectural engineering design, analysis, planning and construction of various building types. The four-year curriculum provides a program that emphasizes the fundamentals of structural, mechanical, electrical and construction management systems. Using these fundamentals, the student applies these engineering principles to the design of a building infrastructure. This provides the student with an understanding of the design process from planning through construction.

This provides the student with an understanding of the design process from planning through construction.

The educational objectives for the Department of Architectural and Facilities Engineering are as follows:

1. To provide the student with the knowledge of physical sciences, mathematics and engineering science so that he/she has the capability to delineate and solve architectural engineering problems,

2. To familiarize the student with the systematic scientific approach to the identification and solution of practical problems in architectural engineering,

3. To provide the student with architectural experiences through the systematic application of engineering fundamentals to the design of facilities (buildings) that focus on structural, mechanical and electrical engineering, and construction management,

4. To develop professional attitudes, ethical character and an understanding of the engineers responsibility to society, and

5. To provide the student with intellectual challenges of a global society through life-long learning.

A background of architectural and engineering subjects that range from residential to industrial facilities layout, planning, design and management, form the basics of the architectural engineering discipline. A stem in Facilities Planning, Design and Management include; energy conservation, heating/ventilation/air-conditioning, illumination, plumbing, and electrical systems. The structural systems design option include steel, concrete, and wood design for floor systems, columns, foundations, statically determinate and indeterminate structures, girders, and trusses. The B.S. Degree Program in Architectural and Facilities Engineering is Accredited by the Engineering Accreditation Commission of the Accreditation Board in Engineering and Technology [EAC/ABET]

ENGINEERING DESIGN EXPERIENCE

Extraordinary opportunities are available through close contact with other engineering courses and research programs offered by the College of Engineering and Technology. The Architectural & Facilities Engineering curriculum integrates these technical resources with social and cultural needs.

The Engineering Design Experience provides the Architectural & Facilities Engineering student with the training that enables him/her to develop the ability to systematically apply Engineering Fundamentals to the design of engineering components and systems. The AFE Department has in place series of required engineering design courses which are integrated throughout its curriculum.

The AFE design experience begins in the freshman year with ENGR.101L-Introduction To Engineering II, and continues into the sophomore year with ENGR. 201-Thermodynamics and ENGR, 211-Statics. During the junior year the design experience continues with ENGR. 320-Introduction To Design, AE 301L-Architectural Design I and AE 350L-Architectural CAD. Further required specialization in design takes place during the senior year with AE 312L-Working Drawings, AE 445-Energy Conservation in Buildings/Industrial Facilities, AE 446-Manufacturing Facilities Layout Planning and Design; and two (2) Design Option Electives, which can be selected from the following: AE 343-Masonry and Reinforced Concrete Design, AE 344-Structural Steel Design, AE 413L-Lighting Applications, AE 443-Lighting and Power Systems for Facilities, CE 342-Reinforced Concrete Design, CE 344-Steel Design, CE 444-Foundation Engineering or ME 420-Heating and Air Conditioning.

The Department requires one course which is 100% engineering design during the senior year; AE 302L-Architectural Design II.

The design sequence is completed with a two semester discipline specific capstone design course ENGR. 450 and ENGR. 451.

The graduate may find many opportunities through continued studies in graduate programs or employment with private firms, industrial establishments and/or governmental agencies.

[The Minimum Number Of Semester Hours Required For A Bachelor of Science degree in Architectural Engineering is: **136** Credit Hours for Completion].

Departmental Requirements For Bachelor of Science - Architectural and Facilities Engineering 46 Semester Hours

MAJOR CORE: A minimum of **forty (40)** semester hours including: AE 111L, 301L, 302L, 312L, 350L, 430, 431, 445, 446; ENGR.330, 450, 451, 490; CE 310, 312, 312L, 313, 313L, 341; ME 420; Guided Electives.

GUIDED ELECTIVES: A minimum of **three (3)** semester hours including CE 342, 344, 444; AE 343, 344, 413L, 443, 444, 447.

Bachelor of Science Degree in Architectural & Facilities Engineering

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 1010	3	ENGL 1020	3
MATH 1060	4	MATH 1070	4
CHEM 151	4	PHY 221	3
CHEM 151L	1	PHY 221L	1
ENGR 100L	1	ENGR 101L	1
ENGR 115L	2	AE 111L	1
HPER/AERO/BAND	1	HIST 2010	3
		HPER/AERO/BAND	1
	16		17

SUMMER SESSION

PHY 222	3
PHY 222L	1
MATH 263	3
	7

SOPHOMORE YEAR

MATH 264	3	MATH 303	3
PHY 223	3	ENGR 200	3
ENGR 211	4	ENGR 200L	1
ENGR 221L or 222L or 223L	1	ENGR 212	4
ENGL 2010	3	ENGR 201	4
	14		15

All students are required to pass the **ENGINEERING ENTRANCE EXAMINATION** prior to enrolling in Engineering Upper [300-400] level courses.

JUNIOR YEAR

AE 301L	3	AE 312L	3
CE 310	3	AE 350L	2
CE 312	3	AE 430	3
CE 312L	1	CE 313	2
ENGR 320	3	CE 313L	1
ENGR 340	3	CE 341	3
		ENGR 330	3
	16		17

SENIOR YEAR

AE 302L	3	AE 431	3
**AE Option Elective	3	AE 446	3
ENGR 450	1	ENGR 451	1
ME 420	3	ENGR 490	1
*ENGR 420L	1	**Humanities Elective	3
ENGL 2020	3	**Social Science Elective	3
HIST 2020	3		
	17		14

*F.E. EXAM - A student must have filed to take the **Fundamentals of Engineering** (FE)

Examination in the same semester ENGR. 420L is taken, and one semester before graduation. The student must provide evidence that he/she has filed the application to take the FE Examination before filing for graduation. ENGR 420L is offered only during the Fall Semester.

**This Elective must be chosen from an approved list of upper level (300-400) courses with Advisor's approval.

The completion of a minimum of three **(3)** semester hours from either the Structural or Facilities Planning, Design and Management Emphasis is required.

Suggested Option Block Elective Courses

STRUCTURAL EMPHASIS:
CE 444 - Foundation ENGR (3)
AE 343 - Masonry and Reinforced Concrete Design (3)
AE 344 - Structural Steel Design (3)

FACILITIES PLANNING, DESIGN & MANAGEMENT EMPHASIS:
AE 413L - Lighting Application (3)
AE 443 - Lighting & Power Systems For Facilities (3)
AE 444 - Advanced Mechanical Systems Design For Buildings (3)
AE 447 - Facilities Management (3)

COURSE DESCRIPTIONS

AE 111L Architectural Graphics (1). Graphic techniques for preliminary presentation of architectural design problems. Emphasis are on the proper representation of the design components, structural systems, materials and other features. Three laboratory hours per week. Prerequisite: ENGR 115L.

AE 301L Architectural Design I (3). Principles of design and systematic approach to problem solving of architectural design. Emphasis are to be on form and space relationships, structural elements, building materials and methods of construction, building and site relationships. Contact hours 9. Prerequisites: ENGR 115L, AE 111.

AE 302L Architectural Design II (3). Design solutions of architectural / engineering problems of a complex nature involving principles of organic planning with the study of composition and structural problems in design with close coordination of site, materials, human needs and structural harmony. Lecture 1 hour; Lab 7 hours. Prerequisites: AE 301L, AE 350L, CE 341.

AE 312L Working Drawings (3). Laboratory course. Design development drawings and architectural working drawings. Production of small scale general drawings include plans and elevations, large scale detail drawings and schedules. Prerequisites: AE 301L; Co-requisites: AE 350L.

AE 343 Masonry and Reinforced Concrete Design (3). Introduction to the design of reinforced concrete and masonry structural systems; composite structural design. Prerequisite: CE 341.

AE 344 Structural Steel Design (3). Introduction to the design of steel structural systems. Prerequisite: CE 341.

AE 350L Architectural CAD (2). Design solutions of Architectural problems using AutoCAD the basic concept software, hardware, and mathematical tools for the representation, manipulation, and display to two-and-three-dimensional objects. Lecture 1 hour; Lab 3 hours. Prerequisites: ENGR 115L, AE 111L, AE 301L.

AE 413L Lighting Applications (3). An application of the principles of lighting fundamentals to engineering analysis and design. The course develops methodology for solving special problems in both interior and exterior lighting. Lecture 2 hours; Lab 3 hours. Prerequisites: ENGR 200, ENGR 200L.

AE 430 Building Construction and Management (3). Principles and methods of cost analysis of materials, labor, and equipment production costs for the building trades. Scheduling, specification, and construction administration. Prerequisite: CE 312L; Co-requisite AE 312L.

AE 431 Architectural History (3). A survey of architectural styles of the past to the present time on the comparative methods. Emphasis include the geographical, geological, climatic, religious, social and political influences. Prerequisite: Junior Standing.

AE 443 Lighting and Power Systems For Facilities (3). Principles and practices of Electrical of Electrical Circuits and Equipment Design for Buildings with emphasis on Industrial Facility requirements. Practical use of Electrical Codes for the design and sizing of power distribution, load characters, transformers, motors, generators, and control systems for single-and three-phase systems. Prerequisites: ENGR. 200 and ENGR. 200L.

AE 444 Advanced Mechanical Systems Design For Buildings (3). Engineering design and performance analysis procedures for large industrial and commercial buildings. Course includes HVAC, energy management and conservation, and control systems. Co-Requisite: ME 420.

AE 445 ENERGY CONSERVATION IN BUILDINGS (3). Energy use patterns in industrial buildings/schools and hospitals. Various utility rate structures and the relevant IES and ASHRAREN Standards. Energy auditing techniques along with the effect of operation and maintenance on building energy use. Retrofit options and computerized Energy Management Systems. Design projects are required. Prerequisite: ENGR. 221L; Co-requisite: ME 420.

AE 446 MANUFACTURING FACILITIES LAYOUT PLANNING AND DESIGN. The planning layout and design of industrial manufacturing facilities will focus on defining facility requirements, site location, workflow and work station analysis, personnel, legal and environmental issues. Emphasis is placed on utilizing computer graphics and data analysis to interactively optimize production flow paths, alternative layouts of plants and machines, storage areas, and other material and personnel flow. Prerequisites: AE 301L, AE 350L, AE 430.

AE 447 FACILITIES MANAGEMENT (3). This course deals with long range and master planning for facilities including space forecasting, project management, and post occupancy evaluation. Prerequisite: AE 430; Co-Requisite: AE 302L

Department of Civil and Environmental Engineering

Dr. Farouk Mishu, Head
ET 108, A.P. Torrence Hall
Telephone: 615-963-5421

Faculty: F. Chen, E. Isibor, I. McClain, P. Paily, J. Rozenberg

General Statement: The Civil Engineering program systematically builds upon the knowledge acquired in the study of the physical sciences, mathematics, and engineering sciences to provide the students with a broad base knowledge in the various areas of civil engineering and environmental engineering. The program prepares the students for careers in the private and public sectors and/or to pursue graduate study.

The educational objectives for the Department of Civil and Environmental Engineering are as follows:

1. To provide the student with the knowledge of physical sciences, mathematics and engineering science so that the student has the capability to delineate and solve problems that are susceptible to engineering treatment,
2. To familiarize the student with the systematic scientific approach to the identification and solution of practical problems in civil and environmental engineering,
3. To provide the student with civil and environmental engineering experiences through the systematic application of engineering fundamentals to the design of civil and environmental engineering, components, systems and/or processes.
4. To develop professional attitudes, ethical character and an understanding of the engineer's responsibility to society, and
5. To provide intellectual challenges of a global society through life-long learning.

ENGINEERING DESIGN EXPERIENCE

The design experience in civil and environmental engineering begins in the freshman year with ENGR 101L-Introduction to Engineering II, and continues into the sophomore year with ENGR 201-Thermodynamics and ENGR 211-Statics.

The design experience at the junior year includes ENGR 320-Introduction to Design and CE 320: Transportation Engineering.

At the senior year the engineering design based courses are: CE 325: Hydraulic Engineering and CE 335: Hydrology, CE 425: Water and Waste Water Engineering, and CE 452: Civil Engineering Design, ENGR 450 and 451: Capstone Design I and II, and two design elective courses.

Design Electives:

CE 342	Reinforced Concrete Design
CE 344	Steel Design
CE 411	Design of Hydraulic Structures
CE 428	Solid Waste Management
CE 429	Air Pollution Control
CE 444	Foundation Engineering

Departmental Requirements for Bachelor of Science - Civil and Environmental Engineering **36 Semester Hours**

Four Year Plan: (Total hours = 131)

Bachelor of Science Degree in Civil Engineering

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
ENGL 1010	3	ENGL 1020	3
MATH 1060	4	MATH 1070	4
CHEM 151	4	PHY 221	3
CHEM 151L	1	PHY 221L	1
ENGR 100L	1	ENGR 101L	1
ENGR 115L	2	HPER/AERO/BAND	1
HPER/AERO/BAND	1	HIST 2010	3
	16		16

SUMMER SESSION

PHY 222	3
PHY 222L	1
MATH 263	3
	7

SOPHOMORE YEAR

MATH 264	3	MATH 303	3
PHY 223	3	ENGR 200	3
ENGR 211	4	ENGR 200L	1
ENGR 221L or 222L 0r 223L	1	ENGR 201	4
ENG 2010	3	ENGR 212	4
	14		15

All students are required to pass the **ENGINEERING ENTRANCE EXAMINATION** prior to enrolling in engineering upper level (300-400) courses.

JUNIOR YEAR

CE 300	3	CE 436L	1
CE 310	3	CE 313	2
CE 312	3	CE 313L	1
CE 312L	1	CE 320	3
ENGR 320	3	CE 341	3
ENGR 330	3	ENGR 340	3
		HIST 2020	3
	16		16

SENIOR YEAR

CE 425	3	CE 325	3
ENGR 450	1	CE 335	3
ENGR 452	2	ENGR 451	1
ENGR 420L FE Review*	1	ENGR 490	1
HUMANITIES ELECTIVES**	3	Social Sci. Elective**	3
Design Technical Elective**	3	Design Technical Elective**	3
ENG 2020	3		
	16		14

*A student must have completed an application to take the FE exam offered by the State Board in the same semester ENGR 420L is taken.

**This elective must be chosen from an approved list of upper-level (300 or 400) courses with advisor's approval.

COURSE DESCRIPTIONS

CIVIL AND ENVIRONMENTAL ENGINEERING

CE 300. Introduction to Environmental Engineering (3). Methods to recognize, analyze and solve environmental problems related to air, water, noise and radiation. Introduction to regulatory criteria for governing pollution. Prerequisite: Junior Standing.

CE 310 Fluid Mechanics (3). Fluid properties; fluid pressure and pressure forces; fluid flow fundamentals; continuity, Bernoulli and momentum equations for ideal and real fluid flows; experiments in pipe flows and open channel flows. Two hours lecture and three hours lab. Prerequisite: ENGR 201, ENGR 211; Co-requisite: ENGR 212.

CE 312 Mechanics of Materials (3). Concepts of stress and strain, stress-strain relationships, shear and moment diagrams, shear and moment by integration, torsion in shafts, bending and axial loads on determinate beams, Stress Transformation. Prerequisite: ENGR 211.

CE 312L Mechanics of Materials Lab (1). A laboratory based on CE 312 lecture material, one 3-hour lab per week. Co-requisite: CE 312.

CE 313 Soil Mechanics (2). Principles of soil mechanics, index properties of soils, particle size and gradation, soil identification and classification, permeability of soils, failure criteria, concept of effective stress in soils, shear strength and shear testing, settlement and consolidation tests. Two lectures per week. Prerequisite: CE 312.

CE 313L Soil Mechanics Lab (1). Laboratory based on CE 312 lecture material, one 3-hour lab per week. Co-requisite: CE 313.

CE 320 Transportation Engineering (3). An introduction to urban and rural transportation problems and the basic fundamentals for design, construction, maintenance and operation of various transportation modes, guideways and terminals. The course also includes introductory material in mass transportation, traffic and accident analysis, and measurement systems. This course will consist of two hours of lecture and three hours of lab. Co-requisites: ENGR 212, ENGR 320.

CE 325 Hydraulic Engineering (3). Analysis and design of flow in single and multiple pipes, and uniform and nonuniform flow in open channels; pump performance and pump selection; concept of drag; model testing. Prerequisites: CE 310, ENGR 320. Corequisite: ENGR 340.

CE 335. Hydrology (3). Study of the hydrologic cycle including precipitation, and runoff; hydrograph analysis; methods to estimate peak flows; design of drainage systems and flood control reservoirs. Prerequisites: CE 310, ENGR 320.

CE 341 Theory of Structures I (3). Reactions, shear forces and moments in determinate structures from gravity and lateral loads, influence lines, moving loads, deflections of beams, trusses and frames, introduction to matrix methods of structural analysis. Prerequisite: CE 312.

CE 342 Reinforced Concrete Design (3). Behavior and design of rectangular beams and T-sections and one way slabs for bending, shear and deflection. Topics also include design of columns for axial forces and bending moments, shear and development of reinforcement, and introduction to footing design. Prerequisites: CE 341, ENGR 320.

CE 344 Steel Design (3). The analysis and design of structural steel elements and connections by LRFD Method, including tension members, compression members, beams and columns subjected to axial forces and bending moments. Prerequisites: CE 341, ENGR 320.

CE 411 Design of Hydraulic Structures (3). Principles and procedures for the design of small hydraulic structures including flow measurement structures such as flumes, flow regulation structures such as locks, and discharge structures such as spillways. Computer applications in hydraulic design. Prerequisite: ENGR 320, CE 325.

CE 422 Hydrologic Design (3). Application of hydrologic principles to the design of urban drainage structures including storm sewers, culverts, detention basins and other minor structures; computer applications in hydrological design. Prerequisite: ENGR 320, CE 325 or CE 335.

CE 425 Water and Wastewater Engineering (3). Planning and design of water supply and wastewater collection systems; estimation of population trends; water demand; water quality criteria and water treatment processes; treatment and disposal of wastewater. Prerequisites: CE 310, ENGR 320, ENGR 340.

CE 428. Solid Waste Management (3). Quantities and characteristics of solid wastes; collection methods and equipment; recycling of wastes; disposal methods including composting, incineration and sanitary landfills; economics and planning of solid waste management systems. Prerequisite: CE 300, ENGR 320

CE 429. Air Pollution Control (3). Sources of primary an secondary air pollution; production of air pollutants from combustion processes. air pollution control devices; air quality modeling. Prerequisite: CE 300, ENGR 320

CE 435. Hazardous Waste Management (3). Generation of hazardous wastes by industries; nature and quantities of hazardous wastes; transportation, treatment and disposal; environmental impacts; risk analysis of spills; management of radioactive wastes. Prerequisite: CE 300.

CE 436L. Environmental Engineering Laboratory (1). Basics of wet chemical analysis of water samples; titrametric and spectrometric analysis; evaluation of processes such as coagulations, thickening, adsorption and gas transfer, etc. Three hours of lab. Prerequisite: CE 300.

CE 444. Foundation Engineering (3). Subsurface exploration, retaining walls, shallow foundations, bearing capacity of soils, spread and combined footings, raft foundations, deep foundations, piles, caissons and piers. Prerequisites: CE 313; ENGR 320, ENGR 340.

CE 452 Civil Engineering Design (2). Civil engineering design implementation in one or more of the following areas: structures, geotechnical, water, environmental, and transportation. Prerequisites: Consent of Instructor.

Department of Computer Science

Head (Vacant)
See Dr. Decatur B. Rogers, Dean
ET 230 A.P. Torrence Hall
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Faculty: E. Eyoh, A. Gamshadzahi, J. Holloway, A. Sarayloo, W. Smith, A. Thomas, M. Williams.

General Statement: The Computer Science program systematically builds upon the knowledge acquired in the study of the mathematics, computer science and engineering science to provide the students with a broad knowledge in the various areas of computer science including algorithm development and analysis, computer programming, computer systems, computer communication and networking. The program prepares the students for careers in the private and public sectors and/or to pursue graduate study.

The educational objectives of the Department of Computer Science are as follows:

1. To provide the student with the knowledge of mathematics, computer science and engineering science so that the student has the capability to delineate and solve problems using computers and computer science methodology.

2. To familiarize the students with the systematic scientific approach to the identification and solution of practical problems in many areas of computer science.

3. To provide the student with hands-on computer science experience through the systematic application of computer science fundamentals to real world problems.

4. To provide an awareness of social issues, communication skills and ethical conduct that the profession expects, and an understanding of the computer professional's responsibility to society.

5. To provide the student with intellectual challenges of the global society designed to arouse curiosity and desire for lifelong learning.

The Department offers the degree of Bachelor of Science in Computer Science. The Department aims to (1) provide training for industry, governments, business, and educational and scientific organizations; (2) develop skills in applying the algorithmic method general problem-solving to write efficient, well organized, well documented computer programs; (3) provide the training to enable graduates to enter graduate school; (4) provide majors from any of the academic areas the requisite knowledge in computer science to complete their programs of study; (5) provide computer training to members of the University and community at large, required to keep pace with the changes brought about by computer in the workplace, homes, and schools.

The Computer Science core consists of courses in computer programming, computer organization, data structures and algorithms, discrete mathematical structures, computer theory, operating systems/computer network protocols, and senior project. The computer Science specialization consists of courses in the areas of computer networking and communications, computer systems, computer applications, algorithm development and analysis, or

information science. You may select appropriate computer science electives to specialize in one of these areas. Six additional semester hours are required as technical electives, which may be selected from the areas of Computer Science, Physics, Mathematics, Business, Engineering or Technical Writing.

Departmental Requirements For Bachelor of Science Computer Science

MAJOR CORE: a minimum of semester hours including: CS 211, CS 212, CS 240, CS 304, CS 320, CS 410, CS 450, CS 305, ENGR 490; Guided Electives.

MAJOR CORE FOR CONCENTRATION IN SOFTWARE ENGINEERING: CS 323, CS 355, CS 370, CS 411, CS 470, CS 430, and CS 445.

MAJOR CORE FOR CONCENTRATION IN COMPUTER COMMUNICATION NETWORKS: CS 330, CS 341, CS 365, CS 430, CS 440, CS 445, CS 455, and CS 475.

Four Year Plan:

Bachelor of Science Degree in Computer Science

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 1010	3	CS 211	3
ENGR 100L	1	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1060	4	SOCIAL SCIENCE	3
PHIL 250	3	ENGR 101L	1
HPER/AERO/MUS 306A	1	SPCH 230	3
		HPER/AERO/MUS 306A	1
	15		17

SOPHOMORE YEAR

CS 212	3	CS 240	3
CS ELECTIVE	3	CS 305	3
ENGL 2010	3	ENGL 2020	3
MATH 1070	4	HUMANITIES	2
PHY 211, 211L	4	PHY 212, 212L	4
	17		15

JUNIOR YEAR

CS 304	3	STAT 311	3
CS 320	3	OPEN ELECTIVE	6
TECHNICAL ELECTIVE 300/400 LEVEL	3	ANY LEVEL	
		OPEN ELECTIVE 300/400 LEVEL	6
OPEN ELECTIVE	3		
MATH 361	3		
	15		15

SUMMER SESSION

CS ELECTIVE (CS 302)	3
CS ELECTIVE (CS 365)	3
	6

SENIOR YEAR

ENGR 450	1	CS 410/CS 455	3
CS ELECTIVES 300/ 400 LEVEL	6	CS ELECTIVES 300/400 LEVEL	6
TECHNICAL Elective 300/400	3	ENGR 451	1
OPEN ELECTIVE 300/400 LEVEL	3	OPEN ELECTIVE ANY LEVEL	6
ENGR 490	1		
	14		16

Course Descriptions

CS 121 Introduction to Computing (3). History of computer, computer hardware, computer software (system and application), communications, algorithms, and BASIC programming. Course includes hand-on laboratories using operating systems, productivity applications, e-mail, the Internet, and programming. Prerequisite: high school algebra. Satisfies the University computer science requirement. Not open to students having credit for CS 210 or above. Offered fall, spring, and summer.

CS 210 Computer Laboratory (3). Introduction to computer hardware and software, data, data types, and conversions. Topics include memory organization and data storage methods, DOS, Windows, UNIX and VAX/VMS system, and data communication. Prerequisites: high school algebra. Required of all Physics and Mathematics majors. Not open to students with upper-level CS credits or other appropriate college-level courses. Offered fall, spring, summer.

CS 211 Computer Science I (3). Introduction to computer units and their functions, control statements, and subprograms (default parameter values, templates, overloading, scope and lifetime of objects. Prerequisite: ENGR 100L ENGR 101L. Required of all Physics, Mathematics, and Computer Science majors. Offered fall and spring.

CS 212 Computer Science II (3). A continuation of CS 211, including object-oriented design, pointers, classes, arrays, object-oriented methodology, inheritance, virtual functions, exception handling, I/O statements and operators for low-level operations. Prerequisite: CS 211. Required for all Physics, Mathematics, and Computer Science majors. Offered in fall and spring.

CS 221 Computer Programming-COBOL (3). Fundamentals of structured design, development, peer reviews, testing and documentation using COBOL including language syntax, data file structures, and sorting. Prerequisite: CS 211 or BIS 215. Offered in fall and spring.

CS 240 Computer Organization I (3). Basis computer architecture, historical review, organization, and structure of major computer components, both hardware and software. Prerequisites: CS 211. Required of all Computer Science majors. Offered fall and spring.

CS 260 Assembly Language (3). Introduction to machine structure and machine language, subroutine linkage control, and basic I/O operations. Prerequisite: MATH 1040 and ENGR 100L, ENGR 101l. Co-prerequisite: CS 240. Offered on demand.

CS 301 Files and Operating Systems (3). A review of I/O libraries and statements, sorting searching programs used for creating files, sequential file organization creation and processing, creation and processing of direct file organization and creation and processing of indexed sequential file organization. Prerequisite: CS 212. Offered spring semester.

CS 302 Computer Programming C++ (3). An introduction to object-oriented programming using C++. Classes, operators, and function overloading: constructor and destructor functions: inline, friend, and virtual functions: encapsulation; polymorphism; and inheritance. Prerequisite: CS 212 Offered fall and spring semesters.

CS 304 Data Structure and Algorithms (3). Storage allocations, structured data types, and algorithms for their manipulation. Topics include lists, stacks, queues, graphs and trees, and algorithms for sorting and searching. Prerequisite: CS 302 Required of all Computer Science majors. Offered fall and spring semesters.

CS 305 Programming Languages (3). Analysis and comparison of programming languages, their characteristics and implementation. Prerequisite: CS 304. Offered summer.

CS 310 Advanced Programming (3). Implementation of advanced algorithms with an object-oriented programming language. Topics include problems involving numeric and character type arrays, dynamic variables, and low-level operators. Program use object orientation principles and coding. Prerequisite: CS 304.

CS 315 Computer Programming COBOL (3). Application of COBOL to business problems. Topics include file processing sorting, subroutines Prerequisite CS 212 or Cs 221. Offered spring semester.

CS 318 A, B, C, D Cooperative Education I, II, III, IV (3,3,3,3). Supervised and approved program of learning experiences undertaken by students in governmental, business, or industry setting. Formal proposals, project objectives, and learning plans must be reviewed and approved by faculty. Student activity and progress are monitored, evaluated, and graded by a full-time faculty member. Course may be repeated up to three times for a total of twelve credit hours of credit, but the learning experience must be changed each semester. Prerequisite: permission of Department Head. Offered fall, spring, summer semesters.

CS 320 Discrete Math Structures (3). Set, relational and functions, Boolean algebra and propositional logic, graph theory and its applications to computer science. Prerequisite: CS 212. Required of all Computer Science majors. Offered fall and spring semesters.

CS 323 Information Systems Analysis (3). Information analysis and logical design concepts for information systems and decision making. Prerequisite: CS 301 and CS 211. Offered in fall semester.

CS 330 Telecommunications (3). Communications organization and structure, data transmission and control, networks, software protection, communication media, carriers, and hardware. Prerequisite: CS 240. Offered fall semester.

CS 341 Advanced Computer Organization (3). Advanced computer architecture, RISC, use of instruction formats and types, addressing, control, I/O, parallel processing and assembly language programming, virtual memory. Prerequisite: CS 240. Offered fall and spring.

CS 350 Logic Design (3). Switching algebra, logic design of combinational circuits, minimization methods, and sequential circuit analysis and synthesis. Prerequisite: CS 341. Offered in spring.

CS 355 Introduction to Computer Theory (3). Regular expressions, deterministic and non-deterministic finite state automata, Turing machines, grammars, and limits of digital computations. Prerequisite: CS 320. Offered fall and spring.

CS 365 Microcomputers (3). Design and use of microcomputers, including architecture, programming, applications, and software support. Prerequisites: CS 240 and CS 211. Offered in fall.

CS 370 Data Management Systems. (3). Introduction to database systems concepts. Topics include data structure, relational hierarchical and network models, data sub-languages, query languages, security, and database administration. Prerequisite: CS 301. Offered in fall.

CS 390 Numerical Analysis (3). Interpolation and approximation, numerical differentiation and integration, roots of equations, and systems of equations. Prerequisites: CS 212 and MATH 361, or permission of instructor. Offered in fall of even-numbered years.

CS 410 Operating Systems I (3). Hardware interrupt systems, concurrence of I/O operations, multiprogramming systems, memory management, protection, resources allocation, control job management and task management, real time systems, time-sharing systems, paging, virtual, scheduler, reliability, file management services, and system accounting. Prerequisites: CS 240. Required of all Computer Science majors. Offered in fall and spring.

CS 411 Operating Systems II (3). Continuation of the topics of CS 410, including a case study of a specific operating system. Prerequisite: CS 410. Offered in spring.

CS 415 System Design & Implementation (3). Principles and techniques of design, including types and levels of design, documentation techniques, hardware and software evaluation, software design concepts, database concepts, implementation and testing procedures, and long-run BIS planning. Prerequisite: CS 323. Offered In spring.

CS 420 Compiler Construction (3). Review of programming language concepts, scanners, parsers and translation grammars, lexical scan, syntax scan, object code generation, error diagnostics, object code optimization, and overall design. Prerequisite: CS 320. Offered in fall.

CS 430 Software Engineering. (3). Design of reliable software; error causes and consequences; software testing methodologies, including test case design, tools, path testing and transactions flow; data validation and program correctness. Prerequisite: CS 304. Offered in fall.

CS 440 Artificial Intelligence (3). Topics in machine intelligence. Prerequisite: CS 304. Offered in fall.

CS 445 Computer Network Architecture (3). Network design and types, circuits switching, bridges, routers, control signaling, traffic control, LANs, MANs, WANs and digital networks. Prerequisite: CS 330. Offered in spring.

CS 450 Senior Project (3). Prerequisite: senior status. Required of all Computer Science Majors. Offered in fall and spring.

CS 455 Computer Network Protocols (3). Basic flow control, types of protocols, routing, transports, contention, redundancy checks, encryption and decryption, viruses, internet protocols. Prerequisites: CS 304 and CS 320. Offered in fall and spring.

CS 470 Algorithms (3). Studies in selecting and designing algorithms for computer solutions to problems in various areas. Algorithms for sorting, searching, pattern matching, and some mathematical problems, such as combinatorics, are covered. Prerequisites: CS 304 and 305. Offered in fall.

CS 475 Computer Network Management (3). Network interfacing, measuring failures and availability, reliability, security, maintenance, network statistics, reconfiguration and documentation. Prerequisites: CS 330. Offered in fall.

CS 480 Computer Graphics (3). Passive and interactive computer graphics, programming, hardware, user languages and output devices, transformations, algorithms, object modeling, storage and manipulations, and image processing. Prerequisite: CS 304. Offered in spring.

CS 490 Special Topics I, II, (3). Individual topics as approved by the instructor. Prerequisites: junior or senior status and at least 18 hours of CS courses previously completed. Offered in fall on demand.

CS 497A Computer Science Practicum (3). A course which provides Computer Science majors who have completed thirty or more hours of Computer Science courses an opportunity to gain experience in an actual computing environment. Each student is assigned a mentor and is required to perform a minimum of ten hours per week in training and consultation duties. Students meet periodically with the instructor to discuss problems and issues relevant to their activities. Course may be repeated once for an additional three hours of credit, but only three hours can be applied to meeting the 48 hours required by the CS major. Prerequisite: thirty hours of CS courses.

Department of Electrical and Computer Engineering

Satinderpaul Singh Devgan, Ph.D., P.E., Head
ET-214F A.P. Torrence Hall

Faculty: M. Awipi, M. Bodruzzaman, S.S. Devgan, J.R. Johnson, M. J. Malkani, D.R. Marpaka, A.S. Sekmen, M.S. Zein-Sabatto

General Statement: The program in electrical engineering systematically builds upon the knowledge acquired in natural sciences, mathematics, and engineering sciences to provide the students a broad base in the various areas of electrical engineering and prepares them for careers in the private and public sectors or to pursue graduate study. The program also offers a concentration in computers under the B.S.E.E. degree. The program offers courses in electrical circuits, linear systems, computer programming, electronics, control systems, energy conversion, power systems, electromagnetic theory, communication systems, digital logic design, software engineering, computer structures and microprocessors. The students may further specialize in one among the areas of control systems, communication systems, power systems, or computer engineering through a choice of technical electives.

The educational objectives for the program are as follows:

The main goal of the program at Tennessee State University is to prepare its B.S. E.E. graduates for starting positions as electrical engineers and/or pursue graduate study in related areas. The educational objectives of the electrical engineering program are:

1. To provide the student with the knowledge of natural science, mathematics, engineering and computer sciences so that the student has the capability to systematically delineate and solve electrical and related engineering problems.

2. To provide the student with a broad based background in electrical engineering with experiences in the design, development and analysis of electrical and computer systems, subsystems and components.

3. To provide the student with an engineering education to function as educated members of a global society, with awareness of the contemporary issues, professional responsibility, ethics, impact of technology on society, and the need for life long learning.

4. To provide skills to function as members of multidisciplinary teams, and to communicate effectively using modern tools.

Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision making process (often iterative). The fundamental elements of the design process are the establishment of objectives and criteria, synthesis, construction, testing and evaluation and should include a variety of realistic constraints, such as economic factors, safety, reliability, aesthetics, ethics and social impact.

Engineering design experience is integrated throughout the curriculum starting with definition of engineering and engineering design in ENGR 101L Introduction to Engineering II in freshman year where student's creativity and economic analysis skills are used in a required group design project. Design experience continues in sophomore year with ENGR 213 Combined Statics and Mechanics of Materials course. In the Junior year, design process and methodology are covered in a required ENGR 320 Introduction to Design course, that covers development of specifications, realistic constraints and consideration of alternate feasible solutions leading to design projects. During junior and senior years, design experiences are continued through required design projects in EE 212 Circuits II, EE 310, 310L Design of Digital Logic Systems and Lab., EE 330, 330L Electronics and Lab., EE 341 Energy Conversion, EE 342 Power Systems, EE 400, 400L Control Systems I and Lab., EE 350 Communication Systems, EE 430 Digital Computer Structures, EE 431 Software Engineering, EE 480 Introduction to Microprocessors and group design projects in EE 410L Electrical Systems Design Laboratory (100% design) courses. These design experiences lead to a culminating major, meaningful design experience in a required two semester sequence of program specific ENGR 450, ENGR 451 Capstone Design Project I, II courses in the senior year. Students' communication skills are also developed through required written reports in laboratory courses, design project reports, formal oral presentation and bound written report for ENGR 451 - Capstone Design Project II course.

The B. S. degree program in Electrical Engineering is accredited by Engineering Accreditation Commission of Accreditation Board for Engineering and Technology (EAC of ABET).

Departmental Requirements for Bachelor of Science - Electrical Engineering **41 Semester Hours**

MAJOR CORE: A minimum of 41 semester hours including: EE 212, 306L, 310, 310L, 320, 321, 330, 330L, 341, 342, 350, 400, 400L, 410L, ENGR 450, 451, 490; Guided Electives.

MAJOR CORE FOR CONCENTRATION IN COMPUTERS: A minimum of 42 semester hours including: EE 212, 306L, 310, 310L, 320, 321, 330, 330L, 350, 400, 410L, 430, 431, 480, ENGR 450, 451, 491, CS 320; Guided Electives.

TECHNICAL ELECTIVES: A minimum of 6 semester hours. Choose two from the following with the approval of the advisor: EE 333, 343, 401, 402, 410, 415, 430, 431, 432, 435, 461, 480, 481. Only one technical elective is needed for concentration in computers.

Four Year Plan:

Bachelor of Science in Electrical Engineering

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 1010	3	ENGL 1020	3
MATH 1060	4	MATH 1070	4
CHEM 151	4	PHY 221	3
CHEM 151L	1	PHY 221L	1
ENGR 100L	1	ENGR 101L	1
ENGR 115L	2	HIST 2010	3
HPER/AERO/BAND	1	HPER/AERO/BAND	1
	16		16

SUMMER SESSION

PHY 222	3
PHY 222L	1
MATH 263	3
	7

SOPHOMORE YEAR

MATH 264	3	MATH 303	3
PHY 223	3	ENGR 200	3
ENGR 213	4	ENGR 200L	1
ENGR 223L	1	ENGR 212	4
ENGL 2010	3	ENGR 225	4
	14		15

All students are required to pass the **Engineering Entrance Examination** prior to enrolling in major and engineering upper level (300-400) courses.

JUNIOR YEAR

EE 212	3	EE 321	3
EE 310	3	EE 330	3
EE 310L	1	EE 330L	1
ENGR 320	3	EE 320	3
ENGR 330	3	ENGR 340	3
HIST 2020	3	ENGL 2020	3
EE 306L	1		
	17		16

SENIOR YEAR

EE 341	3	EE 342	3
EE 350	3	ENGR 451	1
EE 400	3	ENGR 490	1
EE 400L	1	**Technical	
EE 410L	1	Elective	3
ENGR 450	1	**Technical	
*ENGR 420L	1	Elective	3
**Humanities		**Social Science	
Elective	3	Elective	3
	16		14

*A student must have filed an application to take the **Fundamentals of Engineering (FE)** examination in the same semester ENGR 420L is taken and one semester before graduation. The student must provide evidence that he/she has filed the application to take the FE examination before filing for graduation. ENGR 420L is offered only during the fall semester.

**Electives must be chosen from an approved list of 300 or 400 level courses with advisor's approval.

FOUR YEAR PLAN:

Bachelor of Science in Electrical Engineering with Concentration in Computers

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
ENGL 1010	3	ENGL 1020	3
MATH 1060	4	MATH 1070	4
CHEM 151	4	PHY 221	3
CHEM 151L	1	PHY 221L	1
ENGR 100L	1	ENGR 101L	1
ENGR 115L	2	HIST 2010	3
HPER/AERO/BAND	1	HPER/AERO/BAND	1
	16		16

SUMMER SESSION

PHY 222	3
PHY 222L	1
MATH 263	3
	7

SOPHOMORE YEAR

MATH 264	3	MATH 303	3
PHY 223	3	ENGR 200	3
ENGR 213	4	ENGR 200L	1
ENGR 223L	1	ENGR 212	4
ENGL 2010	3	ENGR 225	4
	14		15

All students are required to pass the **Engineering Entrance Examination** prior to enrolling in major and engineering upper (300-400) level courses.

JUNIOR YEAR

EE 212	3	EE 320	3
EE 306L	1	EE 321	3
EE 310	3	EE 330	3
EE 310L	1	EE 330L	1
ENGR 320	3	ENGR 340	3
ENGR 330	3	ENGL 2020	3
CS 320	3		
	17		16

SENIOR YEAR

EE 400	3	EE 430	3
EE 350	3	ENGR 451	1
EE 431	2	ENGR 490	1
ENGR 450	1	EE 480	3
EE 410L	1	**Technical	
HIST 2020	3	Elective	3
*ENGR 420L	1	**Social Science	
**Humanities		Elective	3
Elective	3		
	17		14

*The student must have filed an application to take the **Fundamentals of Engineering** (FE) examination in the same semester ENGR 420L is taken and one semester before graduation semester. The student must provide evidence that he/she has filed the application to take the FE examination before filing for graduation. ENGR 420L is offered only during fall semester.

**Electives must be chosen from an approved list of 300 or 400 level courses with advisor's approval.

COURSE DESCRIPTIONS

EE 212 Circuits II (3). Steady-state A.C. circuits; polyphase circuits; complex frequencies; resonance and frequency response; Bode plots; magnetically coupled circuits; two-port networks; Introduction to Fourier analysis. One hour of recitation is required. Prerequisites: ENGR 200, 200L, MATH 303.

EE 306L Advanced Programming Lab (1). Concepts of files, object types, algorithm analysis, data structures. Class projects involve software development and implementation. Prerequisite: ENGR 221 or 223.

EE 310, 310L Design of Digital Logic Systems and Lab (3-1). A course which introduces techniques used for designing and analyzing digital systems; design of combinational and sequential circuits, design of digital circuits with MSI and PLD'S. Microcoding and assembly language programming. Lecture: 3 credits. Prerequisites: ENGR 200, 200L. Co-requisites: ENGR 320, EE 310L. Laboratory: 1 credit. Prerequisite: ENGR 200L. Co-requisites: EE 310, ENGR 320.

EE 320 Linear Systems (3). Classical analysis of linear systems; Continuous and discrete time signals; Fourier series, Fourier Transform; Laplace Transform and its applications; transfer functions and impulse response; Z-transform; state space analysis of networks. Prerequisite: EE 212.

EE 321 Electromagnetic Theory I (3). Review of vector analysis and coordinate systems; electrostatic and magnetostatic laws; boundary conditions for dielectric and magnetic materials; Poisson's and Laplace's equations; time-varying fields and Maxwell's equations; plane wave propagation in free space, dielectrics and conductors; transmission lines. Prerequisite: EE 212.

EE 330, 330L Electronics and Lab (3-1). AC and DC models of diodes, bipolar and FET transistors; theory, design, and analysis of single and multi-stage amplifiers at low, mid and high frequencies; design of op-amp circuits; transfer functions, analog computer and active filters. Prerequisites: EE 212, ENGR 320, 330. Co-requisite: EE 330L. Laboratory: 1 credit. Prerequisites: EE 212, 320, 330. Co-requisite: EE 330.

EE 333 Power Electronics (3). Introduction to the application of semiconductor devices in amplification, generation and control of electrical energy. Topics covered include operation, modeling, analysis of power semiconductor devices such as diodes, SCR's and triacs, analysis and design of controlled rectifiers and control of motors. Prerequisites: EE 330, 330L. Co-requisite: EE 341.

EE 341 Energy Conversion (3). Magnetic circuits; single-phase and three-phase transformers; transformer design using voltage regulation, efficiency, and temperature rise; theory; analysis, and modeling of three-phase induction motors, synchronous machines and direct current machines, two-phase servo motors. Prerequisite: EE 212, ENGR 320.

EE 342 Power Systems (3). Representation of transformers, synchronous machines, short, medium and long transmission lines, calculation of line parameters, per-unit representation, design projects on transmission lines and power factor correction; symmetrical faults, network reduction; load flow analysis. Prerequisites: EE 321, 341, ENGR 340.

EE 343 Electric Power Distribution (3). Power distribution system planning, load characteristics, application of distribution transformers, design of sub- transmission lines, distribution substations, primary and secondary distribution system design, voltage regulation and protection. Prerequisites: EE 341.

EE 350 Communication Systems (3). Spectral analysis and signal transmission channel design; amplitude, frequency, phase and pulse modulation systems; design of frequency-division and time-division multiplex systems; digital communication; noise and its effects in modulation systems. Prerequisites: EE 320, ENGR 320.

EE 400 Control Systems I (3). Classical and modern control system analysis and design; transfer functions, time domain analysis and design; frequency domain analysis and design; stability analysis with Root Locus, Bode and Nyquist plots; state variable analysis of linear dynamic systems. Prerequisites: EE 320, ENGR 213, 320. Co-requisites: EE 341, 400L.

EE 400L Control Systems Laboratory (1). Experimental analysis of a.c. and d.c. servo systems, design of compensation and control systems, PLC and robotic applications. Co-requisites: EE 341, 400.

EE 401 Control Systems II (3). Digital control system analysis and design using transform techniques and state space methods; z-transform, state variable analysis, design in z-domain, control- ability and observability; state variable feedback, and state estimator design; digitization effects and sampling rate selection. Prerequisite: EE 400.(Check with department about frequency of offering).

EE 402 Introduction to Robotics (3). Basic principles of robotics and design of robot systems. Sensing position and velocity; concepts of robot coordinate systems, kinematics, dynamics, path control, velocity control, force control and compliance. Introduction to vision and robot programming languages. Prerequisite: EE 400.

EE 410 Digital Signal Processing (3). Discrete-time signal and systems; analysis and design of discrete-time systems in the frequency domain; realization of discrete-time systems; design of digital filters; Discrete-Fourier Transform (DFT) and Fast Fourier Transform (FFT) algorithms; introduction to random signals and power spectral estimation. Prerequisites: EE 320, ENGR 320. Co-requisite: EE 350.

EE 410L Electrical Systems Design Lab (1). Principles and practice of electrical systems design. Projects carried out on a 'team' basis. System and subsystem design goals, specifications, constraints, implementations, presentations and milestones. Practical implementation of several systems in different areas of Electrical Engineering. Prerequisites: Graduating Senior and Instructor Approval, EE 330, 330L, 400.

EE 415 Introduction to Digital VLSI Design and Testing (3). Introduction to the design and layout of Very Large Scale Integrated (VLSI) circuits for complex digital systems; fundamentals of the VLSI fabrication process; and introduction to VLSI testing and structured design for testability techniques. Prerequisites: EE 310, 310L, 330, 330L.(Check with department about frequency of offering).

EE 430 Digital Computer Structures (3). Computer hardware systems and the relevant aspects of software; various levels of design such as gate, register, and process levels, design of each major unit of the computer, memory and system organization. High performance computer systems are used as examples. Prerequisites: EE 310, 310L, ENGR 320.

EE 431 Software Engineering (2). A course which follows the software life cycle from the requirement, specification, and design phases through the construction of actual software. Topics include management of programming teams, design and programming methodologies, debugging aids, documentation, evaluation and measurement of software, verification and testing techniques, the problems of maintenance, and portability and application of CASE tools. Prerequisite: EE 306L. Co-requisite: ENGR 320.

EE 432 Computer Hardware Design (3). An introduction to hardware design of computers and "hardwired" and micro programmed standard peripherals. Modular design is emphasized. Topics include system buses and protocols, synchronous timing, and coprocessing techniques. Prerequisites: EE 310, 310L, ENGR 320.(Check with department about frequency of offering).

EE 435 Computer Communication and Networks (3). Introduction to local area networks, data communication over transmission lines; network technology, topology, characteristics and the ISO layered network protocol; high speed networks, packet switching and routing, and the network interface; network performance and local area network design issues. Prerequisite: EE 306L, EE 321, 430.

EE 441 Design of Renewable Energy Systems for Remote Community (3). Review of renewable energy sources, energy and society, and thermodynamics; discussion of sociopolitical, economic and environmental factors; theory of photo-voltaic, wind turbine power, batteries, and other renewable energy sources, load forecasting, transmission and distribution systems; design of hybrid energy systems, wind electric water pumping system, and design of electric power distribution system for a community. Prerequisite: EE 341.(Check with department about frequency of offering).

EE 460 Introduction to Biomedical Engineering (3). A multi-disciplinary course of biomedical engineering which include: basics of anatomy & physiology, bio-electric phenomena, biomedical sensors, bio-signal processing, medical imaging, physiological modeling, biotechnology and rehabilitation engineering. Laboratory experiments for biomedical project design are also part of this course. Lecture 3 Credits. Prerequisites: Senior Standing.

EE 461 Design of Computer Systems Programs (3). Overview of the design of system, in particular operating systems, assemblers, loaders, and compilers. The role of systems programs as the link between computer hardware and software is emphasized. Topics include problems of assembling and loading microcomputer codes, microprocessors, memory management, implementation of high level languages, features and special purpose language compilers. Projects involving practical applications of systems programming for devices such as controllers are required. Prerequisite: EE 431 or equivalent.(Check with department about frequency of offering).

EE 480 Introduction to Microprocessors (3). This course serves as an in-depth introduction to microprocessors. Topics covered are microprocessor hardware, software and architecture of both eight bit and sixteen bit machines; assembly and high-level languages; cross-assemblers; cross-compilers on-line debugging tools. Prerequisites: EE 310, 310L.

EE 481 Microprocessor Applications (3). Microprogrammed control design of control processor unit, design of binary and hardwired multiplier, design of simple computer; addressing modes, stack organization, data transfer, data manipulation, and program control instructions, floating point operations, program interrupt, design of central processing unit, ALU, processor unit, control unit, instruction formats, micro-instruction formats, microprogram for computer cycle, input-output interface, priority interrupt, DMA, multiprocessor systems, memory management. Prerequisites: EE 480 or equivalent.

Department of Mechanical and Manufacturing Engineering

Hamid R. Hamidzadeh, Ph.D., Head
ET 138 A. P. Torrence Hall

Faculty: Y. Clark, H. Hamidzadeh, L. Onyebueke, D. Rogers, A. Shirkhodaie.

General Statement: The Mechanical Engineering program systemically builds upon the knowledge acquired in the study of the physical sciences, mathematics, and engineering sciences to provide the student with a broad base in the various areas of mechanical engineering and prepares them for careers in the private and public sectors and/or to pursue graduate study. Students may orient their program toward the thermal design, or mechanical design, and manufacturing engineering.

The educational objectives for the department of Mechanical and Manufacturing Engineering are as follows:

The Mechanical and Manufacturing Program in the College of Engineering, Technology, and Computer Science is designed to prepare graduates for entry level positions in industry, to pursue graduate studies and/or to work in related fields. The educational objectives for the Mechanical and Manufacturing Engineering Program are:

1. To provide the student with the knowledge of physical sciences, mathematics and engineering science so that the student has the capability to delineate and solve mechanical and related engineering problems,
2. To familiarize the student with the systematic scientific approach to the identification and solution of practical problems in mechanical engineering,
3. To provide the student with experience through the systematic application of engineering fundamentals to the design of mechanical, thermal, and manufacturing components and systems,
4. To develop professional attitudes, ethical character and an understanding of the engineer's responsibility to society and the impact of technology on society.
5. To provide the student with intellectual challenges and contemporary issues designed to arouse curiosity and a desire and need for lifelong learning as a responsible engineer.
6. To provide students with experiences which will prepare them to function effectively in multicultural and multidiscipline teams.
7. To provide students with hands-on experimental learning activities with traditional and modern mechanical and manufacturing machinery, state-of-the-art technologies and software to enhance engineering problem solving including man-machine interface problems.

MECHANICAL ENGINEERING DESIGN EXPERIENCE

A major curriculum objective is to provide mechanical engineering students with the ability to systematically apply engineering fundamentals to the design of mechanical, thermal and manufacturing components and/or systems. Courses with engineering design content are integrated throughout the mechanical engineering curriculum.

The engineering design experience begins in the freshman year with ENGR 101L Introduction to Engineering II. The design experience continues in the sophomore year with ENGR 201 Thermodynamics and ENGR 211 Statics.

Engineering design continues in the junior year with two required interdisciplinary design courses: ENGR 320 Introduction to Design and ME 325 Computer Aided Design.

The Mechanical Design and Manufacturing sequence also begins in the junior year with ME 321 Mechanism Design followed by ME 322 Design of Machine Elements and continues in the senior year with ME 423 Machine Design, ME 440 Manufacturing Engineering and an elective course with 100% design content, ME 480 Advanced Machine Design.

The Thermal Design sequence builds on thermodynamics (ENGR 201), fluid mechanics (CE 310) and the two required interdisciplinary junior design courses with two senior level thermal design courses ME 415 Heat Transfer, ME 425 Thermal-Fluid Systems Design and an elective course with 100% design content ME 420 Heating and Air Conditioning.

The mechanical engineering design requirement is completed with a two-semester capstone design course (ENGR 450, 451 Capstone Design I & II) which draws upon previous course work. An integral part of the design experience is the introduction of ethical, economic, social and safety factors required to make a design successful. These concepts are introduced during the freshman year (ENGR 100L, ENGR 101L), reinforced during the junior year. (ENGR 320) and integrated into design projects in junior and senior level design courses. At each level, a formal written report and a formal oral presentation are required to communicate the design.

The Bachelor Science degree program in Mechanical Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC of ABET).

Departmental Requirements For Bachelor of Science
Mechanical Engineering **41 Semester Hours**

MAJOR CORE: A minimum of 41 semester hours including: CE 310, 312, 312L; ME 310, 321, 322, 325, 351L, 352L, 401L, 402L, 415, 423, 425; ENGR 450, 451, 490; Technical & Design Electives.

TECHNICAL ELECTIVES: Choose one from the following: ME 311, 412, 413, 430, 440, 460, 470, or any other approved by the advisor and Department Head.

DESIGN ELECTIVES: Choose one from the following: ME 420, 480.

Four Year Plan:

Bachelor of Science Degree in Mechanical Engineering

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
ENG 101	3	ENG 102	3
MATH 163	4	MATH 164	4
CHEM 151	4	PHY 221	3
CHEM 151L	1	PHY 221L	1
ENGR 100L	1	ENGR 101L	1
ENGR 115L	2	HIST 201	3
PE, BAND or AERO	1	PE, BAND or AERO	1
	16		16

SUMMER SEMESTER

PHY 222	3
PHY 222L	1
MATH 263	3
	7

SOPHOMORE YEAR

MATH 264	3	MATH 303	3
PHY 223	3	ENGR 200	3
ENGR 211	4	ENGR 200L	1
ENGR 221L or 222L or 223L	1	ENGR 212	4
ENG 211	3	ENGR 201	4
	14		15

All students are required to pass the **ENGINEERING ENTRANCE EXAMINATION** prior to enrolling in engineering upper level (300-400) courses.

JUNIOR YEAR

ENGR 320	3	HIST 202	3
ENGR 330	3	ME 310	3
ENGR 340	3	ME 325	3
ME 321	3	ME 322	3
CE 312	3	CE 310	3
CE 312L	1	ME 352L	1
ME 351L	1		
	17		16

SENIOR YEAR

ENG 212	3	ME 402L	1
ME 401L	1	ME 425	3
ME 415	3	ENGR 451	1
ME 423	3	**Design Elective	3
*ENGR 420L	1	**Social Science Elective	3
ENGR 450	1	**Humanities Elective	3
ENGR 490	1		
**Technical Elective	3		
	16		14

* A student must take the **Fundamentals of Engineering (FE) examination** in the same semester ENGR 420L is taken and one semester before graduation. A student must demonstrate that she/he has filed an application to take the **FE** before filing for graduation. ENGR 420L is offered only during the fall semester.

**This elective must be chosen from an approved list of upper level (300-400) courses with advisor's approval.

COURSE DESCRIPTIONS

ME 310 Materials Processing (3). Introduction to Manufacturing systems and the primary and secondary manufacturing processes. Prerequisite: ENGR 330.

ME 311 Physical Metallurgy (3). Introduction to theories of alloying. Review of aequilibrium diagrams. Elementary kinetics of rate processes. Diffusion in solids. Nucleation and growth processes. Solidification. Heat treatments of alloys to produce equilibrium and non-equilibrium phases. Properties of alloys in relation to their structures. Plastic deformation, recovery and recrystalization. Corrosion and oxidation of metals and alloys. Prerequisite: ENGR 330.

ME 321 Mechanism Design (3). Analysis of mechanisms. A study of instantaneous centers, velocities, accelerations and forces in plane mechanisms by analytical and graphical methods. A study of cams and tooth gearing in plane and epicyclic train. Design projects required. Prerequisite: ENGR 212.

ME 322 Design of Machine Elements (3). A study of the fundamental principles which govern the design of machine elements. A study of design for strength, stiffness, wear and assembly. The design of screws, fasteners, welds, springs will be considered along with bearing selection and lubrication. Design projects required. Prerequisites: ME 321, CE 312.

ME 325 Computer Aided Design (3). Introduction to software design and its application to engineering design. Computer aided design of curves and surfaces. Computational techniques useful in design processes including simulation and optimization. Design projects required. Prerequisite: ENGR 340.

ME 351L Measurements and Instrumentation Laboratory (1). Use of basic instruments used in mechanical engineering. Measurement of basic physical Properties including length, area, time, speed, mass, weight, inertia, temperature, humidity, pressure, viscosity, thermal conductivity etc. Calibration of instruments. Statistical and uncertainty analyses of data. Prerequisites: PHY 223, ENGR 221. Co-requisite: ENGR 320.

ME 352L Manufacturing Process Laboratory (1). Introduction to basic processing methods used to shape engineering materials. Us of lathes, milling, drilling, tapping, welding and casting. Basic testing of mechanical properties of materials. Prerequisite: ENGR 330.

ME 401L Mechatronics Laboratory (1). Introduction to advanced instrumentations used by engineers including displacement and force transducers, strain gauges, thermocouples, X-Y plotters, oscilloscopes etc. Behavior of zeroth, first and second order systems. Measurement of vibration, sound etc. Prerequisites: ENGR 200, 200L.

ME 402L Thermal Fluid Systems Laboratory (1). Observation and analysis of common mechanical engineering systems. Hydraulic Pumps and Turbines. Pneumatic fans and blowers, internal combustion engines, refrigerators & heat pumps and solar energy system. Prerequisite: CE 310.

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 of electromechanical elements. Transient and frequency response of elements. Linear analysis of simple closed-loop systems. Criteria of stability and improvement of systems performance. Design of simple systems. Prerequisites: Math 303, ENGR 200, 200L.

ME 412 Mechanical Metallurgy (3). Introduction to various measures of strength. Topics include mechanical testing of poly-crystalline materials, plastic deformation of metal, and elementary geometry of dislocations. Prerequisites: ENGR 330, ME 311.

ME 413 Analytical Techniques (3). Study of various analytical and instrumental methods for the characterization of solid materials. This includes (1) Light Microscopy; (2) X-Ray diffraction; (3) Transmission electron methods. Prerequisite: ENGR 330.

ME 415 Heat Transfer (3). Introduction of heat transfers mechanisms; conduction heat transfer including steady state; one, two and three dimensional conduction and conduction in the unsteady state; convection heat transfer including forced and free convection; radiation heat transfer; heat exchangers. Prerequisites: CE 310, ENGR 340.

ME 420 Heating and Air Conditioning (3). Principles of heating, ventilating and air conditioning systems, refrigeration cycles, refrigerant properties, heating and cooling loads, psychrometry; processes for heating, cooling, humidifying, dehumidifying, purifying; heat transfer principles and controls. Heat loss and gain computations. Design and layout of heating and air-conditioning systems. Design projects required. Co-requisite: ME 415.

ME 423 Machine Design (3). The design of machine parts including shafting, gears, brakes, clutches, flywheels and frames. Design projects required. Prerequisites: ME 322, 325.

ME 425 Thermal Fluid Systems Design (3). Application of analytical techniques the design of thermal devices and thermal-fluids engineering systems. Design projects required. Prerequisite: ME 415.

ME 430 Mechanical Energy Conversion (3). Energy sources: solar, chemical, hydraulic and nuclear. Discussion of solar cells, fossil fuels, hydraulic turbines, fuel cells, thermionic generators, thermoelectric generators, MHD generators, fission reactors and the steam power plant. Prerequisites: ENGR 201, CE 310.

ME 440 Manufacturing Engineering (3). Operating concepts and functions present in manufacturing. Topics include, industrial organization, process planning, specifications of designs of tools, jigs and fixtures, product quality control and automated production facilities. Case methods of instruction, which emphasize student participation in class discussion. Prerequisite: ME 310.

ME 460 Fluid Dynamics (3). Review of 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. Prerequisite: CE 310.

ME 470 Mechanical Vibration (3). Undamped and damped vibrations with one and two degrees of freedom. Methods of solution for n degree of freedom systems. Transient vibration in one degree of freedom systems. Balancing and shearing degrees of shafts. Noise and noise control. Prerequisites: MATH 303, ENGR 212.

ME 480 Advanced Machine Design (3). Function and application of analytic techniques as integrated in design procedures and design methodology. Advanced design topics in selected areas such as gears, lubrication and seals. A study indeterminate structures and introduction to fracture mechanics. Design projects required. Prerequisite: ME 423.

THE SCHOOL OF AGRICULTURE AND CONSUMER SCIENCES

Troy Wakefield, Jr., Ph.D., Dean
108 Lawson Hall

General Statement: The School of Agriculture and Consumer Sciences seeks to carry out the University's mandates in instruction, research and public service. Instruction is achieved through three academic departments: Agricultural Sciences, Family and Consumer Sciences, and Hospitality and Tourism Administration. The academic departments maintain a collaborative relationship with the research and extension programs. Research is federally funded and is administered through the Cooperative Agricultural Research Program (CARP), which focuses on research that will enhance the quality of life for all people. Public service is carried out by the Cooperative Extension Service, which works in collaboration with the University of Tennessee's Extension Service. The mission of the TSU Cooperative Extension Program is to extend educational information statewide to urban and rural families, as well as other groups and organizations, for the purpose of addressing critical needs and issues that will result in a better quality of life for people.

Admission/Retention Requirements: The requirements for each of the programs are listed under the Departments.

Agricultural Sciences

Constantine L. Fenderson, Ph.D., Head
211B CARP Building

Faculty: S. Comer, D. Duseja, W. Hayslett, S. Singh.

General Statement: The undergraduate program in the Department of Agricultural Sciences is designed to provide both liberal and specialized education for students who seek to advance their education in the field of agriculture. The program in liberal education involves the social sciences, the natural sciences, the humanities and the arts, and is designed to prepare students to understand and function in a very complex environment. The specialized program is designed to provide understanding and training in the complex scientific field of agriculture. The overall program offers curricula leading to the Bachelor of Science (B.S.) degree in Agricultural Sciences, with concentrations in Agribusiness, Agricultural Education, Agricultural Statistics, Agronomy, Animal Science, Pre-Veterinary Medicine, Food Technology, Ornamental Horticulture, and Resource Economics. Work involved in reducing the number of concentration is in progress. No grade less than "C" in any major course (Agricultural Sciences course) will be accepted as credit toward meeting departmental requirements.

UPPER DIVISION POLICY

Students majoring in Agricultural Sciences must be admitted to the upper division before enrolling in any upper division courses (300 & 400 levels). Upper division courses taken prior to being given upper division status may not be accepted towards the B.S. degree. Students may be admitted to the upper division at the end of the sophomore year or after completing at least 60 degree level lower division credits (as set out in the curriculum) with a minimum cumulative grade point average (GPA) of 2.0 and the successful completion of the Rising Junior Examination. It is the responsibility of the student to submit a formal petition to the department. Such petition will be reviewed by a departmental committee to ensure that all criteria have been met.

Departmental Requirements
For Bachelor of Science
Agricultural Sciences **21 Semester Hours**

MAJOR CORE: A minimum of 21 semester hours including, AGSC 120, 141, 201, 220, 241, 450, 471, 472 & SAHE 100.

General Education: 45 semester hours including, ENGL 1010 & 1020, 2010 & 2020; HIST 2010 & 2020; ART 1010, AGSC 204; HPER 2 hrs; CHEM 1010 & 1020; MATH 1010, 1020 or 1030; SPCH 220; SOCI 2010.

Teacher Education Admission and Retention Requirements

Each student who desires to be a candidate for admission to the Teacher Education Program will make application to the Director of Student Services and Teacher Education in the second semester of the sophomore year. The student must have earned a cumulative 2.75 GPA and passing scores on the Pre-Professional Skills Test (PPST)or PRAXIS ACT composite: Academic Skills Assessments Computer-based Tests (CBT). Students who have previously earned a 21 on the ACT, a 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST.

Further clarification of the Teacher Education Program can be found in the College of Education section of this catalog. "Admission, Retention, and Student Teaching Requirements for the Teacher Education Program." Admission is a prerequisite for upper-level certification courses. Students are required to complete 12 semester hours of student teaching which includes a dual placement.

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Agribusiness

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
MATH 1010	3	MATH 1020 or 1030	3
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 202	3
AGSC 204	3	AGSC 241	3
SAHE 100	1	HUMANITIES	3
	16		18

SOPHOMORE YEAR

ENGL 2010	3	ENGL 212	3
CHEM 1010, 1011 or BIOL 1010, 1011	4	CHEM 1020, 1021 or BIOL 1020, 1021	4
HIST 2010	3	HIST 2020	3
ECON 2010	3	SPCH 220	3
AC 211	3	AGSC 220	3
HPER/AERO/MUSC 2010	1	HPER/AERO/MUSC 2010	1
	17		17

JUNIOR YEAR

BL 300	3	AGSC 301	3
AGSC 300	3	AGSC 303	3
AGSC 304	1	AGSC 313	3
AGSC 312	3	MG 301	3
SOC	3	EC 212	3
ELECTIVE	3	ELECTIVE	3
	16		18

SENIOR YEAR

AGSC 401	3	AGSC 402	3
AGSC 450	3	AGSC 404	3
AGSC 471	3	AGSC 408	3
ELECTIVES	6	AGSC 472	1
		ELECTIVES	6
	15		16

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Agricultural Education

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 202	3
AGSC 204	3	AGSC 241	3
SAHE 100	1	MATH 1020 or 1030	3
MATH 1010	3	HUMANITIES	3
	16		18

SOPHOMORE YEAR

ENGL 2010	3	ENGL 2020	3
CHEM 1010, 1011	4	CHEM 1020, 1011	4
HIST 2010	3	PSY 242	3
SPCH 220	3	AGSC 220	3
EDCI 201	3	HPER/AERO/MUSC 2010	1
HPER/AERO/MUSC 2010	1	HIST 2020	3
	17		17

JUNIOR YEAR

AGSC 305	3	AGSC 306	3
AGSC 307	3	AGSC 310	3
AGSC 309	3	EDAD 301	2
AGSC 311	3	EDAD 400	3
SOCI 2010	3	PSY 374	3
	15		14

SENIOR YEAR

AGSC 308	3	AGSC 405	12
EDRD 491	3	EDCI 470A	3
AGSC 450	3		
AGSC 471	1		
EDSE 333	3		
PSY 312	3		
AGSC 472	1		
	17		15

Bachelor of Science Degree in Agricultural Sciences Concentration in Agricultural Statistics

Suggested Four Year Plan:

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
MATH 1010	3	MATH 1030	3
SAHE 100	1	HPER/AERO/MUSC 2010	1
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 202	3
AGSC 204	3	AGSC 241	3
	16		16

SOPHOMORE YEAR

ENGL 2010	3	ENGL 2020	3
CHEM 1010, 121L or BIOL 1010, 1011	4	CHEM 1020, 1021 or BIOL 1020, 1021	4
SPCH 220	3	SOCI 2010	3
HIST 2010	3	HIST 2020	3
HPER/AERO/MUSC 2010	1	AGSC 220	3
HUMANITIES	3		
	17		16

JUNIOR YEAR

AGSC 300	3	AGSC 301	3
AGSC 304	3	AGSC 302	3
AGSC 305	3	AGSC 313	3
AGSC 312	3	EC 212	3
ELECTIVE	3	ELECTIVES	6
ECON 2010	3		
	18		18

SENIOR YEAR

AGSC 404	3	AGSC 402	3
AGSC 450	3	AGSC 408	3
AGSC 471	1	AGSC 472	1
ELECTIVES	9	ELECTIVES	9
	16		16

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Agronomy

Students interested in a career as a soil scientist should choose a minimum of fifteen credit hours in soils. (See advisor)

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	MATH 1030	3
AGSC 141	3	SOCI 2010	3
AGSC 201	3	AGSC 120	3
SAHE 100	1	HUMANITIES	1
HPER/AERO/MUSC 2010	1		
	17		16

SOPHOMORE YEAR

ENGL 2010	3	ENGL 2010	3
CHEM 1010, 1011	4	CHEM 1020, 1021	4
AGSC 204	3	ELECTIVE	3
AGSC 241	3	AGSC 220	3
SPCH 220	3	AGSC 322	3
HPER/AERO/MUSC 2010	1		
	17		16

JUNIOR YEAR

AGSC 321	3	AGSC 320	3
AGSC 323	3	AGSC 331	3
AGSC 324	3	AGSC 334	3
AGSC 325	3	AGSC 342	3
AGSC 340	3	CHEM 211, 211L	4
	15		16

SENIOR YEAR

AGSC 421	3	AGSC 301	4
AGSC 300	3	AGSC 330	3
AGSC 400	3	AGSC 422	4
AGSC 450	3	AGSC 426	4
AGSC 471	1	AGSC 472	1
ELECTIVE	3		
	16		16

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Animal Science

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	MATH 1020 or 1030	3
HUMANITIES	3	AGSC 120	3
AGSC 141	3	AGSC 204	3
SAHE 100	1	HPER/AERO/MUSC 2010	1
HPER/AERO/MUSC 2010	1		
	17		16

SOPHOMORE YEAR

ENGL 2010	3	ENGL 2020	3
CHEM 1010, 1011	4	CHEM 1020, 1021	4
AGSC 201	3	SOCI 2010	3
AGSC 241	3	AGSC 220	3
SPCH 220	3	ELECTIVE	3
	16		16

JUNIOR YEAR

CHEM 211, 211L	4	AGSC 220	3
AGSC 341	3	AGSC 340	3
AGSC 344	3	AGSC 345	3
ELECTIVE (Ag Business	3	AGSC 354	3
ELECTIVE (Plant Sci)	3	ELECTIVE (Ag Bus)	3
		ELECTIVE (Plant Sci)	3
	16		18

SENIOR YEAR

AGSC 342	3	AGSC 312	3
AGSC 441	3	AGSC 343	3
AGSC 442	3	AGSC 444	3
AGSC 443	3	AGSC 445	3
AGSC 471	1	AGSC 450	3
CHEM 341, 341L	4	AGSC 472	1
	17		16

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Food Technology

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	MATH 1020 or 1030	3
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 220	3
SAHE 100	1	HUMANITIES	3
HPER/AERO/MUSC 2010	1		
	17		18

SOPHOMORE YEAR

ENGL 2010	3	ENGL 2020	3
CHEM 1010,1011	4	CHEM 1020, 1021	4
AGSC 204	3	SOCI 2010	3
AGSC 241	3	BIOL 1030, 1031	4
SPCH 220	3	ELECTIVE	3
HPER/AERO/MUSC 2010	1		
	17		17

JUNIOR YEAR

CHEM 211, 211L	4	CHEM 212, 212L	4
AGSC 350	3	AGSC 351	3
AGSC 354	3	AGSC 352	3
FDS 352	3	AGSC 353	4
BIO 240, 240L	4		
	17		14

SENIOR YEAR

AGSC 443	3	AGSC 445	3
AGSC 471	1	AGSC 446	3
CHEM 341, 341L	4	AGSC 450	3
NTR 411	3	AGSC 472	1
ELECTIVE (Plant Sci.)	3	CHEM 342, 342L	4
		ELECTIVE (Ag Bus.)	3
	14		17

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Ornamental Horticulture

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	MATH 1020 or 1030	3
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 202	3
HPER/AERO/MUSC 2010	1	HUMANITIES	3
SAHE 100	1		
	17		18

SOPHOMORE YEAR

ENGL 2010	3	ENGL 2020	3
CHEM 1010, 1011	4	CHEM 1020, 1021	4
AGSC 204	3	SOCI 2010	3
AGSC 241	3	AGSC 220	3
SPCH202	3	ELECTIVE, 300/400	3
HPER/AERO/MUSC 2010	1		
	17		16

JUNIOR YEAR

AGSC 300	3	AGSC 301	3
AGSC 321	3	AGSC 320	3
AGSC 325	3	AGSC 331	3
AGSC 332	3	AGSC 333	3
AGSC 334	3	AGSC 335	3
	15		15

SENIOR YEAR

AGSC 324	3	AGSC 330	3
AGSC 340	3	AGSC 342	3
AGSC 423	3	AGSC 424	3
AGSC 425	3	AGSC 472	1
AGSC 450	3	CHEM 211, 211L	4
AGSC 471	1	ELECTIVE, 300/400	3
	16		17

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Pre-Veterinary Medicine

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENG 1010	3	ENGL 1020	3
MATH 114 or 1041	3	HIST 2020	3
AGSC 141	3	MATH 1030 or 1060	3
HIST 2010	3	AGSC 120	3
BIOL 1030, 1031	4	BIOL 1040, 1041	4
SAHE 100	1	HPER/AERO/MUSC 2010	1
HPER/AERO/MUSC 2010	1		
	18		17

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 2010	3	ENGL 2020	3
CHEM 1010, 1011	4	CHEM 1020, 1021	4
SPCH 220	3	AGSC 204	3
AGSC 201	3	AGSC 241	3
MATH 1030	3	BIO 322, 211L	4
	16		17

JUNIOR YEAR

SOCI 2010	3	CHEM 212, 212L	4
PHY 211, 211L	4	AGSC 342	3
CHEM 211, 211L	4	AGSC 343	3
AGSC 340	3	AGSC 344	3
HUMANITIES	3	PHY 212, 212L	4
	17		17

SENIOR YEAR

CHEM 341, 341L	4	CHEM 342, 342L	4
AGSC 345	3	AGSC 443	3
AGSC 441	3	AGSC 444	3
AGSC 442	3	AGSC 445	3
AGSC 450	3	AGSC 472	1
AGSC 471	1		
	17		14

Bachelor of Science Degree in Agricultural Sciences Concentration in Resource Economics

Suggested Four Year Plan:

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
MATH 1010	3	MATH 1020 or 1030	3
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 202	3
AGSC 204	3	AGSC 241	3
SAHE 100	1	HPER/AERO/MUSC 2010	1
	16		16

SOPHOMORE YEAR

HIST 2010	3	HIST 2020	3
ENGL 2010	3	ENGL 2020	3
BIOL 1010	3	BIOL 1020	3
HUMANITIES	3	AGSC 220	3
ECON 2010	3	EC 212	3
SPCH 220	3	ELECTIVE	3
	18		18

JUNIOR YEAR

AGSC 302	3	AGSC 301	3
AGSC 303	3	AGSC 304	3
AGSC 305	3	AGSC 309	3
AGSC 312	3	ELECTIVES	6
ELECTIVES	6		
	18		15

SENIOR YEAR

AGSC 404	3	AGSC 313	3
AGSC 409	3	AGSC 402	3
AGSC 450	3	AGSC 410	3
AGSC 471	1	AGSC 472	1
ELECTIVE	3	ELECTIVES	6
ELECTIVE	3		
	16		16

COURSE DESCRIPTIONS

SAHE 100 Orientation (1). A course required of all entering freshmen and new students under the age of 21. Transfer students who have had orientation at TSU do not have to take this course. However, students transferring from another university with less than 60 credits must take orientation. It is designed to aid in the adjustment of freshmen and new students to the college community and to all facets of university life including academic adjustment, effective study habits, student support services, and varied life-styles.

Agricultural Sciences (AGSC)

AGSC 120 (Formerly AGR 102) Introduction to Plant Science (3). A one semester, introductory course in plant science that exposes students to the principles of crop science, horticulture, and conservation of the renewable natural resources. Two lectures and one laboratory period per week.

AGSC 141 (Formerly AS 101) Introduction to Animal Science (3). A course 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 the correct types of livestock in relationship to economical production and market demands. Two lectures and one laboratory period.

AGSC 201-202 (Formerly ABUS 201-202) Introduction to Agribusiness (3-3). The role of agricultural business in the economy. Application of principles and method of economics to agricultural economy with emphasis on agriculture - including the organization, management, marketing and finance of agricultural enterprises and evaluation of politics, programs, and institutions.

AGSC 204 (Formerly AST 200) Computer and Statistical Application in Agriculture (3). Computer concepts and basics of use of computer for decision-making. Emphasis on agricultural management concepts, management of data, and statistical analysis, use of popular software in agribusiness.

AGSC 220 (Formerly AGR 202) Fundamentals of Soil Science (4). A study of the origin, structure, general nature of soil and the factors related to soil fertility, maintenance, and fertility practices. Three lectures and one laboratory period.

AGSC 241 (Formerly AS 201) Introduction to Poultry Science (3). An introduction to the poultry industry and a fundamental study of the anatomy and physiology of the fowl. Principles and practices in incubation, production and marketing of chickens, turkeys and specialized fowl. Management, automation and production economics will also be emphasized. Two lectures and one laboratory period.

AGSC 300 (Formerly ABUS 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. Prerequisite: AGSC 201 or instructor's approval.

AGSC 301 (Formerly ABUS 302) Farm Management (3). Organization planning and operating farm business to make the most effective use of available resources and procedures for making economic decisions. Prerequisite: AGSC 201 or instructor's approval.

AGSC 302 (Formerly AEC 301) Food Economics (3). An examination of the food prices and their effect on the consumers' and farmers' budgets. Food price determination and the marketing channels. International trade and development. Prerequisite: AGSC 201 or instructor's approval.

AGSC 303 (Formerly AEC 302) Natural Resource Economics (3). A Study of the physical, economic and institutional factors affecting land and water use; population and resource requirements; principles of land utilization; social control of land, property, and land tenure. Prerequisite: AGSC 201 or instructor's approval.

AGSC 304 (Formerly AEC 303) Agricultural Policy (3). A study of problems in agriculture, governmental policies and programs assigned to deal with them.

AGSC 305 (Formerly AGED 301) Adult Education in Agriculture/ Agribusiness 301 (3). Administering, planning, organizing, and arranging courses and programs for adults in agriculture/agribusiness are covered in this class. Emphasis is to implement cooperative experience, public relation and philosophy and development of vocational education. Supervised field experiences in junior and senior high schools required for teacher education students.

AGSC 306 (Formerly AGED 302) Intra-Curricular and Related Activities in Agricultural Education (3). Planning and supervision of agricultural experience programs and youth organizations; establishment and maintenance of necessary reports and records; development and use of instructional materials; and operation and use of audio and visual equipment are covered in this class.

AGSC 307 (Formerly AGED 303) Methods of Teaching and Management in Vocational Agriculture (3). A study of teaching methods, materials, and concepts of classroom management for teaching vocational agriculture. Emphasis will be placed on developing a program of vocational agriculture/agribusiness that will relate to a total school; agricultural business and/or industry's program. Supervised field experiences in junior and senior high schools required for teacher education students.

AGSC 308 (Formerly AGED 304) Methods of Teaching Agricultural Mechanics (3). Developing agricultural mechanics programs, application of methods, practices, and skills; study of shop layouts; equipment, organization and laboratory exercises. Two lectures - one laboratory. Supervised field experiences in junior and senior high schools required for teacher education students.

AGSC 309 (Formerly AGEN 302) Introduction to Agricultural Engineering (3). The fundamental principles of agricultural power and machinery; agricultural arc and acetylene welding; agricultural structures; soil and water conservation, and agricultural uses of electricity. One lecture - two laboratory periods.

AGSC 310 (Formerly AGEN 303) Agricultural Power and Equipment (3). Basic power units and machine elements; principles of selection, operation and maintenance of field machinery; farm materials handling and processing equipment. One lecture - two laboratory periods.

AGSC 311 (Formerly AGEN 304) Agricultural Mechanics Shop (3). Shop planning and organization; bench work; agricultural carpentry, concrete and masonry; plumbing; repair and reconditioning farm machinery, and electrical equipment operation and maintenance. One lecture - two laboratory periods.

AGSC 312 (Formerly AST 311) Introduction to Applied Statistics I (3). Basic concepts and principles of measurements, data collection, scientific investigation, and survey design. Topics include statistical measures of central tendency and dispersions, probabilities, normal and other distributions, tests of significance, regression and correlation, analysis of variance and index numbers. Prerequisite: Six hours of college math.

AGSC 313 (Formerly AST 312) Sample Survey Theory and Techniques (3). A practical course in conducting, analyzing, and summarizing surveys; includes review of probability, distribution, and statistical measures; simple random sampling, stratified, systematic and cluster sampling, multi-frame, objective measurement, and enumerative surveys; sampling and non-sampling errors. Questionnaire design and enumeration techniques are included. Prerequisite: AGSC 312.

AGSC 320 (Formerly AGR 210) General Agricultural Botany (4). A course designed to provide a broad understanding of the fundamental facts and principles of botanical science. Three lectures and one laboratory period. Prerequisite: AGSC 120.

AGSC 321 (Formerly AGR 301) Principles of Crop Science (3). A general study of the distribution culture, use and climatic adaptation of the major agronomic crop plants. Two lectures and one laboratory period. Prerequisite: AGSC 120.

AGSC 322 Soil and Environmental Chemistry (3). A study of the chemical, mineralogical and colloidal properties of soils, with emphasis on mineral crystal structure and ion exchange phenomenon. Soil acidity, salt affected soils and their amelioration. Soil and water pollution and abatement principles and wet chemistry principles. Three lectures. Prerequisites: AGSC 220, CHEM 1010 & 1020.

AGSC 323 (Formerly AGR 311) Soil Morphology and Classification (4). An introductory study of the principles of soil classification and land judging. Required of majors in Agronomy. Three lectures and one laboratory period. Prerequisites: AGSC 120 & 220.

AGSC 324 (Formerly AGR 320) Economic Entomology (3). A brief review of the structure, morphology, controls and the recognition of economic insects as related to agriculture. Two lectures and one laboratory period. Prerequisite: AGSC 120.

AGSC 325 (Formerly AGR 321) Farm Weeds and Their Control (3). A course involving the identification, eradication, and economic value of the important weeds of fields and pastures. Elective for any department. Two lectures and one laboratory period. Prerequisite: AGSC 120.

AGSC 326 (Formerly AGR 300) Plant Physiology (3). Application of plant physiological principles to seed plants with special emphasis on photosynthesis, respiration, absorption, transpiration and nutrition. Prerequisites: AGSC 120 & 320.

AGSC 330 (Formerly AGR 322) Plant Pathology (3). A study of the diseases of the most important agricultural plants in Tennessee and the south. Emphasis on the nature of the disease, recognition and control measures. Two lectures and one laboratory period. Prerequisite: AGSC 120.

AGSC 332 (Formerly 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. Prerequisite: AGSC 120.

AGSC 333 (Formerly HRT 352) Floriculture (3). A course dealing with the principles underlying culture of greenhouse crops, commercial cut flowers and house plants. Prerequisite: AGSC 120.

AGSC 334 (Formerly HRT 360) Forestry (3). A study of forest conservation and management and the relation of forestry to agriculture, including the influence of the forest on climate, stream flow and erosion. Two lectures and one laboratory period. Prerequisite: AGSC 120.

AGSC 335 (Formerly HRT 372) Landscape Plants and Design (3). A study of the 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. Prerequisite: AGSC 120.

AGSC 340 (Formerly AS 301) Animal and Plant Genetics (3). A study of the fundamental laws of heredity and their relation to plants and animals. Two lectures and one laboratory period. Prerequisites: AGSC 120 & 141.

AGSC 341 (Formerly AS 304) Anatomy and Physiology of Domestic Animals (3). Review of the structure and function of body systems of domestic livestock. Relationships to animal management practices and animal health considerations emphasized. Two lectures and one laboratory period. Prerequisite: AGSC 141.

AGSC 342 (Formerly AS 311) Feeds and Ration Formulation (3). A study of the basic principles of feeding farm animals, feeding standards, balanced rations, composition and nutritive value of feeds. Two lectures and one laboratory period. Prerequisite: AGSC 141.

AGSC 343 (Formerly AS 313) Animal Health and Disease Prevention (3). A study of the causes, symptoms, and treatment of general diseases and parasites of livestock and poultry with special emphasis on prevention of health problems. Two lectures and one laboratory period. Prerequisite: AGSC 141.

AGSC 344 (Formerly AS 321) Swine Production and Management (3). A study of the breeding, management, feeding and marketing of swine. Emphasis placed on both purebred and commercial production. Two lectures and one laboratory period. Prerequisite: AGSC 141.

AGSC 345 (Formerly AS 322) Beef Production and Management (3). This course includes a study of history, development and distribution of breeds; management practices of the various production systems; control of diseases and parasites; and feeding practices for commercial and purebred breeding herds. Two lectures and one laboratory period. Prerequisite: AGSC 141.

AGSC 350 (Formerly FT 300) Principle of Food Science and Technology (3). Techniques of procurement, processing, packing, preservation and distribution of foods are covered in this class. Mechanization and automation of food handling processes. Nutrient components and organoleptic properties of foods. Regulation of the food industry. Two lectures and one laboratory period.

AGSC 351 (Formerly FT 301) Processing Milk and Milk Products (3). A study of the procurement, processing and sale of milk and the bacteriological, chemical, and physical aspects of market milk processing. Two lectures and one laboratory period. Prerequisites: CHEM 1010 & 1020.

AGSC 352 (Formerly FT 303) Processing Poultry Products (3). A detailed study of grades and classes of market poultry and eggs; methods of processing, storage, preservation and problems in plant operations. Two lectures and one laboratory period. Prerequisite: AGSC 241.

AGSC 353 (Formerly FT 325) Food Microbiology (3). A study of the microorganisms associated with food products. Subjects include: classes of microorganisms, factors that influence growth of spoilage organism, food hazards and quality assurance, effects of preservation techniques on food-borne organisms, microbiology of preservation techniques on food-borne organisms, and microbiology of fermented food products. Two lectures and two laboratory periods. Prerequisite: BIO 240.

AGSC 354 (Formerly FT 375) Laboratory Instrumentation (3). Introduction to procedures and techniques commonly utilized in analysis of biological materials. Includes spectroscopy, gas and column chromatography, electrophoresis, etc.

AGSC 401 (Formerly ABUS 401) Rural Finance (3). An examination of the rural credit institutions and the role of credit in the development of economics, farmer and consumer organizations. Pre-requisite: AGSC 201 or instructor's approval.

AGSC 402 (Formerly ABUS 402) Introduction to Agribusiness Analysis (3). Application of theory to management problems encountered in agribusiness firms, application of quantitative tools to solve problems, economies of size, supply demand relationship; input-output analysis, benefit-cost analysis, and interregional competition. Prerequisite: AGSC 201 or instructor's approval.

AGSC 403 (Formerly ABUS 410) Practicum in Agribusiness (4). Approval of instructor. Supervised in-depth specialized practical experience in an agribusiness or working experience in a specialized public organization, agency; or solving problems in the organization and/or operation of agribusiness. Students select a practical problem and recommend solution(s) after analyzing the same. Designed to give students training in problem-solving in a real business environment. Prerequisite: AGSC 201 or instructor's approval.

AGSC 404 (Formerly AEC 403) World Agriculture (3). A study of the role of agriculture in economic development. Survey of lesser developed countries with special emphasis on Africa.

AGSC 405 (Formerly AGED 472) Student Teaching in Agriculture Education (12). A Supervised experience in vocational agriculture in off-campus centers on a full-time basis for a semester (15 weeks) in both junior high and a high school program. Prospective teachers will receive experience in all phases of the program.

AGSC 406 (Formerly AGEN 402) Agricultural Buildings and Conveniences (3). Planning, location and selection of materials. Methods and costs of construction, water systems, sewage disposal, and other utilities management.

AGSC 407 (Formerly AGEN 403) Agricultural Engineering Special Problems (3). Supervised laboratory or field work research of a problem in agricultural engineering. Written project outline and reports of results required.

AGSC 408 (Formerly AST 404) Experimental Design (3). A review of scientific investigation principles and statistical inference. Subjects include analysis of variance and co-variance, non-parametric and analysis, multiple comparison test and experimental designs. Designs cover all randomized block, balanced block, latin square, factorial, split plot, rectangular lattice and augmented. Greater emphasis placed on logic rather than on mathematics and computer.

AGSC 409 (Formerly AEC 401) Community Development (3). An analysis of the meaning, structure and function of community development with emphasis on the factors important in community change is carried out in this class.

AGSC 410 (Formerly AEC 402) Organization and Contemporary Issues Facing Agriculture Firms (3). An examination of the organization of agribusiness firms, types of business, advantage and disadvantages of each type, legal considerations, approaches to organizational structure, integration deciding where decisions should be made. Operating a business in a socially conscious environment, social, health, environmental, and global issues affecting agricultural firms and their impact on future of agribusiness. Prerequisite: AGSC 201 or instructor's approval.

AGSC 421 Soil Physics (3). A study of the physical properties of soils. Physical makeup, color, structure, thermal relationships, aeration, water movement phenomenon in soils and its relationship to soil nutrient movement/uptake. Three lectures. Prerequisites: AGSC 220, MATH 1010 & 1020.

AGSC 422 (Formerly AGR 402) Advanced Soil Fertility (4). A study dealing with the determination of nutrient deficiencies in soils and plants in rapid methods, recommendations of corrective measures. Two lectures and one laboratory period. Prerequisites: AGSC 220, CHEM 1010 & 1020.

AGSC 423 (Formerly 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. Prerequisites: AGSC 120 & 220.

AGSC 424 (Formerly 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. Prerequisite: AGSC 120.

AGSC 425 (Formerly HRT 451) Floral Design (3). A course dealing with essentials of flower arrangement. One lecture and two laboratory periods. Prerequisite: AGSC 120.

AGSC 426 (Formerly HRT 400) Greenhouse Operation and Management (3). An elementary course of principles involving greenhouse site selection, types of structure, covering materials, heating and cooling systems and cultural practices for producing flowers and ornamental plants. Two lectures and one laboratory period. Prerequisite: AGSC 120.

AGSC 431 (Formerly AGR 350) Plant Breeding (3). Application of genetic principles to the improvement of economic crop plants; methods

and procedures of plant breeding. Two lectures and one laboratory period. Prerequisite: AGSC 120.

AGSC 441 (Formerly AS 403) Dairy Production and Management (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. Two lectures and one laboratory period. Prerequisites: AGSC 141 & 342.

AGSC 442 (Formerly AS 404) Poultry Disease Prevention and Sanitation (3). A course designed to give the major principles underlying sanitation and disease prevention as applied to a poultry farm. Two lectures and one laboratory period. Prerequisite: 241.

AGSC 443 (Formerly AS 424) Animal Nutrition (3). A study of nutrients: their classification, properties and functions; their digestion, absorption and cellular metabolism; and their requirements and deficiency symptoms. Prerequisites: AGSC 141 & 342 and one semester of organic chemistry.

AGSC 444 (Formerly AS 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 cycle; fertility and sterility, and manipulation of the reproductive process are covered in this class. Prerequisite: AGSC 141.

AGSC 445 (Formerly FT 402) Science of Meat (3). The study of the composition, physical, chemical and nutritional properties of meat and meat products. Biochemical alterations of meat during aging, curing, processing and storage. Prerequisite: AGSC 141.

AGSC 446 (Formerly FT 405) Food Chemistry (3). The study of the function of food. Subjects include: food constituents-proteins, lipids, carbohydrates, mineral and trace elements, vitamins, enzymes; Effects of processing, storage and preparation. Two lectures and one laboratory period. Prerequisites: CHEM 1010 & 1020.

AGSC 450 Senior Project (3). A course required of all seniors majoring in Agricultural Sciences. A course designed to expose students to basic research skills. Students are required to plan and carry out research in the area of their concentration. They are to design project, select method of investigation, review relevant literature, gather and analyze data, draw conclusions based on the results obtained from data.

AGSC 471-472 Seminar (1-1). A course devoted to discussions of current literature and problems in agricultural sciences. Required of seniors majoring in the department. One hour credit each semester. One lecture.

Department of Family and Consumer Sciences

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General Statement: The purpose of the undergraduate program in the Department of Family and Consumer Sciences is to provide both a liberal and specialized education in which the interests and well-being of individuals, family members, and consumers are significant. The program includes study of nutrition, food, health, clothing, textiles, management of resources, design, care and guidance of children, human growth and development throughout the life span, interpersonal relationships, and family relationships, with emphasis on breadth of knowledge and its application to the solution of contemporary human problems.

The unifying focus is on an integrative approach to relationships among individuals, families, and communities and the environments in which they function. The program seeks to a) empower individuals, b) strengthen families and c) enable communities.

Specifically the mission of the Department of Family and Consumer Sciences is to:

1) Prepare individuals from diverse backgrounds, ages, and ethnic groups, including those that may be educationally, economically, and socially disadvantaged, as well as those that may be academically and socially advantaged for (a) leadership roles in professional family and consumer sciences careers; (b) graduate and professional specialization; (c) an improved quality of personal and family life; and (d) leadership in improving the quality of life for families through education, prevention and development.

2) Discover new knowledge and extend this knowledge to an increasingly global community.

3) Provide service to the community through workshops, presentations, and involvement.

The Department of Family and Consumer Sciences is accredited by the Council for Accreditation of the American Association of Family and Consumer Sciences. The Didactic Program in Dietetics is currently granted approval status by the Commission on Accreditation/Approval for Dietetics Education of the American Dietetic Association, 216 W. Jackson Blvd., Chicago, IL 60606-6995, 312/899-4876.

Admission/Retention Requirements: Students who wish to complete requirements for the ADA approved Didactic Program in Dietetics must maintain a 2.5 GPA and have a "C" or better in all major courses. Degree candidates seeking teaching certification in Early Childhood Education and Family and Consumer Sciences Education must meet requirements designed for the Teacher Education Program as below.

All Family and Consumer Sciences majors must have a "C" or better in all courses in their area of concentration in order to graduate.

Teacher Education Admission and Retention Requirements:

ADMISSION UNDERGRADUATE

Each student who desires to be a candidate for admission to the Teacher Education Program will make application to the Director of Student Services and Teacher Education in the second semester of the sophomore year. The student must have earned a cumulative 2.75 GPA, and acceptable scores on the Pre-Professional Skills Test (P-PST), or the Computer Based Test (CBT).

Further clarification of the Teacher Education Program can be found in the College of Education section of this catalog; "Admission, Retention, and Student Teaching Requirements for the Teacher Education Program." Students are required to complete 12 semester hours of student teaching which includes a dual placement.

Admission to Upper Level (junior-senior year) in Family and Consumer Sciences/Early Childhood Education Programs

Family and Consumer Sciences/Early Childhood Education majors must meet the following criteria to be admitted to the programs to gain full admission to the programs;

1. GPA of at least 2.0 for FCS majors and 2.75 for Early Childhood Education and Family and Consumer Sciences Education majors.

2. Completed at least 31 hours in general education including all of the following: ENGL 1010, 1020; computer literacy, orientation; most of the math and science requirements; humanities; and at least one of the two American History classes.

3. Completed all remedial courses

4. Completed the following major field courses: FCS 101 and at least one of the following core courses; FM 112, DIGN 201, NTR 201, and ECCD 101. Those students who did not transfer are expected to have completed all the FCS core requirements before gaining full admission. If courses are not available at the time of transfer, the student will receive tentative admission with the stipulation that enrollment in these courses are required at the first available time.

In addition, Early Childhood Education and Family and Consumer Sciences majors must meet the Admission and Retention requirements listed in the Teacher Education Program.

Departmental Requirements
For Bachelor of Science -
Early Childhood Education

MAJOR CORE: A minimum of 34 semester hours including ECCD 101, 201, 302, 332, 352, 361, 460, 462 or 452, 463, 465; FCS 101, 450.

PROFESSIONAL EDUCATION: 38 hours including EDCI 201,387, 390A, 390B; 470B; EDAD 301, 400; EDRD 424, EDSE 333; ECCD 472K.

GENERAL EDUCATION: 62 hours including BIOL 1010, 1011, 1020, 1021; ART 1010; MATH 1010, 211; ENGL 1010, 1020, 2010, 373; MUSC 1010; SPCH 220 or communication elective; HIST 2010 or 2020 or 241 (6 hrs); GEOG 1010 or 1020; CS 121; HPER activity courses (2 semesters), PE 310; HEA 306; PSY 312, 374; SAHE 100; NTR 333.

Suggested Four Year Plan:

Bachelor of Science Degree in Early Childhood Education (With Teacher Certification Pre K-4)

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 100	1	ART 1010	3
ENGL 1010	3	ENGL 1020	3
ECCD 101	3	MATH 1010	3
CS 121	3	FCS 101	1
BIOL 1010, 1011	3	BIOL 1020,1021	3
HPER/AERO/MUSC 2010	1	MUSC 1010	3
GEOG 1010 or 1020	3	HPER/AERO/MUSC 2010	1
	17		17

SOPHOMORE YEAR

ENGL 2010	3	MATH 211	3
HIST 2010 or 2020	3	HIST 2030	3
ECCD 201	3	ECCD 332	3
EDCI 201	3	ECCD 352	3
NTR 333	3	SPCH 220 or Oral Communication Elective	3
		ECCD 302	3
	15		18

JUNIOR YEAR

EDCI 387	3	ENG 373	3
EDAD 301	2	HEA 306	3
PSY 312	3	ECCD 460	3
ECCD 462 or 452	3	ECCD 463	3
PE 310	2	EDCI 390A	3
ECCD 361	3	PSY 374	3
	16		18

SENIOR YEAR

ECCD 465	3	ECCD 472K	12
EDCI 390B	3	EDCI 470B	3
FCS 450	3		
EDSE 333	3		
EDRD 424	3		
EDAD 400	3		
	18		15

Departmental Requirements
For Bachelor of Science -
in Family and Consumer Sciences with
Concentration in Child Development and Family Relations

CONCENTRATION AND MAJOR CORE: A minimum of 52 semester hours including ECCD 101, 332, 351, 352, 353, 452, 460, 463, 465, 466; NTR 333; FM 111 or 112; DIGN 201; HMGT 433 or 321; FCS 101, 450.

Suggested Four Year Plan:

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Child Development and Family Relations

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 100	1	ENGL 1020	3
ENGL 1010	3	ART 1010	3
HPER/AERO/MUSC 2010	1	HPER/AERO/MUSC 2010	1
FCS 101	1	MATH 1010	3
BIOL 1010, 1011	3	BIOL 1020, 1021	3
ECCD 101	3	CS 121	3
FDS 111	4		
	16		16

SOPHOMORE YEAR

ENGL 2010	3	FM 112	3
SPCH 220	3	SOCI 2010	3
ECCD 351	3	BIO 221, 221L	4
GEOG 1010	3	MUSC 1010	3
DIGN 201	3	HIST 2020	3
HIST 2010	3		
	18		16

JUNIOR YEAR

HMGT 433 or 321	3	ECCD 353	3
ECCD 452	3	ECCD 352	3
ECCD 361	3	ECCD 460	3
NTR 333	3	ECCD 332	3
PSY 311	3	ENG 373	3
EDCI 201	3	ECCD 463	3
	18		18

SENIOR YEAR

ECCD 465	3	ECCD 466	9
FCS 450	3	SW 470	3
ELECTIVES (300-400 level)	10		
	16		12

Departmental Requirements For Bachelor of Science - in Family and Consumer Sciences with Concentration in Design

CONCENTRATION AND MAJOR CORE: A minimum of 50 semester hours including DIGN 201, 300, 301, 310, 323, 350, 400, 411, 412, 420, 421, 432, 435; NTR 201; FM 111; ECCD 463; HMGT 433; FCS 101.

Suggested Four Year Plan:

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Design

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 100	1	MUSC 1010	3
ENGL 1010	3	ENGL 1020	3
FM 111	3	MATH 1010	3
DIGN 201	3	ART 1010	3
ART 121	3	FCS 101	1
HPER/AERO/MUSC 2010	1	HPER/AERO/MUSC 2010	1
THEA 111 or 112	3	CS 121	3
	17		17

SOPHOMORE YEAR

ENGL 2010	3	EC 211	3
HIST 2010	3	HIST 2020	3
CHEM 1010, 1011 or BIOL 1010, 1011, 1030, 1031	3-4	CHEM 1020, 1021 or BIOL 1020, 1021 or 1030, 1031	3-4
DIGN 300	3	FM 211	3
NTR 201	3	SPCH 220	3
	15-16		15-16

JUNIOR YEAR

THEA 400 or 402	3	DIGN 301	3
DIGN 310	3	ECCD 463	3
FM 413 or 322	3	DIGN 411	3
DIGN 323	3	FCS 373	3
DIGN 350	2	DIGN 435*	5
FM 203	3		
	17		17

*Summer only

SENIOR YEAR

DIGN 412	3	DIGN 400	3
ELECTIVE (300 or 400 level)	6	DIGN 421	3
FCS 450	3	DIGN 420	3
DIGN 432	3	ELECTIVES (300 or 400 level)	7
HMGT 433	3		
	18		16

Departmental Requirements For Bachelor of Science - in Family and Consumer Sciences with Concentration in Fashion Merchandising

MAJOR CORE: A minimum of 49 semester hours including FM 111, 112, 203, 211, 300, 302, 400, 403, 414, 415, 444; DIGN 201; NTR 201; HMGT 433 or 321; ECCD 463; FCS 101, 450.

Suggested Four Year Plan:

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Fashion Merchandising

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 100	1	BIS 215	3
ENGL 1010	3	ENGL 1020	3
FM 111	3	FM 112	3
MATH 1010	3	FCS 101	1
HIST 2010	3	HIST 2020	3
HPER/AERO/MUSC 2010	1	HPER/AERO/MUSC 2010	1
ART 1010	3	FREN 1010 or 1020	3
	17		17

SOPHOMORE YEAR

ECON 2010	3	ENGL 2020 or 2010	3
NTR 201	3	BIOL 1020, 1021 or 1040, 1041 or CHEM 1020, 1021	3-4
BIOL 1010, 1011 or 1030, 1031, or CHEM 1010, 1011	3-4	SPCH 210, 220 or 230	3
DIGN 201	3	FM 211	3
FM 203	3	AC 212	3
AC 211	3		
	18-19		15-16

JUNIOR YEAR

ECCD 463	3	FM 302	3
DIGN 301	3	MK 301	3
FM 300	3	ECCD 351	3
DIGN 323	3	ELECTIVE (300-400 level)	6
HMGT 321 or 433	3		
	15		15

SENIOR YEAR

MK 425	3	FM 403	3
MK 320	3	FM 415*	6
FM 400	3	DIGN 421	3
FCS 450	3	FM 414	3
ELECTIVES (300 or 400 level)	3	FM 444	3
	15		18

*Summer only

Departmental Requirements
For Bachelor of Science -
in Family and Consumer Sciences with
Concentration in Food Service Management

CONCENTRATION AND MAJOR CORE: A minimum of 46 semester hours including FDS 111, 311, 313, 412, 452; NTR 201, 311; FCS 101, 450, 460; FM 112, DIGN 201; ECCD 463, HMGT 433.

Suggested Four Year Plan:

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Food Service Management

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
FDS 111	4	CS 121	3
HPER/AERO/MUSC 2010	1	HPER/AERO/MUSC 2010	1
MATH 1010	3	FM 112	3
CHEM 1010, 1011	4	CHEM 1020, 1021	4
SAHE 100	1	FCS 101	1
	16		15

SOPHOMORE YEAR

ENGL 2010	3	ENGL 2020	3
HIST 2010	3	HUMANITIES ELECTIVES	3
DIGN 201	3	HIST 2020	3
ECON 2010	3	EC 212	3
NTR 201	3	SPCH 230	3
	15		15

JUNIOR YEAR

NTR 311	3	FDS 311	3
FDS 313	3	MG 301	3
AC 211	3	FDS 412	3
ELECTIVES	8	AC 212	3
		BIO 240, 240L	4
	17		16

SENIOR YEAR

BL 300	3	NTR 462	3
HMGT 433	3	ECCD 463	3
FDS 452	3	FCS 373	3
MK 301	3	FCS 460*	6
ELECTIVES (300-400 level)	6	FCS 450	3
	18		18

*Summer only

Departmental Requirements
For Bachelor of Science -
in Family and Consumer Sciences with
Concentration in Foods and Nutrition

CONCENTRATION AND MAJOR CORE: A minimum of 47 semester hours including FDS 111, 311, 313, 412, 452; NTR 211, 311, 333, 411; FCS 101, 450, 460; FM 112; DIGN 201; ECCD 463; HMGT 433.

Registered Dietitian: By taking the additional courses listed in the footnote and maintaining a minimum of 2.5 overall GPA, a student with a concentration in Foods and Nutrition can meet the didactic requirements needed to receive a verification form and to make them eligible to apply for a dietetics internship. If accepted to an internship, which is then successfully completed, the student must pass the National Registration Examination for dietitians before becoming a Registered Dietitian.

Suggested Four Year Plan:

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Foods and Nutrition

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
HPER/AERO/MUSC 2010	1	HPER/AERO/MUSC 2010	1
DIGN 201	3	HUMANITIES ELECTIVE	3
SAHE 100	1	BIS 215	3
CHEM 1010, 1011	4	FCS 101	1
		CHEM 1020, 1021	4
	15		18

SOPHOMORE YEAR

ENGL 2010	3	ENGL 2020	3
FDS 111	4	FM 112	3
BIO 221, 221L	4	ECON 2010	3
PSYC 2010	3	NTR 211	3
COMMUNICATIONS		MATH 1010	3
ELECTIVE	3	HUMANITIES ELECTIVE	3
	17		18

JUNIOR YEAR

NTR 311	3	FDS 311	3
CHEM 211, 211L	4	FDS 412	3
MG 301	3	BIO 240, 240L	4
ELECTIVE (300-400 level)*	6	ELECTIVE*	6
	16		16

SENIOR YEAR

FDS 313	3	FCS 460**	3
NTR 411	3	ECCD 463	3
FDS 452	3	FCS 371	3
HMGT 433	3	FCS 450	3
NTR 333	3	ELECTIVES	
		(300 or 400 level)*	6
	15		18

**Summer Only

*Students wishing to meet requirements for the Dietetics Program must replace electives with the following courses: PSY 311, CHEM 341 and lab, NTR 453, and BIO 222, 222L.

Departmental Requirements
For Bachelor of Science -
in Family and Consumer Sciences with Concentration
in Family and Consumer Sciences Education
(With Teacher Certification)

CONCENTRATION AND MAJOR CORE: A minimum of 35 semester hours including FM 111, 211; FDS 111; FDS 311 or NTR 311; HMGT 321, 433; ECCD 351*,463, 465; FCS 101; NTR 201*; FCS 450*; DIGN 201, 323 (*also general education).

GENERAL EDUCATION: A minimum of 60 semester hours including ENGL 1010, 1020, 2010; HIST 2010, 2020; MATH 1010; CHEM 1010, 1011, 1020, 1021 or BIOL 1010, 1011 or 1020, 1021; ENGL 2020 or ART 1010 or MUSC 1010 or PHIL 2010 or THTR (6 hrs.); HPER Activity Courses (2 semesters); PSY 242, 312, 374; SOC SCI Elective, SPCH 220; CS 121; NTR 201; SAHE 100; FCS 450; ECCD 351.

PROFESSIONAL COURSES: A minimum of 38 semester including FCS 371, 387, 443, 472*; EDCI 201, EDAD 301, 400; EDSE 333*; EDRD 491*; EDCI 470A*.

*The latter courses with asterisk will be substituted for those not seeking a teaching certificate.

Degree candidates seeking teaching certification in Family and Consumer Sciences Education must meet requirements designed for the Teacher Education Program as outlined in the University Catalog. The program is also designed for those interested in a general family and Consumer Sciences background and preferred competencies for positions in family and community services and cooperative extension.

Suggested Four Year Plan:

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Family and Consumer Sciences Education (With or Without Teacher Certification)

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 100	1	MATH 1010	3
ENGL 1010	3	ENGL 1020	3
CHEM 1010, 1011	4	CHEM 1020, 1021	4
HPER/AERO/MUSC 2010	1	HPER/AERO/MUSC 2010	1
FM 111	3	CS 121	3
FCS 101	1	HUMANITIES	3
FDS 111	4		
	17		17

SOPHOMORE YEAR

ENGL 2010	3		
DIGN 201	3	HUMANITIES ELECTIVE	3
PSY 242	3	FM 211	3
HIST 2010	3	HIST 2020	3
NTR 201	3	EDCI 201	3
		*SOC SCI ELECTIVE	3
	15		15

JUNIOR YEAR

ECCD 351	3	EDAD 301**	2
FCS 387	3	HMGT 321	3
DIGN 323	3	ECCD 463	3
FDS 311 or NTR 311	3	FCS 371	3
EDSE 333**	3	PSY 312**	3
SPCH 220	3	PSY 374**	3
	18		17

SENIOR YEAR

HMGT 433	3	EDCI 470A** or	
ECCD 465	3	FCS 372	3
FCS 450	3	FCS 472** or	
EDRD 491**	3	FCS 474 & Electives	
FCS 443	3	(300 or 400 level)	12
EDAD 400	3		
	18		15

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

**Family and Consumer Sciences and Family and Consumer Sciences Education courses will be substituted for those interested in Family and Consumer Sciences Education without certification. Admission to Student Teaching required for enrollment in these courses.

Curriculum for Occupational Family and Consumer Sciences Endorsement

Family and Consumer Sciences Education majors who complete or are working on teacher certification in Consumer and Homemaking (Vocational Home Economics) may take additional courses to add one or both of the two endorsement areas in vocational home economics.

Occupational Endorsements — 11 Semester Hours

Option I

Food Management, Production, and Service		11
FCS 460	2	
FDS 313, 412	6	
FDS 452	3	

Option II

Care and Guidance of Children		11
FCS 458	2	
ECCD 332	3	
ECCD 452, 460	6	

COURSE DESCRIPTIONS

Design (DIGN)

DIGN 201 Environmental Design (3). A course in which students develop techniques for becoming aware of design in the near environment. Students learn to solve creative problems, varied materials and techniques in design and color with emphasis on the element and principles of art as applied to the home and individuals. They also examine two and three dimensional forms in design. Lab-lecture. Fall Semester

DIGN 300 Fashion Illustration (3). A course in which students learn how to sketch human figures and use fashion illustration as a form of communication. Emphasis on color, proportion, fabric detail, development of individual techniques and development of individual techniques and experimentation with a variety of media. Lab-lecture. Prerequisite: DIGN 201. Fall Semester: Odd Years

DIGN 301 Costume/Fashion Design (3). A course in which students learn how to make rendering and layouts and make costume and fashion analysis for the individual and theatre. They learn fashion fundamentals such as application of the fashion tools, fashion makers, responsibilities of designers, creative use of research, inspirational museums and library sources. Studio problems with emphasis on live color and texture for the individual and costumes are emphasized. Lab-lecture. Prerequisite: DIGN 201, FM 203. Spring Semester

DIGN 310 Interior, Fashion & Textile CAD (3). An introduction to the use of computers in interior, fashion, and textile design. Various computer programs are used for developing interior drawings, fashion designs, and textile design.

DIGN 323 Spatial Living I (3). An introductory course in the interior design profession in which students apply the design elements and principles to interior design. Studio problems in designing living spaces for family living. Lab-lecture. Prerequisite: DIGN 201. Fall Semester

DIGN 350 Studio Design Laboratory (2). A course designed for students who wish to experiment with art studio problems, related art problems, design inspiration and media with guidance of instructor. Prerequisite: DIGN 201. Fall Semester

DIGN 400 Spatial Living II (2). A course which includes a study of the historical and contemporary interiors, traditional and modern, classic Asian, European and current influences, and contemporary. Spring Semester

Design 411 Non-residential Interior Design Contracts (3). A studio course in which students utilize the design process in the analysis and planning of non residential interior environments such as healthcare, restaurant, preschool, and retail facilities. The course includes a study of current codes relating to health, safety, and handicapped accessibility in non residential design. Prerequisite: DIGN 201 and 323 or consent of instructor.

DIGN 412 Art Crafts (3). A course in which students design and execute art crafts using inexpensive materials and tools. The content of the course includes: relationship of design to function, materials, tools and techniques; understanding educational, economic, social, recreational and therapeutic art craft work. Emphasis is placed on making creative objects of original design. Lab-lecture. Fall Semester: Even Years

DIGN 420 Experimental Textile, Apparel and Design (3). A course which covers creative and technical aspects of designing textiles, apparel, accessories, and home fashions. Original designs with exercises in various media, direct, indirect and accidental methods will be used to stimulate ideas and involve the students in the process of exploring and awakening intellectual and creative potentials. Lab-lecture. Prerequisite: DIGN 201 or consent of instructor. Spring Semester

DIGN 421 Interior Architecture (3). A course whose major topics for this course are: 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. Lab-lecture. Prerequisites: DIGN 201 & 323. Spring Semester

DIGN 432 Visual Communication (3). A course in which students learn the principles and techniques of display and exhibit design such as decoration for window and interior displays in schools, department and speciality stores, museums; advertising layout and production. Students design and execute window and interior displays and discuss methods employed in coordinating store wide promotions. The fashion show is used as a media. Emphasis is on creative design, layout and presentation. Lab-lecture. Fall Semester

DIGN 435 Internship/Seminar/Options (3-5). A course in which students gain experience in established firms, institutions, showrooms, etc. Students are introduced to many practical applications of design theory directed toward various aspects of the fashion, interior, visual and fabric structure and decoration industry as well as specialized teaching. Each option is to be executed under the supervision of the concentration coordinator. Senior standing in curriculum required. Summer Semester.

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

ECCD 101 Introduction to Early Childhood & Child Development (3). A study of staff roles in a variety of pre-school programs for children in Middle Tennessee. The first half of the semester will be spent in observation, the second in a practicum as an aide functioning in a variety of roles. Fall Semester

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

ECCD 201 Principles and Concepts of Child Development (3). A study of the basic principles and concepts of growth and development which serve as a foundation in understanding children from birth to age 8. Observation and laboratory experiences are required.

ECCD 211 Problems in CDA Competency Area I (3). An individualized study for early childhood care givers in setting up and maintaining safe and healthy learning environments for young children. This course must be taken in conjunction with ECCD 212 or with consent of instructor.

ECCD 212 Practicum: Safe, Healthy Learning Environments (3). A course in which the care givers demonstrate the ability to set up and maintain safe and healthy learning environments for young children. Consent of instructor.

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

ECCD 222 Practicum: Physical and Intellectual Competency (3). A course in which the care givers demonstrate the ability to advance the physical and intellectual development of young children. Consent of instructor.

ECCD 231 Problems in CDA Competency Area 3 (3). An individualized study for care givers that focus on building positive self-concept and individual strength in young children. Must be taken in conjunction with ECCD 232 or with consent of instructor.

ECCD 232A Art for Young Children (2). A course that includes a study of self-directed activities in art and creative play experiences.

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

ECCD 241 Problems in CDA Competency Area 4 (3). An individualized study course for care givers in organizing and sustaining the positive functioning of young children and adults in groups in a learning environment. Must be taken in conjunction with ECCD 242 or with consent of instructor.

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

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

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

ECCD 252A Observation (CDA) (3). A course in which students observe in nursery school, kindergarten, and other preschool programs for young children.

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

ECCD 253A Internship in Infant Programs (2). A course in which students observe and participate in infant laboratories.

ECCD 253-254-255 (CDA) Problems in Providing Care for Young Children (3). An individualized experience for early childhood care givers. Consent of instructor.

ECCD 266 Internship in Early Childhood and Child Development (3). A course in which students participate in field work in community nursery schools and other preschool programs for young children. Consent of instructor.

ECCD 302 Middle Childhood and Adolescence (3). A course in which students study human development from later pre-school through adolescence (5-18) years. Prerequisite: ECCD 201

ECCD 331-333-334 Internships for Trainers (CDA) (3). An individualized internship experience for persons interested in providing child care giver training. Consent of instructor.

ECCD 332 Expressive Arts for Young Children (3). A course in which students interpret and are involved with (1) art learning activities, (2) self-directed activities, and (3) integrated activities with emphasis on the role of creative play. Prerequisites: ECCD 201 or ECCD 351. Spring Semester

ECCD 351 The Young Child and 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 students. The areas of concentration include the philosophy of child development, pregnancy and birth, and the development of the physical, mental, socio-emotional and language characteristics of the child, and the role of the family in the development of children. Laboratory experience 2 hrs. per week. Fall Semester

ECCD 352 Observation, Participation and Assessment in Early Childhood Settings (3). Observation and participation in early childhood settings. A course required of students concentrating in Child Development and Family Relationships. This course will address appropriate observation methods and assessment tools for use in early childhood settings. Laboratory experiences required. Prerequisites: ECCD 201 or ECCD 351. Spring Semester

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

ECCD 361 Early Childhood Curriculum I (3). A course in which students design curricula in Early Childhood Education, including learning how to write general goals and behavioral objectives for lesson plans, and discussing forces that affect curriculum. Prerequisites: observation in a variety of early childhood settings, ECCD 201 or ECCD 351. Fall Semester

ECCD 452 Early Childhood Administration and Leadership (3). A course designed to familiarize students with the operational procedures of day care programs. Emphasis is placed on providing students with practicum experience relating to administering and supervising personnel, managing budgets, and developing computer programs. Observation/participation in Early Learning Center required. Fall Semester

ECCD 460 Preschool and Kindergarten Methods and Materials (3). A study of methods, materials and modern trends of teaching in the nursery school and kindergarten. Organization, equipment, and housing in child care centers and public kindergartens are studied based on the developmental levels of children. Observation/ participation experiences in early childhood programs required. Prerequisite: ECCD 332 and ECCD 361 Spring Semester

ECCD 462 Current Topics and Issues in Early Childhood Education (3). A course in which students study programs, trends and issues in child development and early education.

ECCD 463 Family Relationships (3). 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. Spring Semester

ECCD 465 Parenting/Practical Steps to Childrearing (3). A course in which students outline and examine contemporary problems of childrearing and focus on systematic and scientific methods of parenting. Subject areas to be examined are child abuse, socialization practices among various cultures, myths and misconceptions about effectiveness of punishment, the rights of children, principles of behavioral modification and parents of children with special needs. Fall Semester

ECCD 466 Internship or Fieldwork in Child Development (9). A course in which students are provided an opportunity to student teach in nursery schools in the community and other agencies caring for children as well as the campus Early Learning Center. Taken with approval of the coordinator of Child Development and Family Relationships.

ECCD 472K Observation and Student Teaching in Pre-K and K-3 (12). Supervised teaching experiences in both Pre-K and K-3 settings on a full-time basis for a semester. Seminars are integral parts of the student teaching experience. Prerequisite: This course is open only to students who have met the student teaching prerequisites.

Family and Consumer Sciences Education (FCS)

FCS 101 Family and Consumer Sciences as a Profession (1). A course designed to help students identify their goals and individual needs and explore possible family and consumer sciences career areas. Students gain knowledge of the history and philosophy of family and consumer sciences as well as public policy and issues and trends. One lecture.

FCS 318 Cooperative Education (3). A university-wide program that combines academic study with meaningful work experiences directly related to the student's academic major. Students are required to work at least two semesters with a school semester in between (work/study/work). Three hours of academic credit will be awarded for the co-op work experience.

FCS 371 Teaching Family and Consumer Sciences (3). A course designed for students preparing to teach family and consumer sciences in middle and secondary schools as well as for family and consumer sciences in the fields of business, social welfare, extension, public utilities, dietetics and nutrition. Students are provided opportunities to develop instructional plans including using instructional techniques and methods and selecting and using media as well as computers. Supervised field experiences in middle and high schools required for Teacher Education Students. Other field teaching experiences required for all students. Prerequisite: Admission to Teacher Education Program for students in Teacher Education. Spring Semester

FCS 372 Special Problems in Family and Consumer Sciences (1-3). A course designed for individual and group projects that focus on recent research findings and general depth in subject matter.

FCS 373 Entrepreneurship in Family and Consumer Sciences (3). A course that focuses on the application of knowledge to teaching entrepreneurship skills in family and consumer sciences programs and/or developing plans to become an entrepreneur using family and consumer sciences skills.

FCS 387 Curriculum and Program Development (3). A course where attention is given to family and consumer sciences curriculum conceptualization including analyzing factors impacting on the curriculum. Students plan and develop family and consumer sciences programs, and analyze teacher roles and communication in the classroom. Professional rights and responsibilities, and multi-cultural/global education are analyzed. Supervised field experiences in middle and high schools are required. Prerequisite: Admission to the Teacher Education Program. Fall Semester, even numbered years.

FCS 443 Principles of Vocational Education and Occupational Program Planning (3). A course which focuses on theory, philosophy, legislative and historical background, and program development in vocational education with special emphasis on program planning in family and consumer sciences related occupation (HERO). Emphasis is also given to implementing cooperative experiences, job placement and follow-up, public relations, advisory committees, evaluation and youth leadership. Supervised observation-participation experiences in vocational programs are required. Fall Semester, odd years.

FCS 450 Senior Project Writing (3). A course in which students develop skills related to techniques of professional writing, literature searching, and abstracting scientific material. Students will incorporate area-special concepts into an original project with an accompanying written component. Senior standing in curriculum required.

FCS 458 Field Experiences in Child Care Services (2). A supervised work experience in the child care industry. Course includes class seminars. Senior standing in curriculum required. Summer Session

FCS 460 Field Experiences in Food Service or Nutrition (2-6). A supervised work experience in the food service industry or in nutrition programs. Course includes class seminar. Senior standing in curriculum required. Summer Session

FCS 472S Student Teaching in Family and Consumer Sciences (12). Supervised teaching in family and consumer sciences in off-campus teaching centers on a full-time basis for a semester (15 weeks) in both a middle school and a high school. Seminars are integral parts of the student teaching experience. Prerequisite: This course is open only to students who have met the student teaching prerequisites for Family and Consumer Sciences and Teacher Education.

FCS 474 Consumer and Family Service Field Experiences (3-6). A course designed to provide students opportunities to gain practical experiences in consumer and family service programs. Students not seeking teaching certification should substitute this course for student teaching. Prerequisites: Senior level Family and Consumer Sciences major and consent of instructor.

Fashion Merchandising (FM)

FM 111 Textiles (3). A consumer-oriented study of textiles, emphasizing fibers, yarns, fabric construction, finishes and socio-economic background of the textiles and apparel industry in relation to end use. Lecture-laboratory. Spring Semester

FM 112 Cultural Interpretation of Dress (3). A study of the dynamic nature of the fashion phenomenon within the global society. Theories regarding psychological, social, cultural and economic forces of acquiring new styles will be explored. Learn about fashionable apparel worn in various cultures. Spring Semester

FM 203 History of Costume (3). The history of costume from ancient times to the present and the influence of social and economic conditions upon costume are covered in this course. Fall Semester

FM 211 Principles of Apparel Construction (3). Students learn the fundamental techniques of sewing various apparel by using a computerized, industrial sewing machine, or serger. Simple pattern alterations will be implemented. Lecture-laboratory. Fall Semester

FM 300 Apparel Quality Analysis (3). A study of various techniques of evaluating silhouettes, and structural and decorative details of apparel. The degree of excellence displayed in construction will be examined. Prerequisites: FM 211 and DIGN 301. Spring Semester

FM 302 Clothing of the Family (3). A study of the physiological, psychological, and aesthetic aspect of clothing for the family. Family clothing problems from the standpoint of income, occupation, and health as well as aesthetic and psychological factors affecting all family members are analyzed in the class. Spring Semester: Odd Years

FM 312 Applied Dress Design (3). The application of elements and principles of design as they relate to clothing. Emphasis is placed upon problem solving and the functional, structural and decorative aspects of apparel design. Prerequisites: FM 211 and DIGN 301. Spring Semester: Even Years

FM 321 Tailoring (3). A course in which students learn advanced construction methods. Students construct a tailored garment. Emphasis is also placed on selection and care of woolen garments. Prerequisite: examination in construction skills and/or FM 211. Fall Semester: Odd Years

FM **322 Flat Pattern Adaptation (3).** A study of the principles and techniques of flat pattern design and application of these principles to commercial pattern alteration. The development of original designs is emphasized. Prerequisite: FM 211. Spring: Odd Years

FM 400 Display Merchandising (3). Presentation of merchandise, coordination elements and principles of design, properties and the art of arranging soft goods through a visual medium. Concepts and tools of selling merchandise in numerous retail settings for increasing sales are covered.

FM 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. Spring Semester

FM 413 Dress Design and Draping (3). A course in dress design with emphasis on originality and draping. Opportunity is given to students to investigate sources of design and to practice various methods of designing. Prerequisite: FM 211 & DIGN 201. One lecture and two laboratory periods. Fall: Even Years

FM 414 Fashion Merchandising Seminar (3). A study of the problems in various aspects of buying fashions. Emphasis is on the planning involved in marketing of merchandise and computer applications in retailing. Spring Semester

FM 415 Internship (3-6). A temporary period of supervised work experience which provides the student an opportunity to apply theoretical knowledge to a work situation. Internship is designed to give students supervised work experience in an area of fashion merchandising. Prerequisites: (1) junior level or above in Family and Consumer Sciences, (2) a job in clothing and/or textiles retailing or merchandising, and (3) instructor's written approval. Summer Sessions

FM 444 Fashion Promotions and Events (3). Students learn to incorporate numerous elements of selling into a theatrical presentation using live models. Stages of planning fashion promotions by establishing the type of show, site, theme, budget, publicity, advertising and various press materials for producing a fashion show are implemented into an annual presentation. Students produce a major fashion show.

Family Economics and Home Management (HMGT)

HMGT 321 Family Resource Management (3). A course which includes a study of the family as an ecosystem and how that ecosystem is influenced by and influences other larger systems. Attention is given to the significance of inputs, throughputs, and outputs of the decision making process. Offered each Spring Semester

HMGT 433 Consumer Education (3). A course which includes a study of consumer activities in the marketplace and the financial world. Emphasis is given to the most important areas in which individuals and families function as consumers. Offered each Fall Semester.

Foods (FDS)

FDS 111 Food Principles and Meal Management (4). A study of foods from harvest to service. A consideration of economics, grade standards, sanitation, preparation and nutritional quality is included. The topics include the planning, preparation and service of nutritious attractive meals at various cost levels for different occasions with emphasis on the conservation of time, energy and money. Two lectures and two laboratory periods. Fall Semester. Prerequisite: Family and Consumer Sciences major or consent of instructor.

FDS 311 Food Science (3). A course which includes a study of the scientific principles of food preparation. Emphasis is placed on deviations from the norm and causes. Lecture and laboratory. Prerequisite: CHEM 1010 and FDS 111. Spring Semester, even years.

FDS 313 Foodservice Equipment and Cost Control (3). A course that assists the student with the tools necessary to plan a foodservice facility and to control the costs in such a facility. Purchase specifications, budgeting, forecasting, fiscal planning and cost analysis are covered in this class.

FDS 412 Quantity Food Procurement and Production (3). A course that includes 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 facilities. Prerequisite: FDS 111.

FDS 452 Foodservice Systems Management (3). A course that includes a study of institutional food service systems, professional ethics and qualifications for managers, employment procedures, personnel schedules, financial records, and computer applications. Field experience required. Prerequisite: FDS 412 or permission.

Nutrition (NTR)

NTR 201 Basic Nutrition Principles (3). A course in which students study nutrition and its relationship to health. Emphasis is placed on functions, sources and deficiency symptoms for the various nutrients. Regulations surrounding food and related products are presented. Nutritional requirements throughout the life cycle are introduced. Fall Semester

NTR 211 Elementary Nutrition (3). A general course in nutrition with emphasis on scientific principles, metabolism and requirements for nutrients. Special topics of interest to health care professionals are discussed. Spring Semester

NTR 311 Nutrition in the Global Community (3). In this course students apply basic nutrition principles to life situations. Course includes the study of current issues in nutrition, community resources, and world nutrition problems. Field experiences. Prerequisite: NTR 201 or 211.

NTR 333 Maternal and Child Nutrition (3). A course which includes a study of nutrition as it relates to children from prenatal life through adolescence. Application of knowledge and nutrition education are emphasized. Experiences with Early Learning Center are included. Fall Semester

NTR 411 Advanced Nutrition (3). A study of chemical and physiological factors in digestion, absorption, and metabolism of nutrients. Reports of recent research and their relation to problems of human nutrition are studied. Prerequisite: NTR 201 or 211 and Chem 1010-1020.

NTR 453 Medical Nutrition Therapy (4). A study of the modifications of the normal diet in the treatment of disease, food and drug interactions, and the role of the dietitian in health care. Prerequisites: NTR 411, BIO 221-222, CHEM 341. Field experiences and laboratory required.

NTR 462 Special Problems in Foods and Nutrition (3). An individual directed study and investigation involving techniques used in nutrition research and food service management.

Department of Hospitality and Tourism Administration

Wayne C. Guyette, Ph.D., Head
Frederick S. Humphries Family and Consumer Sciences and Nursing Education Complex 217

Department Faculty: Eric Vogel, Ph.D.

General Statement: Graduates from the University's Bachelor of Science Degree Program in Hospitality and Tourism Administration are some of the most sought after by employers. The program provides students a high quality, professional program of rigorous academic studies that is both career centered and industry oriented. Specifically, the goals of the program are to: (1) provide students with the technical, operation, managerial and analytical skills required to successfully assume managerial positions of leadership in the hospitality industry; (2) provide opportunities that encourage the free exchange of ideas, innovation, problem-solving and the cultivation of interpersonal skills; and, (3) integrate the dynamic elements and realities of the hospitality industry into all academic course work and program activities.

Aware of the implications of this mission, the program is structured to provide educational opportunities for those from a broad spectrum of society including those seeking entrance to the field and those already in the field seeking further knowledge and advancement. The program lays a solid foundation of general education, HTA core and specialized courses. The majority of HTA courses are writing intensive, verbal presentation intensive, or both. The philosophy of the program centers upon providing students a solid theoretical foundation that supports an operational orientation. To accomplish this, students are provided the analytical, problem-solving, organization, and human relation skills they will need to become successful leaders in their chosen career field.

The HTA program provides 2 + 2 transferability from Tennessee's two-year community colleges and technical institutions which are members of the Tennessee Hospitality Education Network. That Network of post-secondary institutions has established a unified hospitality and culinary arts curriculum in cooperation with the state's public secondary schools.

ADMISSION/RETENTION REQUIREMENTS

Acceptance into the professional program as a Junior is dependent upon the following.

1. Admission to Tennessee State University.
2. Successful completion of sixty (60) semester hours of course work including all of the academic prerequisites for admission listed below with a cumulative grade point average of at least 2.6 on a 4.0 scale.
3. Successful completion of HTA 210 and 211 at the University or at a two-year institution. However, if transferred, the candidate must successfully pass a written and a verbal examination.
4. Successful completion of HTA 230 or its equivalent at a two-year institution. However, if transferred, the candidate must successfully pass a computer literacy examination.
5. Completion of a minimum of 600 hours of a verifiable, supervised internship in the hospitality industry or a minimum of one year of verifiable employment in the hospitality industry.
6. Completion of the HTA Application, a typed resume, and a handwritten two page statement from the applicant outlining his/her motivation for pursuing a managerial career in the field.

Retention in the professional program is dependent upon the following.

Students who withdraw or who are dismissed will be required to reapply for admission to a subsequent class if they wish to pursue the HTA major. Dismissal from the program may result for failure to maintain a cumulative 2.5 GPA in all 300 and 400 level HTA courses, have more than 6 credits with course grades less than "C" in 300 and 400 level HTA courses; or, having a grade of "F" in *any* 300 and 400 level HTA course.

Departmental Requirements For Bachelor of Science Hospitality and Tourism Administration 132 Semester Hours

GENERAL EDUCATION AND BUSINESS CORE: A minimum of 57 semester hours including: SAHE 100, 1 credit, ENGL 1010, 1020, 2010 and 2020; Humanities, 3 credits; MATH 1010 or higher; Natural Sciences, 6 credits; Physical Education, 2 credits; History 2010 and 2020; Economics 211 or 221; Accounting 211 and 212; and, 15 credits of General Education Electives.

MAJOR CORE: A minimum of 75 semesters hours including HTA: 210; 211; 212; 230 (or BIS 215); 320; 321; 322; 323; 324; 325 or 326 or 327; 331; 340; 420; 421; 441; 442: 498; 499; and, 21 semester hours of HTA specialty electives. A minimum of 48 credits of combined general education and major credits must be at the 300 and 400 level.

TRANSFER STUDENTS: Transfer students from a two-year hospitality or culinary arts program member of the Tennessee Hospitality Education Network will transfer to the HTA Major as an articulated 2 + 2 student. All other transfer students from any other program will be evaluated on an individual basis.

Bachelor of Science Degree in Hospitality and Tourism Administration

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
SAHE 100	1	ENGL 1020	3
ENGL 1010	3	HTA 230 (or BIS 215)	3
Math 1010	3	Natural Science	3
Natural Science	3	HIST 2020	3
History 2010	3	HPER/AERO/Band/Health	1
HPER/AERO/Band/Heath	1	General Elective	3
General Elective	3		
	17		16

SOPHOMORE YEAR

ENGL 2010	3	ENG 2020	3
EC 211	3	Humanities	3
AC 211	3	AC 212	3
HTA 210	3	HTA 211	3
General Elective	3	HTA 320	3
		General Elective	3
	15		18

JUNIOR YEAR

HTA 212	3	HTA 322	3
HTA 321	3	HTA 323	3
HTA 331	3	HTA 441	3
HTA 340	3	HTA 325, 326, or 327	1
HTA 324	1	HTA Elective	6
General Elective	3		
	16		16

SENIOR YEAR

HTA 442	3	HTA 421	3
HTA 420	3	HTA 499	5
HTA 498	5	HTA Electives	9
HTA Electives	6		
	17		17

Course Descriptions

HTA 110 Introduction to the Hospitality and Tourism Industry (3). This course is specifically designed for non-majors who have an interest in learning more of the hospitality and tourism industry; the world's largest employer and the second largest US industry. It explores career opportunities in the industry once they receive a degree in another field. Particular attention is directed at developing an understanding of the managerial and operational elements of the industry from an "insider's" perspective and how college students can quickly develop an extensive career network in the industry. Non-major elective course.

HTA 201 Hospitality Lecture Series I - Lodging (1). This course invites lodging executives as guests to provide students a window into senior decision-making issues. Lodging industry segments discussed include chain and independent properties, bed/breakfast, hostels, motels, hotels, resorts, hospices and casinos. Topics include: business practices in Tennessee, region, nation and international markets; growth, development, trends and problems; overall economic, environmental and political impact; and, career opportunities, issues and remuneration. This course assists students to network with lodging industry leaders while exposing them to their future roles within the industry. Particular attention is directed at defining the lodging industry's future. Elective course.

HTA 202 Hospitality Lecture Series II - Food and Beverage (1). This course invites food and beverage executives as guests to provide students a window into senior decision-making issues. Food and beverage segments discussed include vendors and suppliers, full-service, buffet, quick service (fast food), club, cruise ship, airline, institutional, industrial, contract and lodging associated foodservice. Topics include: current business practices in Tennessee, region, nation and international; growth, development, trends and problems; overall economic, environmental and political impact; and, career opportunities, issues and remuneration. Elective course.

HTA 203 Hospitality Lecture Series III - Tourism (1). This course invites tourism executives to discuss tourism issues and trends that impact current business practices. Tourism industry segments include travel agency, meeting/convention, visitor/conference, public planning and development agencies, and third-party provider firms. This course assists students to network with tourism industry leaders while exposing them to their future roles within the industry. Particular attention is directed at defining the tourism industry's future. Elective course.

HTA 210 Survey of the Hospitality Industry I - Lodging Management (3). This course surveys the lodging segment of the hospitality industry making extensive use of library, Internet and world wide web resources. The secondary purpose of this course is to increase each student's *written skills* through a series of written documents of varying types, skill levels and complexities. Required course.

HTA 211 Survey of the Hospitality Industry II - Food and Beverage Management (3). This course surveys the food and beverage segment of the hospitality and tourism industry making extensive use of library, Internet and world wide web resources. The secondary purpose of this course centers upon improving each student's *verbal skills* through numerous presentations to classmates and industry executives. Required course.

HTA 212 Survey of the Hospitality Industry III - Tourism Management (3). This course surveys the Tourism segment of the hospitality industry making extensive use of library, Internet and world wide web resources. The secondary purpose of this course is to enhance each student's *professional skills* including an appreciation for and abilities in the areas of ethics, etiquette, protocol and interpersonal skills used daily by successful hospitality and tourism executives. Required course.

HTA 230 Technology in the Hospitality Industry I (3). This course is an introduction to computer hardware and software used by the hospitality industry. Technology studied centers on the micro-computer with particular attention directed at learning software used in the HTA major and prevalent within the hospitality industry, including, presentation, personal information and contact management, project scheduling and quantitative software, such as spreadsheet. Required course.

HTA 320 Principles of Hospitality and Tourism Management (3). An exploration of the multi-dimensional aspects of contemporary decision-making and problem-solving methods utilized by the fifteen segments of the hospitality and tourism industry. Integrating the case method approach, the course centers on organizational structures, policies, strategies, tactics, and the use of resources to achieve goals and objectives. This writing and verbal skills intensive course is a required course. Prerequisites HTA 210, 211 and 212.

HTA 321 Managing Human Resource Development (3). An introduction to employee recruitment, hiring, training, supervision and personnel administration. Areas addressed include: organizational positioning of personnel functions and responsibilities; job analysis; writing job descriptions and specifications; employee recruitment, interviewing, verifying and hiring; legal obligations and governmental regulations; employee motivation programs; leadership and organizational development; organizational communication and stress management; collective bargaining; labor law and state and federal reporting; employee manual development and presentation; and, introduction to employee training development. This writing and verbal skills intensive course is a required course. Prerequisite HTA 320.

HTA 322 Hospitality and Tourism Research and Analysis (3). An in-depth, objective study of research and analysis techniques used by the different segments of the hospitality and tourism industry including corporate and unit hotels and restaurants, convention centers, industry trade organizations, accounting and consulting firms and governmental bodies at the city, state and national levels. Particular emphasis is placed upon defining research and information needs and selecting the most appropriate research strategies and analysis methodologies including: research needs assessment, identification and definition; symptom and problem identification; data collection methodologies; competition and market assessment; trend analysis; statistical techniques; interpretation of data techniques; development of pricing policies; and, market strategic development. This writing and verbal skills intensive course is a required course. Prerequisite HTA 320. Required course.

HTA 323 Hospitality and Tourism Job/Task Analysis (3). A course which exposes students to the operational positions they will manage during their careers in the lodging, foodservice and tourism industries. Particular attention is directed at exploring employee tasks performed, determining employee skill performance levels, assessing employee proficiencies and identifying causative problems within operational tasks and job functions. This writing and verbal skills intensive course is a required course. Prerequisite HTA 320.

HTA 324 Internship Practicum Planning (1). Required to be completed before the first semester of the senior year and before satisfying HTA 325, 326 or 327 and the required 600 hours of employment at an industry property approved in advance by the course instructor, faculty advisor and program head. The course prepares the student in career and position search skills, including resume writing, personal marketing and interviewing. Prerequisite HTA 320. Required course.

HTA 325 Lodging Internship Practicum (1). All program majors are required to satisfy a total of 1,200 hours of supervised employment in the hospitality and tourism industry prior to graduation. Six hundred hours are

required to be satisfied prior to acceptance into the program as a junior. This course, or HTA 326 or 327, will satisfy the second 600 hours. This two credit course requires a *minimum* of 600 hours of supervised employment at a *lodging industry property* approved in advance by the course instructor, faculty advisor and program head and must be satisfied prior to enrolling as a second semester senior. Weekly Internet conferences with the course instructor and a comprehensive internship report are mandatory. Prerequisite HTA 324.

HTA 326 Food and Beverage Internship Practicum (1). All program majors are required to satisfy a total of 1,200 hours of supervised employment in the hospitality and tourism industry prior to graduation. Six hundred hours are required to be satisfied prior to acceptance into the program as a junior. This course, or HTA 325 or 327, will satisfy the second 600 hours. This two credit course requires a *minimum* of 600 hours of supervised employment at a *food and beverage industry property* approved in advance by the course instructor, faculty advisor and program head and must be satisfied prior to enrolling as a second semester senior. Weekly Internet Conferences with the course instructor and a comprehensive internship report are mandatory. Prerequisite HTA 324.

HTA 327 Tourism Internship Practicum (1). All program majors are required to satisfy a total of 1,200 hours of supervised employment in the hospitality and tourism industry prior to graduation. Six hundred hours are required to be satisfied prior to acceptance into the program as a junior. This course, or HTA 325 or 326, will satisfy the second 600 hours. This two credit course requires a *minimum* of 600 hours of supervised employment at a *tourism industry property* approved in advance by the course instructor, faculty advisor and program head and must be satisfied prior to enrolling as a second semester senior. Weekly Internet Conferences with the course instructor and a comprehensive internship report are mandatory. Prerequisite HTA 324.

HTA 331 Technology in the Hospitality Industry II (3). This course builds upon the technological foundation initiated in HTA 230. The course seeks to strengthen the student's ability to use computer technology to improve managerial decision-making. Students will use quantitative-based software, such as spreadsheet and relational data base programs, to solve operational problems such as: forecasting; financial analysis; marketing; distribution; resource scheduling; yield management; and, be introduced to managerial simulation and decision-making software. Particular attention is directed at analyzing the relevancy of application programs to the defined needs of operational units and various user levels. Required course. Prerequisite HTA 230 and 320.

HTA 340 Hospitality Accounting I (3). Introduction to the accounting cycle, accounting and the accounting systems found in the hospitality and tourism industry. Students are introduced to the Uniform System of Accounts for Restaurants, Hotels, Motels and Clubs and the preparation, interpretation and analysis of various accounting reports. Extensive use is made of computer software and case analysis. Required course. Prerequisites AC 211 and 212.

HTA 350 Managing Lodging Properties (3). This HTA elective course explores the managerial techniques, conditions, environment, problems, trends and issues inherent in the management of all types of lodging properties. Guest lodging department heads discuss their areas with particular attention directed at problems and resolution strategies, including: human resource; rooms division; housekeeping; food and beverage; communication; comptroller; engineering; marketing; guest services; and, administration issues. A wide-ranging number of field trips to area properties are required for this course. This is a writing and verbal skills intensive course. Prerequisite HTA 320.

HTA 351 Managing Smaller Lodging Properties (3). This HTA elective course explores the managerial techniques, conditions, environment, problems, trends and issues inherent in the management of the smaller hotel, motel, bed and breakfast, hostile and hospice. Guest industry executives discuss operational problems and resolution strategies. A wide-ranging number of field trips to area properties is required for this course. This is a writing and verbal skills intensive course. Prerequisite HTA 320.

HTA 352 Managing Resorts and Casinos (3). This HTA elective course explores the managerial techniques, conditions, environment, problems, trends and issues inherent in the management of hotel resorts and casinos. Guest executives discuss operational problems and resolution strategies. The case method approach is used extensively with the participation of senior industry executives. A wide-ranging number of field trips to area properties and "out-of-the-area" casinos is required for this course. This is a writing and verbal skills intensive course. Prerequisite HTA 320.

HTA 360 Managing Food and Beverage Operations (3). This HTA elective course explores the managerial techniques, conditions, environment, problems, trends and issues inherent in the management of all types of food and beverage operations. Guest executives discuss operational problems and resolution strategies including: food and beverage marketing, purchasing, receiving, storage, issuing and control; regulations; budgeting, pricing, product controls, cash controls and profit; and unique issues attendant to casinos, industrial and institutional feeding, family-owned, buffet, upscale, lodging-based, quickservice, club and franchise restaurants. A wide-ranging number of field trips to area properties are required for this course. This is a writing and verbal skills intensive course. Prerequisite HTA 320.

HTA 361 Managing Catering, Institutional and Contract Foodservice (3). This course explores the managerial techniques, conditions, environment, problems, trends and issues inherent in the management of catering, institutional and contract foodservice. Guest industry executives discuss operational problems and resolution strategies. Particular attention centers upon: fulfilling contractual obligations with first-party hiring authorities; on- and off-premise banquets and catering; mobile foodservice; concessions, in-plant and in-office foodservice; delivery-only and vending service; catering equipment, supplies, record keeping and service techniques; marketing catering services; human resources; security; accountability; political; and, contract negotiation. A wide-ranging number of field trips to area properties is required for this course. This is a writing and verbal skills intensive course. Prerequisite HTA 320. Elective course.

HTA 362 Managing Quickservice Food Operations (3). This course explores the managerial techniques, conditions, environment, problems, trends and issues inherent in the management of fast-food/quick service foodservice. Guest industry executives will discuss their areas with particular attention directed at defining problems and resolution strategies. The case method approach will be used to study managerial practices, successes and failures in quick service food operations with the participation of senior industry executives. A wide-ranging number of field trips to area properties are required for this course. This is a writing and verbal skills intensive course. Prerequisite HTA 320. Elective course.

HTA 370 Managing Travel and Tourism Operations (3). This course explores the managerial techniques, conditions, environment, problems, trends and issues inherent in the management of all types of travel and tourism operations. Topics include market differentiation and operational issues unique to the industry segments of: convention and business meeting planners; travel agencies; cruise ships; multi-state and multi-national travel companies; airline industry; bus and tour bus; theme parks; recreation, state and national parks; convention centers; and, relationships with chambers of commerce, industry associations, state and federal travel and tourism agencies, tour wholesalers, tourism research organizations and travel publications. Guest executives discuss their areas with particular attention directed at problems and resolution strategies. A wide-ranging number of field trips to area properties is required for this course. This is a writing and verbal skills intensive course. Prerequisite HTA 320. Elective course.

HTA 371 Meeting and Convention Management (3). This course explores the meeting and convention segment of the hospitality and tourism industry and centers on both the public and private sectors including convention and meeting centers, single and multi-purpose arenas, sport stadiums, convention bureaus and the meeting planning industry. Areas explored include planning, coordinating and managing small, medium and large group meetings, seminars, conventions, trade shows, exhibitions, sport, stage and music events, political assemblies and other special events. A key component of the course is the operational detailing required for each activity from first contact through to follow-up after the event. This is a writing and verbal skills intensive course. Prerequisite HTA 320. Elective course.

HTA 372 International Hospitality and Tourism Marketing (3). This course surveys the international travel market to and from the United States of America. An examination of the market forces, supporting infrastructures, hospitality products and services, governmental and private sector tourism strategies and the measurement of the economic, social and environmental consequences of international tourism. This is a writing and verbal skills intensive course. Prerequisites: HTA 320. Elective course.

HTA 380 Hospitality Franchising, Investment and Entrepreneurship (3). This course establishes the foundation for those seeking to become an entrepreneur, investor or franchiser of an existing or potential hospitality or tourism concept. Topics include: franchise history, trends and opportunities; evaluation and analysis of franchise concepts, ROI, longevity and marketability; ownership imperatives; securing initial and continuing financing; organizational and functional interrelationships; marketing and competition analysis and design; product development, quality control and evaluation; production management and control; physical plant management; operational ratios; equipment and energy management; codes and governmental regulations; employee recruitment, interviewing, hiring, training and retaining; and, cash control and accounting. Students are guided through a semester-long development project of their own design. This is a writing and verbal skills intensive course. Prerequisite HTA 320. Elective course.

HTA 381 Hospitality Property Development and Design (3). This course introduces students to project feasibility studies, site analysis for new projects and rehabilitation, basic design techniques and technologies including the use of computerization in the design and evaluation process. Particular attention centers upon evaluating project design, planning, budgeting, equipment, ergometrics, mechanical, electrical, engineering, interior design and landscaping. Design teams will develop a rehabilitation program for an existing property including layouts, budgets and scheduling. A formal presentation will be made to a design jury of industry professionals. This is a writing and verbal skills intensive course. Prerequisite HTA 320. Elective course.

HTA 382 Training Program Design and Development (3). This course is an in-depth study of employee training development practiced by the hospitality and tourism industry. Areas addressed include orientation, development, problem resolution, productivity, quality and retraining techniques and technologies, third party providers, cost analysis and training results evaluation. Working with area properties, students develop a comprehensive training program for a specified need including site implementation of the developed program. This is a writing and verbal skills intensive course. Prerequisite HTA 320. Elective course.

HTA 420 Hospitality Marketing and Promotion (3). This required course is a study of the identification, development and implementation of marketing strategies, tactics and goals. Emphasis is placed upon evaluation of marketing decisions in relation to the implemented programs. Particular attention is directed at developing promotional programs in the hospitality and tourism industry and its fifteen industry segments. This is a writing and verbal skills intensive course. Prerequisite: HTA 322. Required course.

HTA 421 Survey of Legal Affairs in the Hospitality Industry (3). Fundamental survey of contract, agency and tort law pertaining to the hospitality and tourism industry. Using a case law approach, students study the legal rights and obligations of hospitality and tourism companies, units and agencies; their managers; employees; customers; suppliers and contractors. This is a writing and verbal skills intensive course. Prerequisite: HTA 320. Required course.

HTA 432 Physical Plant Management (3). This course studies the interactive environmental systems that comprise a property's physical plant. Particular attention focuses upon electrical, mechanical, fluids, maintenance, engineering, security systems, fire prevention, emergency systems, safety and health protection, budget analysis, trade practices, government regulations and energy utilization and conservation. Students will be introduced to various computer software programs to control and regulate the physical plant. This is a writing and verbal skills intensive course. Prerequisite HTA 320. Elective course.

HTA 441 Hospitality Accounting II (3). This course extends the hospitality accounting foundation built in HTA 340 and centers upon the hospitality property as a capital investment and responds to the issues of analyzing risk, value analysis, asset management, and obtaining and using external funds for the development of a new facility or upgrading of an existing facility. The semester project involves students in a exercise of valuing an existing property, establishing a capital development budget, locating and securing third-party financing and evaluating the results. Once finances have been secured, a simulation exercise is undertaken to use the obtained finances. Extensive use is made of computer software and case analysis. Prerequisites include HTA 230 and 340. Required course.

HTA 442 Hospitality Accounting III (3). This course builds upon the hospitality accounting foundation established in HTA 441 and centers upon operational budgeting, procurement and cost management. Operational budgeting includes policy, planning, preparation and analysis. Procurement includes distribution systems, buying, receiving, storing, issuing, inventorying, development of specifications and procurement areas including consumable, equipment, services and capital goods. Cost management includes the processes required for organizational profitability, cost containment and cost reduction while maintaining predetermined levels of quality products and service. Extensive use is made of computer software, case analysis and a simulation exercise. This is a writing and verbal skills intensive course. Prerequisites include HTA 320 and 441. Required course.

HTA 497 Hospitality or Tourism Independent Study (1-6). This course is for variable credit and provides an opportunity to the outstanding senior student to comprehensively investigate a specific hospitality or tourism policy, operational or management issue of the student's choice under the direction of department faculty. This course *may not* be taken to satisfy a program core course requirement but may be taken to satisfy up to six hours of specialized program electives and can only be taken once. Prerequisites include a minimum of a 3.4 GPA, completion of HTA 498, senior standing and completion of the internship Practicum. Additionally, the candidate is required to submit a two page proposal, in advance of the registration period, to a participating department faculty member and secure the approval of the department head. This is a writing and verbal skills intensive course. Elective course.

HTA 498 Senior Project I (5). This is the "capstone" professional organizational and analysis course of the program. As such it provides each student an opportunity to exercise their developed written, verbal, analytical, ethics, service, operational and research skills. Working independently, students undertake a complex problem-solving activity in cooperation with a participating hospitality or tourism industry organization. Senior HTA standing and permission of department head required. This is a writing and verbal skills intensive course. Required course.

HTA 499 Senior Project II (5). This is the "capstone" managerial, leadership and operational course of the program. As such it provides each student an opportunity to exercise their developed written, verbal, analytical, ethics, service, team building, operational, research, management and leadership skills. Working as a group on a series of complex operational activities, students are provided an opportunity to demonstrate, confirm and expand their abilities to plan, coordinate, organize, direct and evaluate. Senior HTA standing and permission of department head required. This is a writing and verbal skills intensive course. Required course.

SCHOOL OF ALLIED HEALTH PROFESSIONS

Kathleen A. McEnerney, D.A., Dean
Pamela Burch-Sims, Ph.D., Assistant Dean
161 Clement Hall

General Statement: The School of Allied Health Professions was established in 1974 and is jointly supported and administered by Tennessee State University and Meharry Medical College. Program offerings in this School include Cardio-Respiratory Care Sciences, Dental Hygiene, Health Care Administration and Planning, Health Information Management, Medical Technology, Occupational Therapy, and Speech Pathology and Audiology. While Meharry Medical College provides inkind support and participates in the administration of all seven of the programs in the School of Allied Health Professions, Meharry assumes primary responsibility for three of these programs: Dental Hygiene, Health Care Administration and Planning, and Medical Technology. The School was established to offer educational programs designed to produce allied health professions practitioners and to prepare individuals who are interested in pursuing careers as educators in the health professions; to encourage, develop and support interest in research; and to provide health care, when appropriate and continuing educational services to the community. This threefold purpose is consistent with the stated missions of both Tennessee State University and Meharry Medical College.

The goals of the School of Allied Health Professions follow:

1. To develop and implement educational programs designed to produce allied health practitioners and educators based upon employment demands and the availability of resources.

2. To recruit students interested in careers in the health care field in programs offered in the School and instill in these students the basic principles of morality and professional ethics; to provide these students with career counseling, academic advisement, and tutorial assistance designed to assist in achieving career goals.

3. To identify and serve the needs of students whose prior disadvantage has prevented achievement of the level of preparation required to pursue an allied health career.

4. To maintain full accreditation by appropriate agencies for all programs offered by the School.

5. To recruit and maintain faculty capable of making significant contributions to the basic and applied research efforts of the supporting institutions.

6. To encourage and promote the rendering of service to the community through the sponsorship of seminars, workshops, consultation, and the delivery of health care when and where appropriate.

Admission/Retention Requirements: The School of Allied Health Professions offers programs in seven health related fields. Five of the seven programs require completion of a pre-professional curriculum as prerequisite to admission to the professional/clinical level program. In addition to meeting the criteria for admission to Tennessee State University, prospective students must also apply to the specific department in accordance with departmental admissions criteria. Admission to professional programs is a competitive process in addition to and separate from the University's admissions process. Completion of the prerequisites for any allied health program does not ensure acceptance into that program.

Admission and retention policies for each program are found under departmental headings. The following table gives basic program information:

ALLIED HEALTH PROFESSIONS PROGRAMS

Program	Level of Entry	Application Deadline	Starting Semester	Degree Awarded	Professional Examination *
Cardio-Respiratory Care Sciences	Sophomore	March 31 June 30	Summer Fall	B.S.	CRT/RRT
Dental Hygiene	Freshman	December 31	Fall	A.A.S. B.S.	NBDHE/SREB
Health Care Adm. & Planning	Sophomore	July 31	Fall	B.S.	N/A
Health Information Management	Sophomore	June 30 December 1	Fall Spring	B.S.	RHIA
Medical Technology	Senior	March 31	Fall	B.S.	ASCP, NCA, or AMT
Occupational Therapy	Junior	December 31	Summer	B.S.	NBCOT
Speech Pathology & Audiology	Freshman	July 31 December 1	Fall Spring	B.S.	Certification at Graduate Level

*Certified Respiratory Therapist Exam/Registered Respiratory Therapist Board Examination
National Board Dental Hygiene Examination (National & Regional)
National Registration Examination for Registered Health Information Administrators
American Society of Clinical Pathologists MT Examination, National Certifying Agency, or American Medical Technologist
National Board Certification for Occupational Therapy

COURSE DESCRIPTIONS

Allied Health Professions (AHP)

AHP 100 Orientation to Allied Health Professions (1). A requirement for all entering freshmen Allied Health Professions majors. This course presents an overview of the allied health field, the history/development of allied health professions, and the historical development of the School of Allied Health Professions at Tennessee State University/Meharry Medical College. The student is also introduced to the values, ethics, and professionalism required for health care providers.

Department of Cardio-Respiratory Care Sciences

Thomas John, Ph.D., R.R.T., Head
310 Industrial Arts Building

Faculty: S. Hickman, S. Carey, M. Niedermeyer

General Statement: The field of Respiratory Care needs respiratory care practitioners to administer various treatment modalities/medications, perform diagnostic procedures, and/or manage sophisticated life-support equipment. Although the majority of respiratory care practitioners are employed by hospitals, opportunities to practice outside of the standard hospital setting are developing.

The overall goal of the baccalaureate degree program in Cardio-Respiratory Care Sciences is to provide an educational curriculum designed to prepare students for registration by the National Board for Respiratory Care, expanded duty practice of respiratory care, and to be educators, staff therapists and/or supervisors in the field of respiratory care. Students receive clinical training in affiliated hospitals.

The student who satisfactorily completes all the courses in the curriculum by the end of the fourth year and passes the professional "barrier examinations" would be awarded the **Certificate of Completion.** The Program Director will make the recommendation to the Dean of the School of Allied Health Professions when the student is ready for such a certificate. All students have to pass the professional barrier exams with 75% in order to receive the degree.

ADMISSIONS PROCEDURE FOR ACCEPTANCE INTO THE PROGRAM

Students who wish to pursue the Cardio-Respiratory Care Sciences major may apply to the CCS Admissions Committee for acceptance. Students must be formally admitted to the Cardio-Respiratory Care Sciences Program in order to take professional courses which begin in the sophomore year. Applications for admission are accepted from students who meet the following application requirements:

1. Admission to Tennessee State University.
2. A minimum high school grade point average of at least 2.5 on a 4.0 scale
3. One year of high school algebra, biology, and chemistry.
4. Completion of first year CCS curriculum with a grade point average of at least 2.5 on a 4.0 scale.
5. A "C" or better grade in supporting science courses.
6. Two letters of recommendation from instructors who have taught the applicant.
7. An interview with the Admissions and Retention Committee or its designee.

All applicants will be screened by the Department of Cardio-Respiratory Care Sciences Admissions and Retention Committee. Applicants will be advised of the final decision regarding their acceptance into the Program by a representative of the Committee.

TRANSFER STUDENTS

1. Applications will be accepted from transfer students from other colleges or universities, or from other departments of Tennessee State University.

2. Applicants must have an overall college grade-point average of 2.5 on a 4.0 scale and meet the program admissions requirements for entering applicants. Any exceptions to the rule must be approved by the Cardio-Respiratory Care Sciences Admissions and Retention Committee.

3. Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from accredited Respiratory Care programs will be accepted where evidence is provided that the content of courses previously taken is essentially the same as the content for courses in the curriculum. No credit will be accepted for essential courses in which the student has received a grade lower than a "C".

4. In addition to the above, a Tennessee State University student seeking a transfer to the Cardio-Respiratory Care Sciences program is required to complete a Change of Major form. The Admission and Retention Committee will make the final decision regarding admission to the program. The candidate will be advised of the final decision regarding acceptance.

Students with a Science Degree or Associate Degree in Respiratory Care

Students who have a degree in Science may be admitted to the program if they meet the admission criteria. They may have already taken the science courses and the general education courses. They may be able to accelerate their studies. They should consult the program director for details.

Special Requirements

Students are required to have a physical examination and obtain medical and malpractice insurance prior to clinical rotations. During clinical rotation, students may be assigned to off-campus facilities. Students are responsible for transportation costs, clinic attire, and other expenses related to clinical experiences. They are expected to take membership in AARC.

Retention Policy

1. Students who earn a non-passing grade in any supporting science course or any CCS course will not be permitted to take the next sequential course(s). A failed course may be repeated when next offered with permission of the department head providing there is space available in the class. The grade "C" is equivalent to 75% for all professional courses.
2. Students will be dismissed from the professional program for either of the following:
   a. Failure to maintain a cumulative grade point average of 2.0.
   b. A grade of less than "C" in 6 or more semester hours in the major.
   c. A grade of "F" in more than 2 semester credit hours in the major.
   d. A grade of less than "C" in more than one clinical experience.
   e. A grade of less than "C" in a course that has been repeated.
   f. Withdrawal from any Cardio-Respiratory Care Science course or failure to register for any semester without prior written approval from the Department.

g. Failure to comply with clinical or academic policies established by the Department.

3. Students who have been dismissed from the program due to poor academic performance must reapply for admission during the next application cycle and compete for space in a subsequent class. Students who request readmission should present to the Admissions Committee evidence of a substantial change in circumstances that could lead to improved academic performance.

National Board Exam: Students who pass the certificate of completion exam ("professional barrier exams") given during the spring semester of the fourth year of the professional program, take the CRT exam in May of that year and others who pass later take the examination as soon as they are qualified.

***Recommended Electives (Three of the following)**

PE 314	Physiology of Exercise
PSY 353	Death and Dying
HEA 306	First Aid & Cardiopulmonary Resuscitation
SPCH 305	Voice and Dictation

*Other recommended electives may be accepted with the permission of the program director.

+CCS Electives

CCS 422	Advanced Critical Care Management
CCS 426	Advanced Pulmonary Function Testing and Pulmonary Rehabilitation

ACCREDITATION STATUS

The Cardio-Respiratory Care Sciences program is accredited by the Commission on Accreditation of Allied Health Education Programs. Successful graduates of the program receive a BS degree in Cardio-Respiratory Care Sciences and are eligible to take the National Board Examinations.

General Education Core Courses: CHEM 1010, 1011; BIS 215; ENGL 1010, 1020; ENGL 2010 or 2020; HIST 2010, 2020; Humanities 9 semester hours; MATH 1010; BIO 240, 240L; PE (two 2-digit courses) PSY 311; BIO 1010, 1011; PSYC 2010; BIO 221, 221L, 222, 222L.

Departmental Requirements for Bachelor of Science in Cardio-Respiratory Care Sciences — 75 Semester Hours

MAJOR CORE: A minimum of 75 semester hours including CCS 100, 101, 104, 201, 203, 204, 211, 212, 232, 301, 302, 303, 304, 305, 311, 312, 322, 422, 426, 432, 441, 450; 6 hours of CCS electives; 9 semester hours of recommended electives.

Bachelor of Science Degree in Cardio-Respiratory Care Sciences - Plan I

FRESHMAN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AHP 100	1	BIO 222/222L	4
BIO 221/221L	4	CHEM 1010/1011	4
ENGL 1010	3	ENGL 1020	3
MATH 1010	3	HIST 2020	3
HIST 2010	3	HPER (2-Digit)	1
CCS 100	2	BIS 215	3
HPER (2-Digit)	1		
	17		18

Summer Sessions I & II

BIOL 1010, 1011, or 1020, 1021	3
BIO 240, 240L	4
	7

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
Humanities Elective	3	PSY 2010	3
ENGL 2010 OR 2020	3	CCS 201	4
CCS 101	3	CCS 204A	2
CCS 104	2	CCS 212	3
CCS 203	4	CCS 232	3
CCS 211	3	PHIL 336	3
	18		18

Summer I

CCS 204B	2
CCS 301A	3
CCS 305	1
	6

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
CCS 301B	2	CCS 303	3
CCS 302	4	CCS 311	2
CCS 304	3	CCS 312	1
CCS 432	3	CCS 322	4
		CCS 441	3
	12		13

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
Statistics Elective	3	CCS 422	3
SPTH 305	3	CCS 450	3
CCS 426	3	Rec. Electives (300-400 level)	6
Rec. Elective (300-400 level)	3		
	12		12

Total Cr. Hrs. 133

Suggested Plan II

FOR ALL TRANSFERRED STUDENTS, ASSOCIATE LEVEL, WHO SATISFACTORILY COMPLETED FIRST 2 YEARS OF COLLEGE+

JUNIOR YEAR*

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
Rec. Elec. (300-400 level)	3	Statistics Elective	3
*CCS 101	3	*CCS 201	4
*CCS 104	2	*CCS 204A	2
*CCS 203	4	CCS 212	3
*CCS 211	3	*CCS 232	3
SPTH 305	3	Rec. Elec.(300-400 level)	3
	18		18

*Transfer credits may be given for all equivalent courses taken at the Associate degree level. Transfer students may take all the remaining general education and science courses not taken at the Associate level to fulfill the course requirements in Plan I Freshmen & Sophomore years.

SUMMER

*CCS 204B	2
CCS 301A	3
CCS 305	1
Rec. Elec. (300-400 level)	3
	9

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
CCS 301B	2	CCS 311	2
CCS 302	4	CCS 312	1
CCS 303	3	CCS 322	4
CCS 304	3	CCS 441	3
CCS 432	3	CCS 422	3
CCS 426	3	CCS 450	3
	18		16

NOTE: +All transfer students have to satisfy TSU Cardio-Respiratory Care B.S. Curriculum Requirements in Plan 1.

Course Descriptions

Cardio-Respiratory Care Sciences (CCS)

CCS 100 Introduction to Cardio-Respiratory Care Sciences (2) An Introductory course which includes respiratory terminology, basic concepts of respiratory diseases, including etiology, pathophysiology, clinical diagnosis and respiratory care. The course is designed to provide conceptual understanding of major respiratory disease process and basics of respiratory management. Prerequisite: Consent of Instructor.

CCS 101 Cardio-Respiratory Care Sciences Technology I (3) A course designed to introduce the student to the fundamental principles of respiratory care. This course will include the professional development of respiratory care sciences; the principles, operations and maintenance of compressed gas source and gas administration devices; the use of aerosol and humidity therapy; and basic respiratory mechanics. Prerequisites: BIO 221, 221L, 222, 222L; CHEM 1010, 1011; MATH 1010.

CCS 104 Cardio-Respiratory Care Sciences Clinical I (2) This course serves to introduce the beginning respiratory care sciences student to the clinical environment. The student spends eight hours/week participating in oxygen therapy and clinical oriented workshops or observing the application of respiratory care in the clinical setting. Corequisite: CCS 101.

CCS 201 Cardio-Respiratory Care Technology II (4) A study which includes the principles of the operation and usage of various respiratory care modalities such as Aerosol Therapy, IPPB, IS, PD&C, manual resuscitators, sterilization techniques, and classification of mechanical ventilators. Students will also be instructed in CPR and patient assessment. Prerequisites: CCS 101.

CCS 203 Pulmonary Function Testing and Evaluation (4) A course designed to expose the student to the pulmonary function testing, evaluation, and assessment. It includes spirometry, diffusion studies, flow volume loops, helium dilution, nitrogen washouts, and the instructional sequence necessary to become certified in ABG analysis. Prerequisites: BIO 221, 221L, 222, 222L; CHEM 1010, 1011; MATH 1010.

CCS 204A Cardio-Respiratory Care Sciences Clinical II (2) This course provides the respiratory care sciences students with opportunities to practice basic respiratory care procedures. The student will spend a minimum of 16 hours/week in the clinical setting with emphasis placed on performance of respiratory care procedures and application of equipment. This course will emphasize topics such as aerosol therapy, IS, and IPPB therapy. The student will assume limited patient care responsibilities. Prerequisites: CCS 101, CCS 104, and CCS 203.

CCS 204B Cardio-Respiratory Care Sciences Clinical II (2) This is a continuation of CCS 204A. This course provides the respiratory care sciences student with opportunities to practice basic respiratory care procedures and advanced therapy. Emphasis will be placed on the application of respiratory equipment, the performance of basic respiratory procedures and advanced procedures such as incentive spirometry, continuous bronchodilator therapy, and CPR. The student will assume limited patient care responsibilities. Prerequisites: CCS 101, 104, 201, 204A.

CCS 211 Pulmonary Function in Disease (3) A review of the application of respiratory therapeutic modalities in the treatment and management of medical, and pre-post surgical patients. Course includes etiology, recognition and management of pulmonary diseases, and an introduction into basic x-ray interpretation. Prerequisites: Concurrently take CCS 203.

CCS 212 Respiratory Pharmacology (3) A course designed to present the various classifications of pharmacological agents used in the treatment and management of cardio-respiratory diseases. Course includes safe handling, dispensing, and administration of pharmacological agents. Emphasis is placed upon the effects, indications, and contraindications of respiratory pharmacological agents. Prerequisites: CHEM 1010, 1011; BIO 221, 221L 222, 222L; and BIO 240, 240L.

CCS 232 Cardiopulmonary/Renal Physiology (3) A course which goes beyond general physiology to cover the respiratory system as it relates to ventilatory mechanics, gas transport, gas exchange, acid-base physiology, neurological and chemical control of respiration, fluid and electrolyte balance, ventilation/perfusion relationships, etc. Prerequisites: BIO 221, 221L, 222, 222L, and CHEM 1010, 1011.

CCS 301A Mechanical Ventilation (3) A comprehensive course covering the principles, operation and application of devices used to provide ventilatory assistance and support. Course includes an in-depth study of patient-ventilator interface, artificial airways, ventilatory failure, and physiological alterations resulting from mechanical ventilation. Prerequisite: CCS 201, 232

CCS 301B Mechanical Ventilation II (2) This course presents material on the application of mechanical ventilation with regard to patient diagnosis and changes in condition. Course includes discussions of case studies and patient management involving various modes of mechanical ventilation, presentation of recent advances in mechanical ventilation, and an emphasis on troubleshooting equipment and patient problems. Prerequisites: CCS 301A.

CCS 302 Cardio-Respiratory Care Sciences Clinical III (4) A 24 hour/week supervised clinical application of patient care skills developed in CCS 201, CCS 203 CCS 204A/B, CCS 212, and 232 for 10 weeks. This course provides the student with opportunities to refine procedures and evaluation skills including applied respiratory pharmacology, bedside spirometry, PFT, ABG analysis, pre-post operative evaluation. IPPB and mechanical ventilation will also be practiced. Prerequisites: All 200 level CCS courses.

CCS 303 Critical Care (3) An intensive study of critically ill patient care which includes special procedures patient monitoring techniques and evaluation, acute and chronic respiratory failure, neuromuscular diseases and trauma management. Prerequisites: All 200 level CCS courses.

CCS 304 Neonatal/Pediatric Respiratory Care (3) A study of the principles, practices and techniques utilized in the respiratory care management of the newborn and pediatric patient. Topics will include common pathological conditions associated with such patients. Prerequisites: CCS 203, 204A/B, 211.

CCS 305 Case-Based Seminar (1) This course presents a discussion of cases and topics relevant to respiratory care. Prerequisites: CCS 201.

CCS 311 Current Trends in Respiratory Care (2) A discussion and presentation of new trends and topics in respiratory care. The course shall also include preparation for professional credentialing examinations. Prerequisites: CCS 101, 201, 203, 211, 232, 301A/B, and 302.

CCS 312 Professional Examination Seminar (1) This course shall include practice of credentialing- type examinations. These exams are equivalent to Certificate of Completion exams. Prerequisites: CCS 101, 201, 203, 301A/B, 302, and 304. Corequisite: CCS 322.

CCS 322 Cardio-Respiratory Care Clinical IV (4) A 24 hour/week supervised clinical practicum for 10 weeks designed to provide performance competencies in the administration of respiratory care to critically ill patients and pediatric respiratory care. Prerequisites: CCS 302, CCS 303, and CCS 304.

CCS 422 Advanced Critical Care Management (3) An advanced clinical course where the student is exposed to continuous and extensive critical care patient management during the last 6 weeks of the semester. Prerequisites: CCS 301 A/B, CCS 302, and CCS 304.

CCS 426 Advanced Pulmonary Function Testing and Pulmonary Rehabilitation (3) An advance clinical course where the student can develop emphasis on methodology of diagnosis of respiratory diseases, including advanced pulmonary physiology and pathology. The student is exposed to pulmonary exercise testing and rehabilitation procedures during the last 6 weeks of the semester. Prerequisites: CCS 203 and concurrently register for CCS 432.

CCS 432 Pulmonary Rehabilitation and Home Care (3) Objectives, methods and expected results of pulmonary rehabilitation will be presented and discussed. Patient testing methods, including clinical exercise testing, patient and family education, bronchial hygiene, breathing retraining, physical reconditioning, and home care will be described and discussed. Prerequisites: CCS 201, 203, 211.

CCS 441 Cardio-Respiratory Care Sciences Management Concepts (3) This course includes clinical management of patients and clinical simulations. Also, the human dimensions of personnel, financial, and material management, and planning as related to respiratory care services presented and discussed. Prerequisites: CCS 201, 301A/B, and CCS 304.

CCS 450 Senior Project (3) An approved independent study project. Students collect clinical data, analyze and write a detailed paper with references from pertinent journals. Prerequisites: CCS 301A/B, 302, 304.

Department of Dental Hygiene

Marian W. Patton, R.D.H., Ed.D., Head
219 Clement Hall

Faculty: T. C. Newbern, R. Word. (**Meharry Faculty:** D. Felix, A. Farquharson, D. Boyd, H. Jackson, L. Brookes).

General Statement: The Dental Hygiene Program is jointly sponsored by Tennessee State University and Meharry Medical College. Two degree programs are offered by the Department of Dental Hygiene: the Associate of Applied Science and the Bachelor of Science. Students accepted into the Bachelor of Science degree program may enroll at the freshman or post certificate level. The baccalaureate degree may serve as a foundation for further study. **Courses in Anatomy and Physiology and Microbiology taken prior to enrolling in the program may enhance performance in the Dental Hygiene curriculum.**

The dental hygienist is a licensed professional with specialized clinical and educational skills who performs preventive and therapeutic services under the supervision of a licensed dentist. The primary functions of the dental hygienist include working as an integral part of the dental health team and assisting individuals and groups in obtaining and maintaining optimal oral health. Associated activities include the prevention and control of dental diseases and disorders.

Graduates of the Dental Hygiene Program are eligible for the National Board Dental Hygiene Examination and Regional/State Board Examinations throughout the country.

ADMISSION/RETENTION REQUIREMENTS:

A student must be accepted into the University before applying to the Dental Hygiene Program. Applications to the Department of Dental Hygiene must be received by December 31. Any applications received after the March 31 deadline are considered by the Dental Hygiene Admissions Committee on a space available basis. Admission into Dental Hygiene is required prior to enrolling in any dental hygiene courses.

Associate of Applied Science (AAS) Degree Program:

In addition to University admission requirements, applicants to the two-year AAS degree program must meet the following program requirements:

1. A minimum high school grade point average of 2.5 on a 4.0 scale.
2. One year of high school algebra.
3. One year of high school biology.
4. One year of high school chemistry.
5. A composite score of 19 on the ACT, or an equivalent score on the SAT.
6. One year of English Composition.
7. One letter of recommendation from science teachers describing the applicant's potential for success in the Dental Hygiene curriculum.*
8. One character recommendation.
9. A brief autobiographical sketch in the applicant's handwriting.
10. A complete health evaluation on the official forms provided by the Department of Dental Hygiene.
11. A personal interview. Interviews may be arranged for applicants who live beyond 300 miles of the University.

*If the applicant has had a long period of absence from an academic program, references from employers, counselors, or other community leaders who know the applicant may substitute for references from science teachers.

Bachelor of Science (BS) Degree Program:

Acceptance into the baccalaureate degree program may be accomplished by: (1) meeting the requirements for admission into the AAS degree program as a first-year student; or (2) meeting the requirements for admission at the third-year level. Applicants who wish to enter the BS degree program at the junior level must submit the following data and meet the following criteria:

1. A 2.0 grade point average in clinical dental hygiene courses and a minimum overall grade point average of 2.5 on a 4.0 scale. (Applicants with grade point averages higher than the minimum may be given priority in acceptance).
2. Two letters of recommendation from dental hygiene faculty persons who taught the applicant. One letter must attest to the clinical competencies of the applicant. (May not be required of recent TSU/MMC graduates.)
3. Complete college transcript(s). (May not be required of recent TSU/MMC graduates.)
4. A complete health evaluation on the official forms provided by the Department of Dental Hygiene.
5. A personal interview with members of the Committee on Admissions. Interviews may be arranged for applicants who live beyond 300 miles from the University.
6. The following advanced dental hygiene courses (300-400 level) require national board certification and/or Tennessee State Licensure: DH 301, DH 402, DH 404, DH 411, and DH 412.

Note: Acceptance to the University does not insure acceptance into the Dental Hygiene Program. Following notification of acceptance to the University by the Office of Admissions and Records, the prospective Dental Hygiene applicant's admission material will be evaluated by the Committee on Dental Hygiene Admissions. Dental Hygiene applicants will be informed of their acceptance or rejection by the chairpersons of the Committee on Dental Hygiene Admissions.

Admission to Advanced Standing:

Students admitted from other dental hygiene programs must earn, in residence, a minimum of 24 of the last 30 hours offered for the AAS degree in Dental Hygiene. To receive consideration for advanced standing the following requirements are necessary:

1. Matriculation in an accredited dental hygiene program.
2. Official transcripts from each school.
3. Satisfactory scholastic and disciplinary records from the dental hygiene program from which the applicant is withdrawing. No students are accepted whose failures have resulted in dismissal or academic probation in another dental hygiene program.
4. A statement of honorable dismissal from the dean or director of the program from which the applicant is withdrawing.

5. If the interval since attendance has exceeded two years, the applicant may be required to take examinations recommended by the Committee on Curriculum.

6. If any deficiencies exist, disposition may require:
   a. validation of credits by department chairperson.
   b. examination of credits by department chairperson.
   c. completion of certain courses not common to all dental hygiene curricula.

7. Admission to advanced standing may necessitate auditing, or taking for credit, courses which the Committee on Curriculum may deem necessary to insure adequate preparation for continued dental hygiene study.

Retention Policy:

1. Grades less than "C" earned in dental hygiene courses are considered non-passing. Students are required to maintain a minimum grade point average of 2.0 for each academic year. Students who earn a non-passing grade in a dental hygiene course(s) may be allowed to repeat the course(s) when next offered. Students are unable to progress with a failing grade in a dental hygiene course. Dismissal from the program may result from documented poor studentship.

2. Recommendations for advancement are the charge of the Dental Hygiene Evaluation Committee, which meets following mid-term and the final examination periods.

3. Students who have been dismissed from the dental hygiene program are eligible for reconsideration only under extenuating circumstances.

4. Students who earn a non-passing grade in any supporting science course or any Dental Hygiene course will not be permitted to take the next sequential course/s. A failed course can e repeated when next offered with permission of the department head and providing there is a space available in the class.

5. Students will be dismissed from the professional program for either of the following:
   a. Failure to maintain a cumulative grade point average of 2.0 or above.
   b. A grade of less than "C" in 6 or more semester hours in major field courses.
   c. A grade of "F" in 2 or more semester credit hours in major field courses.
   d. A grade of less than "C" in more than one clinical experience.
   e. A grade of less than "C" in a course that has been repeated.
   f. Withdrawal from any Dental Hygiene course or failure to register for any semester without prior written approval from the Department.
   g. Failure to comply with clinical or academic policies established by the Department.

6. Students who have been dismissed from the program due to poor academic performance must reapply for admission during the next application cycle and compete for space in a subsequent class. Students who request readmission should present to the Admissions Committee evidence of a substantial change in circumstances that could lead to improved academic performance.

Departmental Requirements for Associate of Applied Science Degree in Dental Hygiene — **44 semester hours (core)**
85 semester hours for A.A.S. Degree

MAJOR CORE: DH 101, 101C, 102, 102C, 103, 104, 105, 110, 111, 113, 113C, 114, 201, 201C, 202, 202C, 205, 205C, 210, 211 and 215.

Suggested Two Year Plan:

Associate of Applied Science Degree in Dental Hygiene

FRESHMAN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AHP 100	1	DH 102/102C	2/2
CHEM 101/101C	3/1	DH 103	2
DH 101/101C	3/2	DH 104	2
DH 110	2	DH 114	2
DH 111	2	NTR 211	3
SPCH 220	3	PSYC 2010	3
BIO 221/221L	4/0	BIO 222/222L	4
	21		20

SUMMER

DH 105	2
DH 113C	1
BIO 240/240L	4
	7

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
CHEM 250	3	DH 202/202C	2/4
DH 201/201C	2/4	DH 205C	1
DH 205	2	DH 215	2
DH 211	2	SOCI 2010	3
EDRD 310*	1	CS 121	3
DH 210	3		
	17		15

***Elective**

Departmental Requirements for Bachelor of Science in Dental Hygiene — **47 or 50 semester hours**
132 Semester Hours for B.S. Degree

MAJOR CORE: Includes a minimum of 43 semester hours earned at the associate level. DH 301, 301C, 402, 412, HCA 490, Senior Project, CS/HCA/SPCH/EDRD/NTR/13 semester hours; electives.

Suggested Four Year Plan:

Bachelor of Science Degree in Dental Hygiene (Post Certificate Level)

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
CS 121*	3	DH 402	3
DH 301	3	EDCI 387	3
HIST 2010	3	ENGL 2010 or 2020	3
MATH 1010	3	HIST 2020	3
HPER (2 digit)	1	Elective (UL)	3
	13		15

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
SW 470	3	DH 412	3
PSY 311	3	Elective(UL)	3
HPER (2 digit)	1	HCA 490	3
PHIL 336	3	Humanities Elective	3
Humanities Elective	3		
	13		12

***If not taken at AAS Level**

Suggested Four Year Plan:

Bachelor of Science Degree in Dental Hygiene (Entering at the Freshman Level)

FRESHMAN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
CHEM 101/101L	4	CS 121	3
ENGL 1010	3	ENGL 1020	3
HIST 2010	3	HIST 2020	3
MATH 1010	3	NTR 211	3
AHP 100	1	EDRD 310	1
BIO 221/221L	4	BIO 222/222L	4
		HPER (2 Digit)	1
	18		18

Summer Session I	Cr. Hrs.
BIO 240/240L	4
	4

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
DH 101	3	DH 102	2
DH 101C	2	DH 102C	2
DH 110	2	DH 103	2
DH 111	2	DH 104	2
PSYC 2010	3	DH 114	2
SPCH 220	3	DH 210	2
HPER (2 Digit)	1	SOCI 2010	3
Humanities Elective	3	Humanities Elective	3
	19		18

Summer Session I	Cr. Hrs.
DH 105	2
DH 113C	1
	3

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
DH 201	2	DH 202	2
DH 201C	4	DH 202C	4
DH 211	3	DH 215	2
CHEM 250	3	SPCH 220	3
DH 205	2	PSY 311	3
DH 210	3	DH 205C	1
	17		15

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
SW 470	3	DH 402	3
DH 301	3	HCA 490	3
DH 411	3	PHIL 336	3
ENGL 2010 or 2020	3	DH 412	3
Elective (UL)	3	Elective (UL)	3
	15		15

ACCREDITATION

The program in dental hygiene is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

COURSE DESCRIPTIONS

Dental Hygiene (DH)

DH 101 Dental Hygiene Lecture (3). An introduction to basic concepts, methods, materials, and techniques of dental hygiene care.

DH 101C Pre-Clinical Dental Hygiene (2). Clinical simulation of dental hygiene using mannequin heads and student partners. Taken concurrently with DH 101.

DH 102 Dental Hygiene Lecture (2). A continuation of 101 lecture, including dental hygiene care for patients with special needs and first aid procedures. Prerequisite: CHEM 101/101L and satisfactory completion of all prescribed first semester curriculum.

DH 102C Clinical Dental Hygiene (2). Supervised application of the practice of dental hygiene on patients within the clinical setting. Taken concurrently with DH 102. Prerequisite: Satisfactory completion of prescribed first semester curriculum.

DH 103 Radiology (2). Lecture, group, and individually supervised practice covering x-ray production, radiation hygiene, exposing, developing, mounting, reading and interpretation of intra-oral radiographs. Taken concurrently with DH 102C. Prerequisite: Satisfactory completion of prescribed first semester curriculum.

DH 104 Dental Materials (2). Study of characteristics and techniques of the manipulation of materials used in dentistry. Emphasis is placed on basic knowledge for selecting materials. Laboratory experiences supplement lectures. Taken as designated in the first year curriculum. Prerequisite: Satisfactory completion of first semester curriculum.

DH 105 Periodontics (2). An introduction to periodontics with emphasis on the recognition of gingival and periodontal problems, their probable cause, treatment and prevention, techniques of patient education, and continued application of theoretical principles of clinical dental hygiene. Prerequisite: Satisfactory completion of the prescribed first two semesters of studies.

DH 110 Histology and Embryology (2). Study of microscopic oral tissues to provide students with the knowledge and understanding of the cellular structure and its application to dental problems. Taken concurrently with prescribed courses of the first semester, first year curriculum.

DH 111 Tooth Morphology (2). A study of the nomenclature, form and structure of the permanent and deciduous dentition and their supporting and related structures. Taken concurrently with other prescribed courses of the first semester, first year curriculum.

DH 113C Clinical Dental Hygiene (1). This course is designed to be a continuation of freshman clinical experiences and provide a bridge to the sophomore year.

DH 114 Head and Neck Anatomy (2). The structure and functional aspects of the head and neck and their significance to the practice of dental hygiene. Taken as designated in the first year curriculum. Prerequisite: Satisfactory completion of prescribed first semester curriculum.

DH 201 Dental Hygiene Lecture (2). Includes several modules; ethics, jurisprudence, dental office emergencies, and cardiopulmonary resuscitation. Prerequisite: Satisfactory completion of the prescribed first year of study.

DH 201C Clinical Dental Hygiene (4). Supervised competency-based application of the practice of clinical dental hygiene. Prerequisite: Satisfactory completion of the prescribed first two semesters of studies. DH 201 and DH 210 must be taken concurrently.

DH 202 Dental Hygiene Lecture (2). Includes modules in hospital dentistry and pain control. A concentration in office management is also included. Prerequisites: DH 201,201C. DH 202C must be taken concurrently. Satisfactory completion of first semester sophomore courses.

DH 202C Clinical Dental Hygiene (4). A progressive continuation of competency based supervised applications of clinical dental hygiene. Prerequisites: DH 202 and DH 205C must be taken concurrently. Satisfactory completion of first semester sophomore courses.

DH 205 Expanded Periodontics for the Dental Hygienist (2). Designed to offer aspects of periodontics which are not generally considered as traditional dental hygiene functions. Advanced instructions are offered to

further enable students to recognize and label periodontal disease and to understand etiological factors. Students are taught to participate in the planning of treatment for early or minor forms of periodontal disease and to apply and remove dressings. Prerequisites: DH 105 and satisfactory completion of the prescribed first year of study.

DH 205C Expanded Periodontics Laboratory/Clinic (1). Practical application of DH 205. Prerequisite: DH 105 and DH 205. To be taken concurrently with DH 202C.

DH 210 General and Oral Pathology (3). A study of disease and disease processes, the oral manifestations of systemic disease, oral pathology with particular attention to oral cancer and cancer detection methods. Prerequisite: Satisfactory completion of prescribed first year of study.

DH 211 Community Dentistry (2). A survey of private, community, and governmental agencies. Dental epidemiology, socio-economic factors relating to dental care, special programs, and third party payment plans are covered. Prerequisite: Completion of the prescribed first year curriculum.

DH 215 Dental Health Education (2). A study of the dental health educational methods and procedures for individuals and groups. Students will design and produce relevant projects. Prerequisite: Satisfactory completion of first semester sophomore courses.

DH 301 Curriculum Concepts in Dental Hygiene and Allied Health Education (3). (Formerly DH 411) A course designed to explore theories of learning, teaching strategies, and evaluation techniques as applied to dental hygiene and allied health education. Prerequisite: EDCI 387.

DH 402 Dental Hygiene Externship (3). One hour of seminar and four hours externship. An application of dental hygiene techniques to various settings, e.g., hospitals, health centers and DH 402 clinics. Experiences will be individualized and designed to meet student proposed career goals.

DH 412 Teaching Practicum (3). One hour lecture and 4 hours of practicum. A teaching practicum designed to provide practical experience in the clinical and classroom settings for baccalaureate students. Prerequisite: DH 301.

Department of Health Care Administration and Planning

Richard J. Enochs, MSW, MPH, Dr.PH, Head
Holland Hall, Second Floor

Faculty: R. Theriot

General Statement: The Health Care Administration and Planning program is jointly sponsored by Tennessee State University and Meharry Medical College. The program is designed to prepare individuals for leadership roles in the health care field. The curriculum includes instruction in health management, decision making and health planning. Emphasis is placed on those management and decision-making techniques which lead to efficiency in a supervisory position.

The Bachelor of Science degree is awarded after satisfactory completion of a minimum of 135 semester hours including one summer field placement between the junior and senior years. Courses in the HCAP major lead to certification by Meharry Medical College and are dictated by the academic policies of that institution.

Graduates are prepared to assume entry level management positions in various health care settings or to continue their education in a variety of masters degree program disciplines.

ADMISSION REQUIREMENTS

Students who wish to pursue the Health Care Administration and Planning major must first be accepted for admission by Tennessee State University. Applications for admission to the Program are accepted from students who have completed the first year prerequisites. The Health Care Administration and Planning Admission Committee will consider applications of candidates who present the following qualifications:

1. Acceptance into Tennessee State University.
2. Completion of first year HCAP curriculum with a grade point average of at least 2.5 on a 4.0 scale. Consideration will be given to relevant work experience when considering applicants who fall below this requirement.
3. Two letters of recommendation from persons who have known the applicant for at least two years. Time lengths will be waived for recommendations from employers.
4. Interview by the Admissions Committee or an out-of-town agency designated by the Committee.

RETENTION POLICY

1. A grade of "C" or better must be maintained in HCA major courses.
2. Grades of less than "C" may be repeated when next offered with permission of advisor.
3. Students must maintain a cumulative grade point average of 2.0 to remain in the HCA program.
4. Students falling below the 2.0 cumulative grade point average will be dismissed from program, but may apply for readmission. Students requesting readmission should present evidence to the Admissions Committee of substantial change in circumstances warranting reconsideration.

Departmental Requirements for the Bachelor of Science Degree in Health Care Administration and Planning — 48 Semester Hours

MAJOR CORE: A minimum of 48 semester hours including HCA 201, 210, 310, 320, 330, 390, 400, 420, 450, 460, 470, 480, 490; HIM 101, 104; HCA Electives (choose one): 360, 380, 410, 430, 440; SW 470, 472.

Suggested Four Year Plan:

Bachelor of Science Degree in Health Care Administration and Planning

FRESHMAN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AHP 100	1	BIO 222/222L	4
BIO 221/221L	4	ENGL 1020	3
ENGL 1010	3	HIST 2020	3
HIM 101	1	MATH 1020	3
HIST 2010	3	SPCH 230	3
MATH 1010	3	HPER (2 digit)	1
HPER (2-digit)	1		
	16		17

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
EC 211	3	EC 212	3
ENGL 2010 or 2020	3	BIS 215	3
HCA 201	3	HCA 210	3
POLI 2010	3	HIM 104	3
SOCI 2010	3	Humanities Course	3
Humanities Course	3	PHIL 336	3
	18		18

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AC 211	3	AC 212	3
HCA 310	3	HCA 390	3
HCA 320	3	HCA 460	3
HCA 330	3	HCA 450	3
MG 301	3	SOC 300	3
HCA 420	3		
	18		15

SUMMER SESSION

HCA 400 6 Cr. Hrs.
(Field Placement Practicum)

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
SOC 475	3	HCA 470	3
HCA Elective*	3	HCA 480	3
MG 403	3	HCA 490	3
SOC 330	3	MG 404	3
		Elective*	3
	12		15

***Recommended Electives**

HCA 360 Cultural-Social Aspects of Health Care
HCA 380 Principles of Public Health
HCA 410 Seminar: Critical Health Issues
HCA 430 Epidemiology
HCA 440 Environmental and Sanitary Health
SW 470 Social Gerontology
SW 472 Psychosocial Care of the Aged
MG 405 Leadership and Organization Behavior
MG 302 Production and Operations Management I

ACCREDITATION

The Health Care Administration and Planning Program is certified by the Association of University Programs in Health Administration (AUPHA)

COURSE DESCRIPTIONS

Health Care Administration and Planning (HCA)

HCA 201 Introduction to Health Care Organization (3). Provides an overview of the American Health System, with an emphasis on acquainting students with varied aspects of the entire field, including terminology, facilities, placements, and people. The subject areas include history of the development of the American Health Care System, a descriptive analysis of the various levels of health care delivery and the patient care system, exposure to financing of health care, and an introduction to governmental involvement in the health care system. Prerequisites: AHP 100; HIM 101.

HCA 210 Approaches to Planning in Health Care (3). The principal theories and methodologies of the planning discipline will be studied via lectures, reading, case studies, and guest lectures. The philosophical foundations of various methodologies and those of the planning process will be examined. Specific interpretation and application of comprehensive health planning legislation will be considered. Emphasis will also be given to the concepts of regionalization. This course is recommended for all those considering post-graduate study in planning. Prerequisites: AHP 100; HIM 101; HCA 201.

HCA 310 Health Economics (3). The economics of the health care industry will be reviewed, with attention to the supply and demand for health care services. Critical issues to be examined include the economic mechanisms of the health care industry, methods of payment, cost-effectiveness and benefit-cost analysis, national health insurance plans, and governmental intrusion. The economics of the present health care system will also be analyzed in its relation to the poor and minorities. Prerequisites: AHP 100; HCA 201, 210; EC 211.

HCA 320 Seminar: Health and Facilities Law (3). Introduction to the specifics of health related legislation and programs, and their implications for providers and consumers of health care. The legal principles and issues for medical caseworkers, along with liability of health care facilities and staff for injuries to patients, and abuses to patient rights by the health care system will be examined. Topic areas also include malpractice suits and legislation, collection of bills, labor law, informed consent of patients to medical and surgical procedures. Prerequisites: HCA 201, 210.

HCA 330 Sociology of Health (3). The objectives of the course will be to examine the social and psychological implications of illness from inception to termination. Materials will be drawn from the relevant literature of the behavioral sciences that relate to health. Prerequisites: HCA 201; SOCI 2010.

HCA 390 Communication and Technical Writing (3). The special requirements and techniques for the professional report will be examined along with an analysis of the general communication skills required of the professional health administrator. Students will receive training in practical communication and grant interpretation. Also, attention will be given to the development of writing skills and the special communication needs of individual students. Prerequisites: ENGL 1010, 1020; SPCH 230.

HCA 400 Field Placement (6). The internship is designed to give the student direct experience in various health care settings. The experimental component allows the student an opportunity to apply his newly acquired normative and cognitive skills in an actual working situation. The areas from which students may choose are hospitals, federal government agencies, long-term care facilities, intermediate care facilities, group practices, medical programs, volunteer agencies. During the 12-week placement, the summer between the junior and senior year, students will be required to submit mid-term and final reports to the Department. Prerequisites: Senior standing, completion of HCAP curriculum and permission of Instructor.

HCA 420 Health Care Management I (3). The application of management techniques to the administration of health care facilities will be examined. The various administrative management elements of health care—systems approach to decision making, the establishment of the management of complex and normative organizations will be discussed. Also, the different levels of administrative management will be discussed. Prerequisites: HCA 201, 210; EC 211, AC 211, MG 215.

HCA 440 Environmental and Sanitary Health (3). This course will discuss the responsibilities of the administrator for providing a hygienic, safe, institutional environment, as well as the responsibility of the institution to contribute to the environmental health of the community. The course will also discuss critical environmental health issues as they relate to the overall health of the community. Prerequisites: HCA 201, 210; HIM 101, 104.

HCA 450 Health Care Finance (3). The purpose of this course is to provide a solid foundation and facilitate the student's under- standing of financial management techniques. Upon the completion of this course, students will have a basic understanding of: cost inflation; economic models of physician and hospital behavior; cost sharing and cost containment; economic buying and hospital accounting; marketing; pricing and specialization; cost effectiveness and cost-benefit analysis; access to capital and debt financing; evaluation of financing alternatives; health planning and cost control. Prerequisites: AC 211, 212; EC 211, 212; HCA 201,310.

HCA 460 Health Care Management II (3). As an extension of Health Care Management I, advanced quantitative methods and statistical techniques will be studied. In addition, this course will study managerial financing of health care facilities in relation to acquisition, planning and control of funds from internal/external sources for short-term, intermediate and long-term objectives. Issues to be examined include financial analysis, profit planning, cost-benefit analysis, and reorganization. Prerequisites: HCA 201, 210, 420; EC 211; AC 211, MG 215.

HCA 470 Long-Term Care Administration (3). The administrative issues of care for long-term patients will be addressed with specific discussions about the aged, and primary and extended care of the aged. The peculiar social, cultural, and economic environment will be discussed as each related to accessibility and availability of health and the aspects of administration in long-term care facilities. Prerequisites: HCA 201, HIM 101, 104.

HCA 480 Principles of Managed Care Organizations (3). Introduction and principles of managed care, the health delivery system, medical management, general management and marketing, finance and underwriting, special market segments, relationships with government regulatory agencies, legal issues and health care reform. Prerequisites: AHP 100, EC 211; HCA 201.

HCA 490 Health Care Research (3). An introduction to research design will be provided with emphasis on the application of statistical and research techniques to problems of concern to the health care system. Students will be required to carry through to completion a management research problem. Prerequisites: Senior Standing; SOC 300 or PSY 311.

HEALTH CARE ADMINISTRATION AND PLANNING ELECTIVES

HCA 360 Cultural-Social Aspects Of Health Care (3). Discussion will center on the effects of the social and cultural milieu on the level of health of the community, the nature accessibility and availability of health care services. Prerequisite: HCA 201.

HCA 380 Principles of Public Health (3). This course is designed to enable students to develop an understanding and appreciation for factors affecting health status and the personal and professional means by which they might contribute to the personal and community health. The course will provide an overview of personal and public health issues including minority health concerns, health objectives for the year 2000, and career opportunities in public health. Prerequisite: Permission of the instructor.

HCA 410 Seminar: Critical Health Issues (3). The objectives of the seminar will be to examine many current issues which face the health care industry. Emphasis will be placed on a full evaluation of a gamut of issues, with particular attention being given to the issues of minority health care delivery, health care for the poor, rising cost of health care, medical specialization, and legislative impact on health care for minorities of voluntary and governmental health plans. Prerequisites: HCA 201, 210.

HCA 430 Epidemiology (3). The objective of this course is to acquaint students with epidemiology as a scientific discipline and to facilitate the students' understanding of the role of epidemiology in health service planning and administration. Emphasis will be placed on methods employed in current epidemiologic studies of chronic diseases, public health, vital statistics, environmental sanitation and communicable disease control on a local, national, and global basis. Prerequisites: BIO 221, 221L, 222, 222L; HCA 201; HIM 101,104; SOC 300.

HCA 440 Environmental and Sanitary Health (3). This course will discuss the responsibilities of the administrator for providing a hygienic, safe, institutional environment, as well as the responsibility of the institution to contribute to the environmental health of the community. The course will also discuss critical environmental health issues as they relate to the overall health of the community. Prerequisites: BIO 221, 222; HCA 201.

Department of Health Information Management

Elizabeth Kunnu, M.Ed., RHIA, Head
314 Industrial Arts Building

General Statement: Health Information Management (HIM) is the profession that focuses on health care data and the management of healthcare information resources. Health Information Management professionals collect, integrate, and analyze primary and secondary health care data, disseminate information, and manage information resources related to the research, planning, financing, and evaluation of health care services.

Job opportunities: HIM professionals, as part of quality patient care team, work as HIM department director, HIM system manager, data quality manager, information security officer, educator, consultant, health data analyst, quality improvement analyst, physician practice manager in a variety of health care settings. The settings include hospitals, outpatient clinics, managed-care organizations, consulting firms, accounting firms, medical group practices, hospice and home healthcare agencies, long-term care facilities, correctional facilities, pharmaceutical company, rehabilitation facilities, behavioral healthcare organizations, healthcare research facilities, insurance companies, law firms, or state and federal healthcare agencies.

The Department of Health Information Management offers a four-year program leading to the Bachelor of Science degree. Its goals are to prepare interested students as competent, confident, innovative and contributing health information professionals who can identify and use a variety of information management resources and technologies to accomplish the objectives of various health care facilities and related organizations; and to prepare students for the National Registration Examination for credentialing by the American Health Information Management Association.

The HIM curriculum takes a career-ladder approach and is divided into a technical phase (the first two years) and a professional phase (the last two years). It is designed to accommodate high school graduates, transfer students, graduates from accredited community colleges who have completed prerequisite science courses, and Registered Health Information Technicians (RHITs) who wish to progress to the professional level of a Health Information Management. The **curriculum** is comprised of general education, management principles, computer technology/ information systems, professional education requirements and integrated supervised professional practice.

The Bachelor of Science (BS) degree is awarded after satisfactory completion of 131 credit hours. Graduates of this program are required to demonstrate entry-level competencies for Registered Health Information Administrators (RHIAs) and are **eligible** to sit for the **National Registration Examination** administered by the American Health Information Management Association (AHIMA). The graduates are strongly encouraged to take the National Registration Examination in the same year of graduation to be recognized as a leader in Health Information Management by employers and other healthcare professionals.

ADMISSION REQUIREMENTS

There are two options available to students interested in the HIM Program. **Option I** is for freshmen and transfers. **Option II** is for students who have completed an associate degree in Health Information Technology. In addition to University admission criteria, the program admission and retention requirements include:

Entering Freshman

1. High School graduation with a minimum cumulative grade point average of 2.5 on a 4.0 scale or G.E.D. scores of 50 or above for the five subjects tested.
2. A minimum composite test score of 19 on the ACT (This may change according to University entrance requirements.)
3. First-time freshmen are required to have successfully completed any remedial or developmental courses before consideration for unconditional admission into HIM program.

Transfer Students

1. Applications will be accepted from students transferring from other colleges, universities or other departments at Tennessee State University.
2. Transfers, change-of-major, and continuing students are required to have successfully completed any remedial or developmental courses before consideration for unconditional admission into the program.
3. Applicants must have a minimum cumulative grade-point average of 2.5 on a 4.0 scale.
4. Students transferring from other departments within Tennessee State University are required to complete change-of-major forms.

Advanced Standing

1. Students who already have a degree in health related and other fields may be admitted to the program if they meet admission criteria.

2. Individuals who have an associate degree in medical record/health information technology and who are interested in receiving a baccalaureate degree in Health Information Management must have completed a minimum of 65 semester credit hours including directed professional practice. These individuals are required to complete general education requirements for a BS degree, as well as management, sciences, other prerequisite courses for the program and all the 300-400 level courses as indicated in the curriculum.

Additional Requirements

1. Submission of application to the program is due by June 30 for fall semester and December 1 for spring semester.

2. Two letters of recommendation from persons (non-family member) who know the applicant.

3. A personal interview by Admission and Retention Committee or its designee.

4. Applicants will be informed of the final decision regarding acceptance into the program.

5. Responsible for transportation expenses and other costs relating to clinical experience and field trips.

6. Responsible for a physical examination and Malpractice Insurance prior to professional practice rotations.

7. Acceptance of professional practice rotation in and out-of-state health care facilities.

8. Students are encouraged to complete a minimum of 30 volunteer hours in Medical Record/Health Information Management Department at any health care facility prior to or during the first semester of enrollment in the program. Students with work experience in HIM field may provide evidence in writing from the health care facility.

9. Students are required to complete these courses (ENG 1010 & 1020 with minimum grades of C.; three/four hours of college mathematics, American History 2010 & 2020 or 341; at least six hours of natural science; and nine hours in humanities, including three hours of literature) prior their junior year, and to take the RISING JUNIOR EXAMINATION for admission to the upper HIM course (300-400) level.

RETENTION POLICY

The Health Information Management program retention policy requires the following:

1. Students must maintain a minimum cumulative grade point average of 2.0.

2. Students must earn a C or better in all major courses, supporting Science, Business, Health Care Administration, English, and Mathematics courses. Failure to maintain a C in any of these courses will result in repeating the course the next semester the course is offered with approval of the advisor.

3. Students who earn a grade less than a C in HIM courses for more than one semester will be dismissed from the program.

4. Students who have been dismissed from the HIM program may apply for readmission. Students who request readmission should present evidence to the Admissions and Retention committee of substantial change in circumstances warranting reconsideration.

General Education Core Requirements: A minimum of 75 semester hours including AC 211; AHP 100; BIS 215, 316; BISE 315; BIO 221, 221L, 222, 222L; CHEM 1010, 1011, 250; ENGL 1010, 1020, 2010 or 2020; HCA 450, 490; HIST 2010, 2020; MATH 1010; MG 301, 403; PE (two 2-digit courses); PHIL 250; PSY 311 or QM 211; SPCH 230 or 220; Humanities Elective (3 semester hours); Social Science Elective (3 semester hours).

Departmental Requirements For
Bachelor of Science Health Information Management
Semester hours: 56

Major Core: A minimum of 56 hours including HIM 101, 104, 202, 210, 220, 225, 230, 235, 240, 270, 301, 302, 303, 400, 440, 442 and 443.

Suggested Four Year Plan:
(For students entering at freshman level):

Bachelor of Science in Health Information Management

(PLAN I)

FRESHMEN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AHP 100	1	CHEM 1010, 1011	4
ENGL 1010	3	ENGL 1020	3
MATH 1010	3	HIM 104	3
HIM 101	1	BIO 222, 222L	4
BIO 221, 221L	4	HPER (2 digit)	1
HPER (2 digit)	1	HIST 2020	3
HIST 2010	3		
	16		18

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
ENGL 2010 or 2020	3	HIM 230	3
HIM 202	3	HIM 235	3
HIM 210	3	HIM 240	3
HIM 220	2	Social Science Elective	3
HIM 225	2	PHIL 250	3
CHEM 250	3	Humanities Elective	3
	16		18

Summer Session	Cr. Hrs.
HIM 270	4
	4

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
HIM 301	2	PSY 311, QM 211	3
AC 211	3	BIS 316	3
SPCH 230 or 220	3	MG 403	3
MG 301	3	BISE 315	3
BIS 215	3	HIM 303	3
	14		15

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
HCA 450	3	HIM 442	9
HCA 490	3	HIM 443	3
HIM 302	3		
HIM 330	3		
HIM 400	3		
HIM 440	3		
	18		12

PLAN II

Suggested Two Year Plan Option (for students with an associate degree in Health Information Technology). All general education requirements of the University must be met.

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AC 211	3	Humanities Elective	3
CHEM 1010, 1011	4	PSY 311, QM 211	3
HIST 2020	3	PHIL 250	3
Social Science Elective	3	HIM 303	3
BIS 316	3	CHEM 250	3
HIM 301	2	ENGL 2010 or 2020	3
	18		18

SUMMER SESSION

MG 301	3
BISE 315	3
MG 403	3
	9

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
HIM 302	3	HIM 442	9
HIM 330	3	HIM 443	3
HIM 400	3		
HIM 440	3		
HCA 450	3		
HCA 490	3		
	18		12

TOTAL HOURS FOR DEGREE REQUIREMENT (Option II): 75 cr. hrs.

The information contained in this catalog was prepared as a guide for current and prospective students, and may be changed without notice.

ACCREDITATION

The Health Information Management Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the Council on Education of the American Health Information Management Association (AHIMA).

Adjunct Instructional Staff and Clinical Instructors: V. Sisco, RHIT, Baptist Hospital, Nashville TN; R. Bowen, RHIA, Erlanger Medical Ctr., Chattanooga TN; R. Callender, RHIA, Grady Memorial Hosp., Atlanta GA; B. Cochran, RHIT, Metropolitan General Hosp., Nashville TN; M. Coley, RHIA, Columbia/HCA health Systems, Nashville TN; M. Cordell, RHIT, Southern Hills Hosp., Nashville TN; F. Hall, RHIA, Centennial Medical Ctr., Nashville TN; T. Holbert, RHIA, Tennessee Christian Medical Ctr., Madison TN; L. Hughes, RHIT, Williamson Medical Ctr., Franklin TN; K. House, RHIA, Summit Medical Ctr., Hermitage TN; C. Hall, RHIA, Maury Regional Hosp., Columbia TN; C. Nixon, RHIA, Nashville Memorial Hosp., Madison TN; K. Mair, RHIA, Georgia Baptist Hosp., Atlanta GA; C. Ehiemua, RHIA, Matthew Walker Comprehensive Health Ctr., Nashville TN; T. Perkins, RHIA, Elam Community Mental Health Ctr., Nashville TN; K. Porter, RHIA, Veterans Affairs Medical Ctr., Nashville TN; R.C. Pulley, RHIA, Alvin C. York Veteran Affairs Medical Ctr., Murfreesboro TN; K. Monroe, RHIA, St. Thomas Hosp., Nashville TN; R. Scales, RHIT, Nashville Health Care Ctr., Nashville TN; L. Tate, RHIT, Middle Tennessee Mental Health Inst., Nashville TN; T. Taylor, RHIA, Sumner Regional Medical Ctr., Gallatin TN; B. Totty, RHIA, Maury Regional Hosp., Columbia TN; T. Woodson, RHIA, Methodist Hospital of Memphis, Memphis TN; B. Vanderford, RHIA, Jackson Regional Hosp., Jackson TN; L. Howell RHIT. Bolivar General Hospital, Bolivar TN; M. Clement, RHIA, National Institutes of Health, Bethesda MD; K. Healy-Collier, RHIA, LeBonheur Children's Medical Hosp., Memphis TN.

COURSE DESCRIPTIONS

Health Information Management (HIM)

HIM 101 - Introduction to Health Record Management (1). This course is designed for health related majors who have interest in learning more of health records and documentation practices in various health care delivery systems. The course focuses on the purpose and use of the health record, the role of the health information management department, and its relationship with other services within the health care facility. Prerequisites: None

HIM 104 - Medical Terminology (3). A study of the language of medicine with emphasis on body systems, prefixes, suffixes, root terms, pronunciation and spelling. Emphasis on surgical instruments and procedures, diseases, laboratory tests, clinical procedures, and abbreviations for each system. Terms related to cancer medicine, radiology, nuclear medicine, pharmacology, psychiatry, systemic disorders, and autopsy procedures will be included. Prerequisites: BIO 221-221L with a grade of C. Co-requisite: BIO 222-222L.

HIM 202 - Foundations of Health Information Management (3). A study of Health Information Management systems with emphasis on health care delivery systems; the health information management profession; regulatory and accrediting requirements of patient care data; health care data development, content, structure, and use; data collection, quality, access and retention of paper-based records, electronic information, and image-based records. This course requires a laboratory component (2 lecture & 2 lab hours/week). Prerequisites: Completion of AHP 100, BIO 221-221L, BIO 222-222L, HIM 101, HIM 104 with a minimum grade of a C. Corequisites: HIM 210, HIM 220, HIM 225.

HIM 210 - Fundamentals of Medical Science (3). A study of the nature, cause, treatment and management of pathologic, microbiologic and clinical disease processes. Prerequisites: CHEM 1010-1011, BIO 221-221L, BIO 222-222L, HIM 101 and HIM 104.

HIM 220 - Legal and Ethical Aspects of Health Information(2). The American legal and court systems, terminology and procedures; principles of liability; patient record requirements with emphasis on regulations for content, retention, and destruction; access to health information; confidentiality and informed consent; the judicial process of health information; fraud and abuse; specialized patient records; risk management and quality assessment of patient records as it relates to internal and external reporting; HIV information; computerized patient records with emphasis on accreditation, licensure; liability issues and ethical standards for health information practices. Pre- or co-requisites: HIM 101, HIM 202.

HIM 225 - Health Statistics and Analysis (2). A study of the basic knowledge and skills in health statistics and focus on the applications of the techniques for analyzing and calculating hospital, health, and vital statistics for administrative use and health care planning utilizing manual and computerized health information systems for the purpose of graphic display and required reporting. Prerequisite: MATH 1010. Corequisites: HIM 202, HIM 210, HIM 220.

HIM 230 - Alternative Health Record Systems and Registries (3). A course designed to expose students to health record management in a non-hospital care setting with focus on health record content and structure; regulatory and accreditation requirements; data access, collection, and retention. The overall purpose, organization, development, and maintenance of various registries and indexes will be discussed. Field trips will be required as part of the classroom experience. This course requires a laboratory component (2 lecture & 2 lab hours/week). Prerequisite: HIM 101, HIM 202, HIM 210, HIM 220, HIM 225, BIS 215, BIO 221/221L, BIO

222/222L and student must be accepted into the HIM program and/or with instructor's approval. Co-requisites: HIM 235, HIM 240.

HIM 235 - Coding and Classification of Health Data (3). An introduction to ICD-9-CM classification and coding of symptoms, diseases, operations, and procedures with emphasis on the UHDDS; basic coding steps and guidelines; coding guidelines for operations and procedures; supplementary classifications; signs & symptoms; and ethical coding standards. This course requires a laboratory component (2 lecture & 2 lab hours/week). Prerequisites: BIO 221/221L, BIO 222/222L, HIM 101, HIM 104, HIM 210.

HIM 240 - CPT/HCPCS Coding Classification Systems (3). A basic introduction to CPT and HCPCS coding classification systems for ambulatory care with focus on their structure, application, and purpose as well as related reimbursement issues. Activities for this course will include coding, classification, and indexing of procedures in CPT/HCPCS for the purpose of standardization, retrieval, and analysis. This course requires a laboratory component (2 lecture & 2 lab hours/week). Prerequisites: BIO 221/221L, BIO 222/222L, HIM 101, HIM 104, HIM 210.

HIM 270 - Directed Professional Practice and Seminar in Health Information Services (4). Students are assigned to health information centers during the summer for practice experience under the direct supervision of either an RHIA or RHIT. Students will gain experience through observation and demonstration in applying theory and knowledge of technical aspects of Health Information Management previously and currently studied. A seminar will be held to discuss the experiences acquired during directed professional practice. Focus will be on presentation of the outcome of assigned projects and activities. Capstone examination will be administered to evaluate student competency-based knowledge at the technical level in Health Information Management. Prerequisites: Completion of AHP 100, BIO 221/221L, BIO 222/222L, HIM 101, HIM 104, HIM 202, HIM 210, HIM 220, HIM 225, HIM 230, HIM 235, HIM 240. All AHP, BIO, and HIM courses completed with a minimum grade of a C. An overall minimum grade point average of a C.

HIM 301 - Healthcare Billing (2). A study of health insurance process and responsible health care payers. The course includes discussion on professional and uniform billing; the claim process; managed care including accounts receivable, collections, and terminology; electronic data interchange (EDI); commercial plans; federal and state plans; workers compensation and disability compensation programs. Prerequisites: HIM 202, HIM 230, HIM 235, HIM 240.

HIM 302 - Current Issues in Health Information Management (3). A study of trends, updates and practical problems related to Health Information Management. Other topics include perspective on health care and health information management. Prerequisites: Junior standing in HIM curriculum or with permission of the instructor.

HIM 303 - Quality Assessment and Performance Improvement (3). The study of quality management in healthcare with emphasis on quality improvement, utilization review, risk management, clinical outcomes management, case management/critical path concepts, and accreditation and licensure standards. Student will acquire knowledge, skills, and tools needed to coordinate quality and resource management activities in healthcare facilities. This course requires a laboratory component. Prerequisites: HIM 101, HIM 202, HIM 220, HIM 225, HIM 230, HIM 235, HIM 240, HIM 270.

HIM 330 - Advanced Coding and Classification of Health Data (3). An advanced study of ICD-9-CM coding and reimbursement systems with special emphasis on the complexities of coding related to principle diagnosis selection and sequencing, problem diagnoses and procedures by body system, DRG assignment and PPS regulations for DRG validation, PRO requirements, case-mix concepts, and methods to ensure coding accuracy in automated and manual coding systems. This course requires a laboratory component (2 lecture & 2 lab hours/week). Prerequisites: BIO 221/221L, BIO 222/222L, CHEM 1010/1011, CHEM 250, HIM 235, HIM 240. This course is designed for HIM majors only or with permission of the HIM Program Director.

HIM 400 - Computerized Health Information Systems (3). Development of managerial skills in Systems Analysis and Computer Applications in Health Information Management. Prerequisites: MATH 1010, BIS 215, BIS 323, HIM 202.

HIM 440 - Organization and Management of Health Information Services (3). This course is designed to provide students with managerial skills in the areas of planning, organizing, directing, and controlling. Emphasis will be on the processes of budgeting, staffing, directing, decision making, development and evaluation of policies and procedures, and establishing standards for the quality of health information services. Special assignments include in-service education. Prerequisite: MG courses, Senior standing in the HIM curriculum with a minimum grade Point Average of 2.0 or better.

HIM 442 - Management Professional Practice in Health Information Services (9). Students are assigned to a Health Information center for supervised Management Professional Practice experience to observe employee relations and interact with healthcare professionals and consumers while under the direct supervision of a qualified Registered Health Information Administrator. Students are provided the opportunity to apply the skills and knowledge previously gained through classroom, directed professional practice, and laboratory experiences in carrying out management and administrative activities. A pre-practice seminar will be held to discuss practice expectations and explore potential methods of identifying and solving problems that may be encountered during management practice. Prerequisites: Completion of all HIM, MG, BIO, AHP and HCA courses with a minimum grade of a C have an overall minimum grade point average of C (2.0). Senior standing in the HIM curriculum.

HIM 443 - Management Professional Practice Seminar (3). Student will participate in seminar to discuss the experiences acquired during Management Professional Practice. Focus will be on presentation of the outcome of assigned projects and activities; employment opportunities and preparation for job search; and discussion on graduate and professional studies. Students will participate in preparation for the registration examination. Focus will be on test-taking skills and assimilation of AHIMA required competencies. Capstone examination will be administered to evaluate student competency-based knowledge of Health Information Management. Prerequisites: Completion of all HIM, MG, BIO, AHP and HCA courses with a minimum grade of a C have an overall minimum grade point average of C (2.0). Senior standing in the HIM curriculum. Co-requisite: HIM 442.

Department of Medical Technology

Theola N. Copeland, M.S., M.T., (ASCP), Interim Education Coordinator 216 Industrial Arts

Faculty: W. Burrell, MSPH, MT (ASCP), Clinical Coordinator

General Statement: The Medical Technology Program is jointly sponsored by Tennessee State University and Meharry Medical College, and consists of three years of pre-clinical course work and twelve months of clinical training. A graduate of the program is eligible to sit for a certification examination and apply for a license from the Tennessee Department of Health and Environment.

The medical technologist performs a broad range of chemical, microscopic and bacteriological procedures to assist the physician in identifying and treating diseases and to determine abnormal conditions including the presence of bacteria, viruses and other microorganisms. Medical technologists also type and crossmatch blood samples for transfusions.

Description of Clinical Laboratory Practicum Sites: Clinical laboratories of Nashville Metropolitan General Hospital, Alvin C. York VA Medical Center, Centennial Medical Center, serve as clinical practicum sites for medical technology students.

Nashville Metropolitan General Hospital has 150 beds, a fully automated laboratory and serves patients in the departments of surgery, internal medicine, obstetrics and gynecology, and pediatrics. The hospital is located on Meharry Medical College's campus. Alvin C. York VA Medical Center is located in Murfreesboro, Tennessee, approximately 40 miles from Nashville. The VA medical center has 570 beds and a fully automated laboratory. Columbia Centennial Medical Center is a 685 bed acute care facility located near downtown Nashville with a fully automated laboratory.

ADMISSION REQUIREMENTS

Pre-professional Component:

Entering Freshmen:

In addition to meeting minimum admission criteria of Tennessee State University, applicants seeking admission to the medical technology program must meet one of the following requirements:

1. High school graduation with a minimum cumulative grade point average of 2.5 on a 4.0 scale.
2. GED test scores of 50 or above for the five subjects tested.
3. A minimum composite test score of 19 on the ACT (Enhanced).

Transfer Students:

1. Applicants will be accepted as transfer students from other colleges or universities, or from other departments of Tennessee State University. Applicants with fewer than 30 semester credit hours in courses required by this program must have an overall college grade point average of 2.5 on a 4.0 scale and meet the admission requirements for first year freshman applicants. Applicants with 30 or more semester credit hours will be admitted if they have maintained an overall college grade point average of 2.5 or above on a 4.0 scale.
2. Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from accredited medical technology programs will be accepted where evidence is provided that the content of courses previously taken is essentially the same as the content of courses in this curriculum. No credit will be accepted for major field courses in which the student has earned a grade lower than "C".

Clinical/professional Component:

Application for admission to the professional/clinical year of the Medical Technology program is required. Applicants must meet one of the following criteria for acceptance.

1. Tennessee State University students who have met retention requirements and completed the prescribed curriculum will progress directly into the clinical (professional) component of the program.
2. Applicants from affiliated institutions who have successfully completed the agreed upon three-year pre-clinical curriculum will be admitted to the professional component on a competitive basis.
3. Individuals who possess a baccalaureate degree in biology or chemistry and wish to receive a Certificate of Training in Medical Technology must have college credit in the following courses: Microbiology (Bacteriology), Immunology, Organic Chemistry and/or Biochemistry prior to being admitted to the professional component on a competitive basis.
4. Individuals who possess an Associate of Science Degree in Medical Laboratory Technology and who wish to receive a Bachelor of Science degree in Medical Technology must have completed a minimum of a sixteen (16) week clinical practicum in a NAACLS (National Accrediting Agency for Clinical Laboratory Sciences) approved Medical Laboratory Technology program. These individuals must complete general education requirements for the Bachelor of Science degree, as well as science and math prerequisites for the Medical Technology program and at least seventeen (17) hours of 400 level Medical Technology courses (Cooperative Lecture). Students must have completed a minimum of 48 credit hours at the 300 to 400 level. Electives may be taken in Biology, Chemistry, or other related field.
5. Individuals who wish to receive a Certificate of Training in Medical Technology must complete all science prerequisites for the Medical Technology clinical/professional program.

All Applicants

Prior to enrolling in the clinical component of the program, the student must be evaluated by the Medical Technology Department. Departmental requirements include:

1. Prerequisites: Chemistry - 20 semester hours to include Organic Chemistry; Biological Sciences - 16 semester hours to include Bacteriology, and Immunology (as a part of a course or as a separate course); and Mathematics - minimum of one college level course.
2. Submission of two letters of recommendation from science professors, and one letter of recommendation from major advisor.
3. Completion of the interview process which includes a review of the Technical Standards of the Medical Technology Program.

At the time of the admissions interview, applicants are given a copy of the Technical Standards of the Medical Technology Program.

Technical standards represent the essential non-academic requirements of the program that students must master to participate successfully in the program and become employable. The following is a list of the technical abilities and skills applicants for admission must possess:

1. **Manual Dexterity:** Ability to use hand(s) or terminal devices with coordination.
2. **Fine Motor:** Ability to manipulate small objects with fingertips or adaptive devices.
3. **Mobility:** Ability to maneuver in the laboratory and around instruments and in patient-care settings.
4. **Vision:** Ability to distinguish red, yellow, and blue colors; distinguish clear from cloudy, and see through a microscope.
5. **Hearing:** Ability to adapt with assistive devices (i.e., phone receivers, hearing aid, etc.
6. **Speech:** Ability to verbally communicate understandably in English.
7. **Writing:** Ability to communicate effectively in the written form in English.
8. **Reading:** Ability to read, understand, and follow directions printed in English.

Retention Policy: Any student whose overall grade point average falls below 2.0 or who earns lower than a "C" in two or more courses will be dismissed from the program. No credit will be accepted for major field courses in which the student has earned a grade lower than "C".

Departmental Requirements for Bachelor of Science
Medical Technology **48 Semester Hours**

MAJOR CORE: A minimum of 48 semester hours including MT 401, 411, 421, 431, 451, 460, 471, 402, 412, 422, 432, 452, 461, 472, 403, 413, 423, 433, 453, 473.

SCIENCE REQUIREMENTS: A minimum of 52 semester hours including BIOL 1030, 1031, 1040, 1041, 221, 221L, 240, 240L, 212, 212L, 441, 441L; CHEM 1010, 1011, 1020, 1021, 211, 211L, 212, 212L, 341, 341L; PHYS 2010, 2011; MT 301.

Suggested Four Year Plan:

Bachelor of Science Degree in Medical Technology

FRESHMAN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AHP 100	1	CS 121	3
BIOL 1030, 1031	4	BIOL 1040, 1041	4
CHEM 1010, 1011	4	CHEM 1020, 1021	4
ENGL 1010	3	ENGL 1020	3
MATH 1010	3	MATH 114	3
HPER (2-Digit)	1	HPER (2-Digit)	1
	16		18

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
BIO 221, 221L	4	BIO 212, 212L	4
PHYS 2010/2011	4	CHEM 211, 211L	4
ENGL 2010	3	Humanities Elective	3
HIST 2010	3	HIST 2020	3
	14		14

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
BIO 240, 240L	4	CHEM 341, 341L	4
CHEM 212, 212L	4	BIO 441, 441L	4
Social Science Elective	3	MT 301	3
Humanities Elective	3	Humanities Elective	3
	14		14

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
MT 401	3	MT 402	3
MT 411	3	MT 412	3
MT 421	3	MT 422	3
MT 431	2	MT 432	2
MT 451	3	MT 452	3
MT 460	1	MT 461	1
MT 471	2	MT 472	2
	17		17

SUMMER SESSION

MT 403	3
MT 413	3
MT 423	3
MT 433	1
MT 453	3
MT 473	1
	14

ACCREDITATION

The Medical Technology Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631-3415, (773) 714-8880.

COURSE DESCRIPTIONS

Medical Technology (MT)

MT 301 Introduction to Medical Technology (3). This course is designed to give students an introduction to the field of medical technology. The focus will be on these disciplines: Hematology, Clinical Chemistry, Immunology, Immunohematology, Clinical Microbiology and Urinalysis. Students will be introduced to basic laboratory techniques in each of the areas and be able to apply knowledge learned in undergraduate science courses in the MT student clinical laboratory. Prerequisites: BIO 240, 240L, MATH 1010, Chemistry 1010, 1011, 1020, and 1021.

MT 401-02-03 Clinical Chemistry (3,3,3). Offer the student a brief review of basic chemistry before going into the principles of clinical chemistry. Included are chemistry problems, automation, and quality control. Laboratory experiences will include practical applications of the theories in the blood chemistry laboratory under supervision by trained medical technologists. Students will have the opportunity to work with actual specimens from hospital patients. The lectures include review of the anatomy and physiology of various body systems, contents of body fluids, and special techniques. Prerequisite: Admission to clinical/professional component.

MT 411-12-13 Microbiology (3,3,3). Offer the student an introduction to the clinical aspects of bacteriology with emphasis on morphology and physiology of bacteria, preparation of culture media, and techniques used for identification. An introduction to mycology is also presented. The students will practice under trained supervision in a hospital laboratory. Prerequisite: Admission to clinical (professional) component.

MT 421-22-23 Immunohematology (3,3,3,). The basic principles of blood banking are taught with emphasis on importance of accuracy in laboratory testing. Practical application of theory is carried out in the laboratory by the student under technical supervision. Cross-matching, identification of antibodies, and screening of donors are included. Prerequisite: Admission to clinical (professional) component.

MT 431-32-33 Immunology/Serology (2,2,1). Formal lectures in this course will include immune response, antigen-antibody reactions, hypersensitivity, autoimmune disease and serologic procedure. Prerequisite: Admission to clinical (professional) component.

MT 451-52-53 Coagulation/Hematology (3,3,3). The use of the microscope, methods of obtaining blood and hematological procedure are presented as well as principle and procedures for performance of red and white blood counts, differentials, hemoglobin and hematocrit. In addition, procedures for the detection of diseases involving increased blood production and increased blood destruction are presented as well as the principles and theories of coagulations. Laboratory practice will be carried out in the hematology laboratory of the hospital. Prerequisite: Admission to clinical (professional) component.

MT 460-61 Parasitology (1,1). These courses present the student with techniques and methods used to recover and identify parasitic organisms that produce diseases in humans. Life cycles of the organisms and the human immunological responses will be presented. Prerequisite: Admission to clinical (professional) component.

MT 471-72-73 Clinical Microscopy (2,2,1). The objectives of these courses are to offer the student general information regarding (1) the anatomy and physiology of the urinary system and (2) the role of urine, body fluids and excretions in the diagnosis of diseases by laboratory methods. Prerequisite: Admission to clinical (professional) component.

Department of Occupational Therapy

Larry R. Snyder, M.S., OTR/L
Interim Department Head
369 Clement Hall

Faculty: R. Dorne, D. Kelly Smart, P. Gailey

General Statement: Occupational Therapy is the use of purposeful activity with individuals who are limited by physical injury or illness, psycho-social dysfunction, developmental or learning disabilities, poverty and cultural differences, or the aging process in order to maximize independence, prevent disability, and maintain health. Practitioners work in a variety of systems including health care, education, academic, governmental, social and corporate settings. Individuals interested in learning more about a career in occupational therapy are encouraged to contact the American Occupational Therapy Association (AOTA) at (301) 652-AOTA.

ADMISSIONS REQUIREMENTS

Entering freshman and transfer students must meet Tennessee State University admission standards and have a cumulative, science, and prerequisite grade point average of at least 2.5 on a 4.0 scale. Acceptance into the pre-professional phase of the program does not insure acceptance in the professional phase and is not prerequisite to acceptance.

Acceptance into the professional program (junior and senior year courses) is the result of a competitive process separate from, and in addition to, admission to the University. Minimum requirements for application to professional student status include:

1. Admissions to Tennessee State University
2. Successful completion of all prerequisite courses with a minimum cumulative, science, and prerequisite GPA of 2.5 on a 4.0 scale. Proof, (official transcripts from all colleges and universities attended) of course completion must be provided prior to entrance into the professional component of the program.
3. Submission of the completed **APPLICATION TO OCCUPATIONAL THERAPY** postmarked no later than December 31 to be considered for entry into the professional program.

NOTE: A personal interview may be conducted as part of the admissions process. Completion of minimum requirements does not guarantee an interview with the Admissions Committee nor acceptance into the professional phase of the program. Applicants are strongly encouraged to have a minimum of 45 hours in volunteer or work experience in occupational therapy.

Retention Policy

1. Students who earn a grade of less than "C" in 6 credit hours of professional level courses will not be permitted to take the next sequential course(s). The course may be repeated when next offered providing there is space available in the class and with permission of the department head.
2. Students will be dismissed from the professional program for any for the following:
   A. Failure to maintain a cumulative grade point average of 2.0 or above.
   B. A grade of less than "C" in 7 or more semester hours in major field courses.
   C. A grade of "F" in more than 2 semester hours in major field courses.
   D. A grade of less than "C" in more than one clinical experience.
   E. A grade of less than "C" in a course that has been repeated.
   F. Withdrawal from any Occupational Therapy course or failure to register for any semester without prior written approval from the Department of Occupational Therapy.
   G. Failure to comply with clinical and academic policies established by the Department or disciplinary standards established by the University.
3. Students who have been dismissed from the professional program, due to poor academic performance may reapply for admission during the next application cycle and compete for a space in a subsequent class. Students who request readmission should present to the Admissions Committee evidence of a substantial change in circumstances that could lead to improved academic performance.

Additional Requirements:

1. Applicants accepted into the professional phase of the program are required to submit a physician's statement indicating satisfactory current health status.
2. In addition to Tennessee State University tuition and fees, students in the professional phase are responsible for providing textbooks, prescribed uniforms, professional liability insurance, transportation to assigned clinical experiences, current certification in cardiopulmonary resuscitation (CPR), and housing arrangements for clinical assignments outside of the Nashville area.

General Education Core Requirements: A minimum of 65 semester hours including ENGL 1010, 1020, 2010; MATH 114; PSYC 2010, 311, 321, 351; HIST 2010, 2020; BIO 221,221L, 222,222L; BIS 215; PHYS 2010, 2011 or OT 214; CHEM 1010, 1011, 1020,1021; 2 HPER (2 digit) courses; and 6 additional hours of humanities courses.

Departmental Requirements: For a Bachelor of Science degree in Occupational Therapy: students must complete a minimum of 145 semester hours, (65 prerequisite and 80 professional course hours.)

Professional Core Requirements: A minimum of 80 semester hours including OT 301, 305, 311, 312, 312L, 314, 314L, 316, 316L, 320, 330, 340, 340L, 342, 350, 350L, 355, 360, 365, 381, 391, 400, 410, 445, 446, 447, 470, 473 474, 475 or 476, (OT 343, 344 are elective courses and cannot substitute for core requirements.)

Suggested Four Year Plan:

Bachelor of Science Degree in Occupational Therapy

FRESHMAN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AHP 100	1	BIO 222/222L	4
BIO 221/221L	4	CHEM 1020/1021	4
CHEM 1010/1011	4	ENGL 1020	3
ENGL 1010	3	MATH 114	3
PSYC 2010	3	Humanities Elective	3
HPER (2-digit)	1	HPER (2-digit)	1
	16		18

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
HIST 2010	3	ENGL 2010 or 2020	3
BIS 215	3	HIST 2020	3
HIM 104	3	PSY 311	3
PHYS 2010/2011L or OT 214	4 or 3	PSY 321	3
PSY 351	3	Humanities Elective (PHIL 336 preferred)	3
	16 or 15		15

JUNIOR YEAR

Intercession/Summer Session -
Begins Professional Phase of Program

OT 301	3	Intercession (3 Weeks)
OT 311	7	Full Summer (10 Weeks)
	10	

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
OT 305	3	OT 316/316L	3/1
OT 320	3	OT 340/340L	3/1
OT 312/312L	3/1	OT 355	3
OT 314/314L	3/1	OT 360	3
OT 330	3	OT 381	1
	17		15

SENIOR YEAR

Summer Session	Cr. Hrs.
OT 342	3
OT 350/350L	3/1
OT 365	3
OT 391	1
	11

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
OT 400	3	OT 474	6
OT 410	2	OT 475/476	6
OT 445	3	(Fieldwork Experience)	
OT 446	2		
OT 447	2		
OT 470	3		
OT 473	1		
	16		12

ACCREDITATION

The Department of Occupational Therapy is accredited by the Accreditation Council for Occupational Therapy Education, (ACOTE) of the American Occupational Therapy Association, (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. The telephone number for AOTA is (301) 652-AOTA. Graduates will be eligible to take the national board certification examination for the Occupational Therapist administered by the National Board Certification in Occupational Therapy, (NBCOT). After successful completion of this examination, the individual will be an Occupational Therapist, (OT) and will meet the educational requirements for licensure in Tennessee and most other states that regulate the practice of Occupational Therapy.

COURSE DESCRIPTIONS

Occupational Therapy (OT)

OT 214 Principles of Motion (3). This course will provide students the opportunity to learn the basic principles of motion so they may acquire a sound basis, facilitating their subsequent work in OT 314 (Biomechanics). This course is designed to incorporate practice in relating scientific principles and models to real world phenomena. Prerequisites: Math 114

OT 301 Foundations in Occupational Therapy (3). Introduction to occupational roles and the theoretical basis for using purposeful activity. Includes history and development of the profession; personal ethics and values, socio-cultural systems; and therapeutic use of self Prerequisite: OT professional student status.

OT 305 Health Maintenance and Wellness (3). This course provides a holistic focus on health maintenance and prevention from an occupational therapy perspective. Theoretical concepts are introduced and explored through active learning strategies. An emphasis on group/team dynamics and problem solving and study of emotional and physical daily living skills from a personal perspective provides students with multiple opportunities for insight into theory and health. Prerequisites: OT 301, 311

OT 311 Cadaver Anatomy (7). Study of the human body through laboratory dissection and lecture. Includes musculoskeletal skeletal, cardiovascular, and neurological systems. Prerequisite: OT professional student status.

OT 312 Neurobiology (3). Study of structure and function of the human nervous system including principles and concepts related to control of physiological functions in normal and abnormal states. Prerequisite: OT 311.

OT 312L Neurobiology Laboratory (1). Laboratory to be taken concurrently with OT 312.

OT 314 Biomechanics & Kinesiology (3). Laboratory course applying anatomy and kinesiology to the evaluation of joint range of motion, muscle strength, muscle tone and coordination, and construction and use of static hand splints. Prerequisite: OT 311.

OT 314L Biomechanics Laboratory (1). Biomechanics laboratory to be taken concurrently with OT 314.

OT 316 Occupational Therapy Principals and Practice in Mental Health (3). The study of interpersonal skills, self-expression, coping skills, time management, and self-control, and to foster the psychosocial competencies of the student. This course is part of the educational foundation for all occupational therapy practice, regardless of the treatment setting, including applications for physical disabilities. Students are also introduced to specialization in mental health practice. Course includes application of core and specialized knowledge of those individuals with a diagnosis of mental illness for whom psychopathologies impact the ability to cope with and manage daily living roles and activities. Prerequisites: PSY 321, 351; OT 301 and OT 305.

OT 316L Psychosocial Laboratory (2). Laboratory to be taken concurrently with OT 316.

OT 320 Medical Conditions (3). The study of the etiology, prognosis progression and medical management of major conditions that cause difficulties in daily-living tasks for the individuals served by occupational therapists. Emphasis is on teaching the thinking process employed by occupational therapists to determine what occupational therapy services as the individual patient/client needs. Prerequisites: OT 301 and OT 311.

OT 330 Activity Processes (3). Therapeutic application of media techniques, activity analysis, and teaching methods for individual and group treatment. Prerequisite: OT 301.

OT 340 Physical Disabilities, Principals and Practice I (3). Study of orthopedic conditions and evaluation and treatment techniques. Prerequisites: OT 301, 305, 311, 312, 314, and 320.

OT 340L Physical Disabilities Laboratory I (1). Laboratory course to be taken concurrently with OT 340.

OT 342 Special Topics in Development (3). Study of current topics in adult development and their application in occupational therapy. Prerequisites: PSY 321; OT 316 and 305.

OT 343 Upper Extremity Injuries and Orthotics (1) A laboratory course teaching upper extremity pathology and Orthotics; theory and fabrication. This is an elective course Prerequisite: permission of Department Head.

OT 344 Modalities in Occupational Therapy (1) A laboratory course teaching theory and treatment procedures and applications of various therapeutic modalities. This is an elective course. Prerequisite: permission of Department Head.

OT 350 Physical Disabilities Principles and Practice II (3). Course devoted to theories and approaches to evaluation and treatment of adults using the neurodevelopmental, cognitive, and cognitive behavioral frames of reference. It will include applications of positioning approaches, such as

Orthotics and seating, as well as physical agent modalities. Evaluation and treatment are examined in content of time, environmental, cultural, and social factors to promote successful adaptation to disability. Prerequisites: OT 340, 340L.

OT 350L Physical Disabilities Lab (1). Laboratory course to be taken concurrently with OT 350.

OT 355 Organization and Administration (3). An introductory course on the Business of Health Care and Managerial skills. Topics include: Health Care reform, administration, planning, financial management, marketing policies and procedures, clinical supervision, OT ethics and standards of practice and role delineations. Prerequisite: Permission of Department Head.

OT 360 Assistive Technology in Rehabilitation and Education (3). Lecture laboratory based introduction to the use of computers, adaptive technology and software as applicable to individuals with disabilities. Prerequisite: BIS 215 and permission of Department Head.

OT 365 Community Practice (3). Fundamentals of community practice, consultation and use of community resources. Exploration of non-traditional community settings, Goal writing and funding. Prerequisite: Permission of Department Head.

OT 381 Clinical Practicum II (1). Weekly seminar and 40 hours of clinical experience in a setting in which the biomechanical and/or rehabilitative frames of reference are used. Skills in documentation and professional behavior are enhanced, as appropriate to these settings.

OT 391 Physical Disabilities II Clinical Practicum (1). Weekly seminar and 40 hours of clinical experience in a setting in which the neurodevelopmental and cognitive/cognitive behavioral frames of reference are used. Skills in documentation and professional behavior are further refined, as appropriate to these settings.

OT 400 Occupational Therapy Principals III (3). Study of various developmental disabilities, their impact on family and social systems, and occupational therapy theory and treatment. Prerequisites: OT 350.

OT 410 Occupational Therapy Practice III (2). Laboratory Practice of occupational therapy assessments and intervention techniques for individuals with developmental disabilities. Prerequisites: Concurrent enrollment in OT 350L and 400.

OT 445 Community Mental Health (3). This course includes the study of psychological dysfunction throughout the life span, including child and family issues and issues that arise for people functioning in community settings. Prerequisites: OT 305, 316, 316L, 365, Co-requisites OT 446, 447

OT 446 Community Mental Health Practice (2). This course will encompass the study of psychosocial factors affecting one's overall health and ability to function within the community and society. This course will also study the psychosocial factors that impact health throughout the life span. Prerequisites: OT 305, 316, 316L, 365 Co-requisites OT 445, 447

OT 447 Community Mental Health Practicum (2). Students participate in a community based fieldwork experience where they have opportunities to work with individuals of various ages, ranging from childhood to late adulthood, and with psychosocial and /or physical illness or disability. This course will provide experience in applying the holistic perspective of occupational therapy. Prerequisites: OT 305, 316, 316L,365 Co-requisites: OT 445, 446

OT 470 Senior Project (3). This course provides an opportunity to students to plan and implement either a research project or special project. The project development and implementation will be supported by course material including research design, human subject review protocol, and analysis of other occupational therapist's related work. Prerequisite: Permission of instructor

OT 473 Clinical Practicum III (1). Level I field experience within a pediatric setting. includes I hour seminar and 30-40 hours working with a person with a developmental disability. Prerequisite or Corequisite: OT 410.

OT 474 Field Work Experience (6). 450-480 hours of supervised clinical experience in a hospital, clinical or other center-based facility approved by the Department. Prerequisite: Completion of all other degree requirements and permission of Department Head.

OT 475 Field Work Experience (6). 450-480 hours of supervised clinical experience in a community based or psychosocial practice setting approved by the Department Head. Prerequisite: Completion of OT 474 or concurrent enrollment.

OT 476 Field Work Experience (6). 400 480 hours of supervised occupational therapy experience in an educational or family centered model approved by the Department. Prerequisite: Completion of OT 474 or concurrent enrollment.

Department of Speech Pathology and Audiology

Harold R. Mitchell, Ph.D., Head
Suite A, Avon Williams Campus

Faculty: P. Burch-Sims, J. Cantrell, I. Johnson, V. Matlock.

General Statement: The Department of Speech Pathology and Audiology in the School of Allied Health Professions offers courses of study leading to the Bachelor of Science (B.S.) degree in Speech Pathology and Audiology. Certification to practice in this field requires a master's degree as entry level. The Bachelor of Science degree primarily prepares students for graduate programs. (See the *Tennessee State University Graduate School Catalog* for teacher education and graduate program information.) Courses in this major are structured to provide students with background information, theories, principles, and techniques for diagnosis and remediation of speech, language, and hearing disorders.

The program supplements classroom instruction with required supervised clinical observation and practicum experiences in speech-language pathology and audiology. Clinical experiences applicable toward ASHA certification are available. The on-campus Speech, Hearing, and Language Development Center and the Audiology Clinic provide diagnostic and therapy services to children and adults in Nashville-Davidson County and surrounding counties. Students can be assigned to off-campus practicum sites for observation, diagnostic and clinical experiences, and involvement in interdisciplinary team approaches to case management.

In addition to its academic commitment, the undergraduate/baccalaureate program in speech pathology and audiology provides diagnostic and therapeutic clinical services in the areas of speech, hearing, and language pathologies for the surrounding University community. Joint lectures and healthcare programs are sponsored in cooperation with Vanderbilt University and Meharry Medical College. Students may be allowed to acquire other clinical experiences at the Veterans Administration Hospital, various day care centers, senior citizens centers, and other agencies/facilities in the metropolitan area. These experiences are designed to be expanded upon in a master's level program.

In cooperation with the College of Education, the Department provides assessment of oral communication skills for all University students applying for admission to teacher education programs.

Admission/Retention Requirements:

The Department offers a curriculum leading to the BS degree, which is considered a pre-professional degree for certification in teacher education and speech pathology or audiology. Undergraduate admission/retention requirements follow:

1. Admission to Tennessee State University.

2. All students entering the department will be screened to determine if they have disorders of communication. Students who are found to have such disorders will be required to enroll in the proper therapeutic program or course for remediation. Students are also reminded that they are expected to show steady growth in their development of vocabulary, reading, speaking, and writing skills.

3. Grades of "C" or better are required in courses within the major. Grades which are less than "C" must be repeated.

Departmental Requirements For Bachelor of Science in Speech Pathology and Audiology 40-43 Semester Hours

MAJOR CORE: A minimum of 40 to 43 semester hours inclusive of the courses SPTH 200, 250, 260, 280/310, 290, 305 or 376, 350, 372, 373, 374, 450, 460, 470, 476, and the clinical courses 300 and/or 400 (a,b,c).

Suggested Four Year Plan:

Bachelor of Science Degree in Speech Pathology and Audiology

FRESHMAN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AHP 100	1	BIO 222, 222L	4
BIO 221, 221L	4	ENGL 1020	3
ENGL 1010	3	HIST 2020	3
HIST 2010	3	HPER (2-digit)	1
HPER (2-digit)	1	MATH 1010	3
BIS 215	3	Humanities Elective	3
Humanities Elective	3		
	18		17

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
ENGL 2010/2020	3	Electives* (2)	6
SPTH 250	3	PSY 311 or SOC 300	3
SPTH 310	3	PSY 242	3
SOCI 2010	3	SPTH 260	3
SPTH 305	3	SPTH 473	3
Elective	3		
	18		18

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
SPTH 290	3	*Elective	3
SPTH 350	3	EDSE 336 or 337 or 468	3
EDSE 333	3	SPTH 300B	1
SPTH 374	3	SPTH 476	3
EDAD 400	3	SPTH 373	3
		SPTH 372	3
	15		16

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
SPTH 400A	1	SPTH 400B	1
SPTH 450	3	Electives*	8
SPTH 470	3	SPTH 460	3
Electives*	6	SPTH 480	3
	13		15

*Confer with departmental advisor for recommended electives.

ACCREDITATION

The Department of Speech Pathology and Audiology has maintained accreditation by the Council of Academic Accreditation of the American Speech-Language-Hearing Association since 1971.

COURSE DESCRIPTIONS

Speech Pathology and Audiology (SPTH)

SPTH 250 Speech and Hearing Sciences (3). An introduction to the anatomy and physiology of the speech and hearing mechanisms. The course inspects the acoustics and perception of speech as well as the psychophysics of hearing.

SPTH 260 Phonetics (3). An introductory course in phonetics, the science of speech sounds, which includes acoustics, articulatory and perceptual analysis of speech sounds and transcription of American speech into the international Phonetics Alphabet. Students in speech pathology and audiology are expected to apply this knowledge in the clinical setting.

SPTH 290 Clinical Methods in Articulation Disorders (3). The description, diagnosis and remediation of articulation problems. The academics covered include a review of physical production of speech, normal developmental learning patterns of speech, various models of speech processes and theoretical bases for therapeutic procedures. Prerequisite: SPTH 260.

SPTH 300 Supervised Clinical Practicum (1 hour). An application of clinical session planning skills to first direct client-contact situation, management of one therapy case with close supervision: administration of basic diagnostic tests. Prerequisite: SPTH 260, 310, and 350

SPTH 305 Voice and Diction Improvement (3). A course designed to present the student with an overview of the anatomical and physiological bases for the principles inherent in effective oral communication, especially as related to articulation, language, voice, rhythm, and listening skills — accompanied by practical exercises that will assist in the modification of the student's speech behavior.

SPTH 310 Introduction to Human Communication (3). An introduction to the profession and to the nature and types of speech, hearing and language problems, presenting characteristics and overviews of various methods used in identifying and managing these disorders.

SPTH 350 Language and Speech Development of Children (3). This course is designed to familiarize the undergraduate student with the normal development of language and speech. Students must understand the nature and purposes of communication, the element of the language and speech, and also must understand the nature and purposes of communication, the elements of the language system, the neurophysiological bases for language development, and the psychosocial aspects of the development of speech and language.

SPTH 372 Identification and Appraisal of Speech and Language Disorders (3). This course prepares the student to administer and interpret results of various diagnostic procedures used by professionals in the area of speech pathology and audiology. The theoretical bases for the tests will be covered and basic skills in administration of the tests will be required. Prerequisites: SPTH 260, 290, 310, 350.

SPTH 373 Aural Rehabilitation (3). The history, principles and theory of speech-reading and auditory training, and introduction to amplifying systems including hearing aids. It includes a discussion of comprehensive care for the hearing impaired including psychological aspects and counseling. Prerequisite: SPTH 374

SPTH 374 Introduction to Audiology (3). An introduction to the anatomical and physiological aspects of hearing. The course will explore the etiology and types of hearing loss. It also focuses on theory and practice of techniques of auditory assessment with emphasis on pure tone, speech and impedance audiometry, and the interpretation of test results. Prerequisite: SPTH 250.

SPTH 376 Speech, Language and Voice Improvement Training (3). A speech/oral communication improvement course which trains students to identify and isolate distinctive features and other characteristics of their own speech, voice, language, and vocabulary skills with a plethora of opportunities to modify them through practical clinical exercises, designed

by the instructor. The student is encouraged (but not required) to have completed or be concurrently enrolled in SPTH 305, Voice and Diction.

SPTH 377 Identifying Communication Problems of the Developmentally Disabled with Strategies for Remediation (3). This course acquaints the student with the various types of communication patterns found in various groups of developmentally handicapped individuals (both adults and children); it avoids the traditional areas of stuttering and articulation, and instead stresses the patterns and functions of verbal and nonverbal communication, and their impact on adaptive life skills and social interactions. The course progresses to intervention strategies and remediation tactics often used for the different types of communication disorders.

SPTH 400 Supervised Clinical Practicum (1-3). The management of therapy cases with supervision. The main focus will center on the student's demonstration of increased skill in diagnosis, management, treatment, evaluation, and report writing skills in the field of communication disorders.

SPTH 450 Senior Project (3). An advanced composition or special project conducted by the graduating senior to acquire and demonstrate basic principles of research or investigation. The student is supervised by a member of the faculty.

SPTH 460 Organic Speech Disorders (3). The nature of disorders of speech in which structural alternation is an important contributing cause. It includes the study of neurological disorders (cerebral palsy and aphasia), cleft palate, laryngectomy (esophageal speech), and disorders of voice in which structural alteration can be either demonstrated or inferred. Prerequisite: Must have completed all major courses required of Junior year.

SPTH 470 Stuttering and Allied Disorders (3). This course is designed to provide the student with the theoretical and historical background of stuttering and its allied disorders. The student will be exposed to traditional, and new methods or techniques for diagnosing, treating, and counseling the stutterer and members of his family and environment. Prerequisite: Must have completed all major courses required of Junior year.

SPTH 473 Special Problems in Speech Pathology or Audiology (3). A seminar study of some selected problems in speech pathology/audiology.

SPTH 476 Language Disorders in Children (3). The nature of language disturbances resulting from damage to the central nervous system, auditory impairment, environmental, social, and psychogenic influences. Managerial procedures are discussed while numerous diagnostic tests of language are demonstrated. Prerequisite: SPTH 350.

SPTH 477 Alternatives for the Severely Speech, Hearing and Language Impaired. A course designed to provide an overview of recent developments of nonvocal communication systems and other telesensory electronic devices and instruments—as well as an understanding of the potentials that may be realized through use of special techniques, communication aids, and other technological developments for the physically disabled child or adult.+

SPTH 478 Non-Verbal Communication System (3). This course is designed to introduce the student to the various sign language systems with an opportunity to learn one or more techniques for communicating with specific groups, including the deaf, mentally retarded, physically disabled, and other special populations which may need a non-vocal communication system.+

SPTH 479 Communication Problems of the Elderly (3). This course is designed to teach students how to identify, diagnose, treat and manage communication problems associated with the aged. Special attention will focus on speech, hearing, language, voice, fluency problems, commonly seen among the elderly. Various diseases, medications, social conditions, biological, sociological and psychological factors will be studied to isolate their influencing properties.+

SPTH 480 Speech Science & Instrumentation (3). A study of the properties of sound, mechanisms of speech production and perception, and relevant speech science instrumentation. The information/topics studied will be a combination of classroom presentations/lectures accompanied by guided competence activities with the appropriate instrumentation devices. Prerequisites: SPTH 250 & 260.

+Permission of Department Head Required.

SCHOOL OF NURSING

Frederick S. Humphries
Family and Consumer Sciences and
Nursing Education Complex

General Statement

The School of Nursing contributes to the health and welfare of the citizens of Tennessee by preparing registered nurses who have the knowledge and skill to provide quality nursing care in many different settings. The School of Nursing offers two undergraduate degrees; an associate of applied science degree (two year program) and a baccalaureate degree (four year program). Both programs are approved by the Tennessee Board of Nurse Examiners and accredited by the National League for Nursing Accrediting Commission (NLNAC). The NLNAC is a resource for information about tuition, fees, and length of programs. For specific information contact the NLNAC at 61 Broadway, New York, NY 10006, 1-800-669-1656. Graduates of both programs are eligible to take the NCLEX-RN licensing examination.

Legal Requirements of State Boards of Nursing

Eligibility for licensure for graduates who have been convicted of a violation of the law will be determined by a State Board of Nursing on an individual basis.

Special Fees and Expenses

Students in the nursing programs are required to pay fees for standardized examinations. Students are required to have a physical examination and immunizations, purchase liability insurance, uniforms and equipment, and provide their own transportation to assigned clinical sites. Clinical agencies may require students to have health insurance.

Requirements for Graduation

Students are eligible for graduation upon completion of all the University and School of Nursing program requirements. All nursing students must earn a passing score on the comprehensive program examination before graduation. A minimum of 68 hours are required for graduation from the AAS program and 130 hours from the BSN program.

Transferring Between TSU Nursing Programs

Students may not transfer from one TSU nursing program to another if they have failed (grade of D or F) a nursing course or are ineligible, for any reason, to continue in their current program.

Associate of Applied Science in Nursing Degree

Program Office
Frederick S. Humphries
Family and Consumer Sciences and
Nursing Education Complex

Faculty: H. Allie, S. Bass, S. Bernet, C. Chapman, M. Dahlhauser, B. Fleming, M. A. Helms, S. Lea, J. Polite, A. Rawls, M. Witherspoon.

General Statement: The Department of Associate of Applied Science Degree in Nursing is designed to prepare nurses who can assess patient needs, develop a plan of care, implement the plan of care skillfully, and evaluate the effectiveness of the care given. Care is provided to clients with commonly occurring illnesses in a variety of settings.

Program Options

There are two options for completing the associate degree program:

1. The regular weekday program is offered on the main TSU campus in Nashville and at Volunteer State Community College in Gallatin.

2. The LPN-RN Career Mobility weekend evening program is offered on the TSU Avon Williams campus in Nashville.

Admission, Progression, Retention Requirements

Students must be accepted into the University and be advised by the School of Nursing faculty to assure students are completing the required courses for the AAS degree program.

Students can meet the prerequisite math requirement for the School of Nursing by:

Taking an ACT (Enhanced) examination, within the last 3 years, and having a composite and a mathematics score of 19 or more;

Taking the Compass placement test and completing the required math courses with grades of C or better, or

Completing a college level algebra course.

Students can meet the prerequisite Chemistry requirement for the School of Nursing by:

Completing Chemistry, with a lab (1 year high school or 1 semester of college with grade of "C" or better).

All high school deficiencies, developmental, remedial, courses and pre-requisite courses must be completed before being admitted to the AAS Nursing Program. Students are admitted on a space available basis.

Admission Requirements

1. High school graduate or a GED score of 50. Applicants with GED scores below 50 must complete prescribed college level courses with a minimum GPA of 2.50.
2. Cumulative GPA of 2.50 on high school or completed college work.
3. One year of high school or one semester of college chemistry with a lab (CHEM 100 & 100L), with grades of C or better.
4. An acceptable score on the pre-entrance nursing examination with emphasis on reading and verbal scores.
5. A minimum grade of C in each non-nursing required course. Required courses, with grades of D, must be repeated before review for admission.
6. Anatomy/physiology and microbiology/bacteriology courses must have been taken within the last five years of admission to the program.
7. The curriculum plan must be followed in the sequence listed in the catalog. General required courses must be taken in the semester listed or may be completed before the required semester.
8. Verification of math competency at the intermediate algebra level by University testing or completion of required courses (developmental math courses or a college level algebra course).
9. Be officially admitted to the University and the nursing major.

Admission Process

Students who meet the admission requirements for the nursing program must complete the admission process.

1. The required admission materials for the Associate Degree Nursing Program are a completed School of Nursing application with copies of the following information attached:
   a) Letter of intent stating why the applicant is interested in a nursing career
   b) Copies of transcripts from all other institutions
   c) Copy of current TSU transcript
   d) TSU admission letter for new and newly re-admitted students
   e) ACT (Enhanced) or SAT or Compass placement examination scores
   f) Pre-entrance nursing examination score
2. The Admissions Committee will consider students who have submitted completed application materials, including pre-nursing examination scores, by February 15th. A ranking system is used which considers the number of required general courses completed.
3. Applications received after February 15th will be considered on a space available basis. Applications received after March 1st will not be considered for that year. Students who are not admitted may apply for the next academic year.
4. Students are notified of their admission status by May 15th. Students must return their acceptance form by the date listed in their letter to assure their space in the class. Students not returning their forms by that date will be removed from the admission list.
5. Students who are admitted must have a health examination which indicates satisfactory health and the required immunizations before starting the nursing courses.
6. Students must show evidence of current CPR certification and liability insurance in order to attend nursing classes/clinical.

Progression and Retention Requirements

1. A grade of C or better in lecture and S (satisfactory) in laboratory and clinical evaluation is considered passing.
2. A grade of D or F is considered failing. A student who earns a failing grade in a nursing course is not eligible to progress in the program or be admitted to the BSN program.

Readmission Process

1. A student who earns a failing grade in a nursing course and wants to re-apply must do so, in writing, to the Program Director for re-entry at least six weeks before the beginning of the semester re-entry is requested. An updated transcript is required. Re-admissions are based on previous performance in nursing courses, faculty recommendations, and available faculty and clinical resources. There is no guarantee that any student will be re-admitted.
2. A student who earns a second failing grade in any nursing course at TSU cannot continue in the program.

Admission Requirements for Licensed Practical Nurses (LPN)

Licensed practical nurses must meet the same admission requirements as regular students. Chemistry and math prerequisites and all high school deficiencies, remedial, and developmental courses must be completed before enrolling in NURS 100C.

Advanced Standing for Licensed Practical Nurses (LPN)

LPN students are awarded credit through the challenge process. Credit for NURS 101 is awarded after successful completion of NURS 100C (LPN Transition) and one clinical course (NURS 102, 201, or 202). Grades for NURS 101 are recorded as credit (P and S). Upon successful NURS 102 challenge, LPN's may register for 2nd year AD courses. In the spring semester, LPN's must register and pay tuition and fees for NURS 102. The grade earned is recorded on the transcript. Only nursing courses may be taken in the spring semester for a total of 19 hours (NURS 102, NURS 201 or 202, NURS 220).

Admission Process for Licensed Practical Nurses (LPN)

LPN students are admitted through the same process as regular students.

1. High school graduate or a GED score of 50. Applicants with GED scores below 50 must complete prescribed college level courses with a minimum GPA of 2.50.
2. Cumulative GPA of 2.50 on high school or completed college work.
3. One year of high school or one semester of college chemistry with a lab (CHEM 100 & 100L), with grades of C or better.
4. An acceptable score on the pre-entrance nursing examination with emphasis on reading and verbal scores.
5. Verification of math competency at the Intermediate Algebra Level by University testing or completion of required courses (developmental math courses or a college level algebra course).
6. Be officially admitted to the University and the School of Nursing.

Additional requirements are:

1. Proof of current Tennessee LPN license
2. Completion of NURS 100C with a minimum grade of C
3. Complete the majority of required general courses before enrolling in any AAS nursing courses.
4. A minimum of one year clinical experience and currently working in nursing.

Progression Requirements of Licensed Practical Nurses

LPN's who successfully pass the NURS 102 challenge will have the following progression:

Fall	HR	Spring	HR
NURS 202	9	NURS 102 (Register for lecture, clinical, and lab to receive credit)	8
Credit for NURS 101 will be noted on the transcript after successful completion of the fall semester.		NURS 201	9
		NURS 220	2
			19
		(Will request 1 hour overload, no other courses can be taken)	

LPN's who are NOT successful on the NURS 102 challenge will have the following progression.

Fall	HR	Spring	HR
Complete any remaining general courses		NURS 102	8
		Credit for NURS 101 will be noted on the transcript after successful completion of the spring semester.	
Fall	**HR**	**Spring**	**HR**
NURS 202	9	NURS 201	9
		NURS 220	2
			11

The maximum course load for LPN students is 18 hours in the fall and 19 hours in the Spring. Students may not register for additional courses at other institutions. Any remaining general courses will be completed in the summer and students will graduate in August.

Transfer of RN Nursing Courses

Transfer students from other RN programs must meet the University and School of Nursing requirements for admission and graduation. Students who have completed nursing courses, with minimum grades of C in an NLNAC accredited RN program, may be eligible to receive transfer credit. Students must provide a current transcript, nursing course descriptions, evidence of satisfactory clinical performance, and a letter of good standing from their previous nursing school director **BEFORE** the course(s) are evaluated. Students who have earned a D, F, or WF, in a nursing course at another school, are not eligible for admission. Transfer students are admitted on a space available basis.

Departmental Requirements For Associate of Applied Science in Nursing **35 Semester Hours**

MAJOR CORE: Thirty five semester hours of nursing are required; NURS 101, 102, 201, 202, 220.

GENERAL EDUCATION CORE: Thirty five semester hours of University and general education courses are required: ENGL 1010 and 1020; BIO 221, 221L, 222, 222L, 240, 240L; PSYC 2010 and 351; SOCI 2010; MATH 110; SPCH 220; Humanities Elective, HPER (two semesters, 1 hour each semester).

Suggested Two Year Plan:

Associate of Applied Science in Nursing

FRESHMAN YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
NURS 101	7	NURS 102	8
BIO 221 & 221L	4	BIO 221 & 221L	4
ENGL 1010	3	ENGL 1020	3
PSYC 2010	3	PSY 351	3
MATH 110	1		
	18		18

SOPHOMORE YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
NURS 201	9	NURS 202 or 201	9
BIO 240 &		NURS 220	2
BIO 240L	4	SPCH 220	3
SOCI 2010	3	Humanities	
HPER	1	Elective	3
		HPER	1
	17		18

Course Descriptions

NURS 100C Preparation for Nursing (2). Transition course for licensed practical nurses. Focus is on nursing diagnosis and process, nursing history and trends, and professional role development.

NURS 101 Fundamentals of Nursing (7). Introduction to the nursing process and the concepts of person, environment, and health needs throughout the life cycle. Basic nursing skills related to maintenance of normal functioning are emphasized. Four lecture, two laboratory, and six clinical hours each week. Co-requisites (BIO 221, 221L, MATH 110, ENGL 1010, and PSYC 2010).

NURS 102 Adult Health Nursing I (8). The study of nursing care required to assist the individual and his family in coping with commonly occurring health problems. The nursing process; assessing, planning, intervention, and evaluation is emphasized. Pharmacology, nutrition, psychosocial, and cultural aspects are integrated. Five lecture, two laboratory, and six clinical

hours each week. Pre-requisite (NURS 101). Co-requisites (BIO 222, 222L, ENGL 1020,and PSY 351).

NURS 200 Special Topics (1-3). Student or faculty generated course. Scope of subject matter is determined by students/instructor with approval of the Program Director. RN transfer students register for course to meet program requirements. 1-3 seminar and/or laboratory hours each week.

NURS 201 Adult Health Nursing II (9). Emphasis is placed on the psychosocial, preventive, and rehabilitative aspects of caring for patients with complex and massive limitations. The student learns to assist the patient and family cope with changes in health status which require extended care. Five lecture and twelve clinical hours each week.

NURS 202 Family-Centered Approach to Maternal-Child Health (9). Using the nursing process, the student learns to assume increasing responsibility for judgments in patient situations requiring understanding of concepts and principles of maternal-child nursing. Five lecture and twelve clinical hours each week. Pre-requisites (NURS 101, 102, 201 or 202). Co-requisites for the fall semester with NURS 201 or 202: (BIO 240, 240L, SOCI 2010 and 1 HPER). Co-requisites for the spring semester with NURS 201 or 202: (NURS 220, SPCH 220, Humanities elective and 1 HPER).

NURS 220 Nursing Seminar (2). The course focuses on current issues and trends in the practice of nursing and the relationships with past events. Legal aspects, nursing ethics, management, and adjustments related to making the transition from student to graduate nurse are presented. Two seminar hours each week. Pre-requisites (NURS 101, 102, 201 or 202). Co-requisite (NURS 201 or 202).

Baccalaureate Nursing Degree Program

Yvonne N. Stringfield, Ed.D., R.N., Program Director
Frederick S. Humphries Family and Consumer Sciences and Nursing Education Complex

Faculty: V. Briscoe, B, Buchanan, J. Linn, J. Norman, M. Pleas, E. Schlenker, V. Vaughan, B. Wilson.

General Statement: Upon completion of the Bachelor of Science Degree in Nursing, the graduate will be able to:

1. Synthesize theoretical and emprirical knowledge from the natural and behavioral sciences, the humanities and nursing as a basis for making practice decisions.
2. Evaluate the nursing process as a critical thinking tool to promote, maintain, and restore health to individuals, families, and communities by providing therapeutic nursing interventions, management of care, health promotion, disease prevention instruction, counseling and health and illness screening.
3. Value the leadership role in nursing by upholding bio-socio-cultural-ethical-legal and professional practice standards which affect nursing by acting as a change agent in accordance with these principles.
4. Collaborate with multi-disciplinary health team members, individuals, families and/or communities to improve the health care delivery system.
5. Appraise involvement in activities related to SERVICE, continuing education and graduate education in order to maintain professional competence.
6. Critically evaluate research findings for use in the practice setting.

Admission, Progression, Retention Requirements

Students must be accepted into the University and meet with the School of Nursing faculty to assure they are completing the required general courses in the first two years of the program (lower division).

Admission Requirements for the Nursing Major

1. A cumulative GPA of at least 2.5 on a 4.0 scale.
2. A minimum grade of C in each course. Required courses, with grades of D, must be repeated before review for admission.
3. Completion of 67 hours of lower division required University and general education courses for Spring admission.
4. Completion of 76 hours of lower division required University and general education courses for Summer admission.
5. Completion of the required basic science courses.
6. Minimum scores at the 70th percentile in the pre-nursing examination, with emphasis on the reading and verbal scores.
7. Be in good academic standing in previous schools/colleges and nursing programs (if a transfer nursing student).

Admission Process for the Nursing Major

Students who meet the admission requirements for the nursing major need to complete a School of Nursing application with copies of the following information attached:

1. a) Copies of all college transcripts
   b) Current TSU transcript
   c) TSU admission letter for new and newly re-admitted students
   d) Pre-entrance nursing examination scores
2. Interview with BSN Program Director or Faculty
3. The Admissions Committee will consider students who have submitted their completed application materials by **SEPTEMBER 15th** for Spring admission and by **FEBRUARY 15th** for Summer admission.
4. Applications received after the deadlines will be returned to the applicants who can apply for the next admission cycle.
5. Students are notified of their admission status by December 1st for Spring admission or April 30th for Summer admission.
6. Students who are admitted must have a health examination which indicates satisfactory health and the required immunizations before starting the nursing courses.
7. Students must show evidence of current CPR certification and liability insurance in order to attend nursing classes/clinical.

Students are admitted to the program on a space available basis.

Progression and Retention Requirements

1. A grade of C or better in lecture and S (satisfactory) in laboratory and clinical evaluation is passing.
2. A grade of D or F is failing. A student who earns a failing grade in a BSN nursing course is not eligible to progress in the BSN program and cannot transfer to the AAS program at Tennessee State University.
3. Pathophysiology course (BIO 427A)and all general education courses must be completed before beginning the junior level nursing courses.
4. Upper level nursing courses are sequential and each level must be completed before progressing to the next level.
5. Students who withdraw from a nursing course but continue in other nursing courses for that semester must meet with the Program Director to update their plan for progression.

Re-admission Requirements and Process

Students who withdraw from the program may be reviewed, (one time only), by the BSN faculty to determine, on an individual basis, if they are eligible for re-admission to the program.

1. Students who apply for re-admission must meet the program admission requirements.
2. Once a student is re-admitted, the nursing courses must be completed in sequence. The student must progress to the next level of the program each semester.

3. A student who withdraws from the program a second time, for any reason, will not be re-admitted.

Admission Requirements for Registered Nurses (RN)

Registered nurses must meet the same admission requirements as generic students. All lower division University requirements and required courses must be completed with a cumulative GPA of 2.5 and a minimum grade of C in each course.

Admission Process for Registered Nurses (RN)

RN students are admitted through the same process as regular students. Additionally, RN students are required to have a current Tennessee RN license. RN students must meet with a BSN, Advisor to develop their plan of study before admission to the BSN program.

Progression Requirements for Registered Nurses (RN) (web-based)

The School of Nursing has a web-based Career Mobility Program for RN's to earn a BSN degree. Students may enter the program in the summer or fall.

The Career Mobility Program is one calendar year in length (3 semesters).

Summer	HR	Fall	HR	Spring	HR
NURS 332	3	NURS 300C	3	NURS 330	3
NURS 300B	3	NURS 325	3	NURS 436	6
		NURS 422	3		

Upon successful completion of the first two semesters of the *nursing, credit for 30 hours of BSN courses will be noted on the RN-BSN TSU transcript.*

Transfer of RN Nursing Courses

Transfer students from other four year schools must meet the University and School of Nursing requirements for admission and graduation. Students must provide a current transcript, nursing course descriptions, evidence of satisfactory clinical performance, and a letter of good standing from their previous nursing school **BEFORE** the course(s) are evaluated. Students who have earned a D, F, or WF, in a nursing course at another school, are not eligible for admission.

The BSN Program Director and faculty, who teach the courses being evaluated, will determine if the transfer courses are equivalent to TSU nursing courses. Students may be required to demonstrate lab and/or practicum competencies. Courses that are equivalent to required courses will be accepted if the student earned a minimum grade of C in the course(s) and have the required lab/practicum competencies. Students must meet the University residency degree requirements. Transfer students are accepted on a space available basis.

Departmental Requirements For Bachelor of Science Degree in Nursing **54 Semester Hours**

MAJOR CORE: Fifty-four semester hours of nursing are required; NURS 250, 328, 325, 332, 310, 330, 326, 414, 422, 434, 436.

77 Semester Hours

GENERAL EDUCATION CORE: Seventy-six semester hours of University and general education courses are required: Orientation, ENGL 1010, 1020, 2010, and 2020; HIST 2010 and 2020; 2 HPER; CHEM 1010 & 1011; BIO 221, 221L, 222, 222L, 240, 240L, 427A; MATH 1010; PHIL 2010; Humanities; SOCI 2010; CS 121; PSYC 2010, 311, 321, and 351; Electives, 9 semester hours.

Suggested Four Year Plan:

Bachelor of Science Degree in Nursing

FRESHMAN YEAR

Fall Courses	HR	Spring Courses	HR	Summer Courses	HR
ENGL 1010	3	ENGL 1020	3	BIO 240 & 240L	4
HIST 2010	3	HIST 2020	3	College level	
HPER	1	HPER	1	computer science	
College algebra or		SOCI 2010	3	course	3
higher level math	3	BIO 222 & 222L	4	Elective	3
BIO 221 & 221L	4	PSYC 2010	3		
Humanities	3				
NURS 110	1				
Orientation					
	18		17		10

SOPHOMORE YEAR

Fall Courses	HR	Spring Courses	HR	Summer Courses	HR
ENGL 2010 or 2020	3	ENGL 2020 or HUM	3	Elective	3
PSY 311	3	BIO 427A & 427K	4		
PHIL 2010	3	NURS 250	6	or NURS 250	6
PSY 321	3	CHEM 1010 & 1011	4		
PSY 351	3				
Elective	3				
	18		17		9

JUNIOR YEAR

Fall Courses	HR	Spring Courses	HR
NURS 328	6	NURS 310	6
NURS 325	3	NURS 330	3
NURS 332	3	NURS 326	3
	12		12

SENIOR YEAR

Fall Courses	HR	Spring Courses	HR
NURS 414	9	NURS 434	6
NURS 422	3	NURS 436	6
	12		12

Course Descriptions

NURS 110 Nursing Orientation (1). The course orients the student to the University and the School of Nursing resources, academic life polices and procedures, and the nursing major. One seminar hour each week.

NURS 250 Introduction to Nursing Practice (6). The course focuses on the introduction to the profession of nursing. Specifically, nursing theories, the nursing process, history of nursing, issues, and trends. Legal, moral, ethical, and social policy issues related to nursing are presented. Laboratory and clinical experiences provide opportunities to learn and apply essential nursing skills. Three lecture hours, two laboratory, and six clinical hours each week. Taught in the spring and summer semesters only. Prerequisites all general education core courses. Co-requisites - none. For spring semester admission may have 9 hours of non-nursing courses remaining. Program Director must approve which courses can be taken with NURS 250. For summer admission all required non-nursing courses

must be completed. Can only take NURS 250 in the summer. Pre-requisites all general education core courses. Co-requisites - none.

NURS 300 Special Topics (1-8). Student or faculty generated course. Scope of subject matter is determined by students/instructor with approval of the Program Director. Minimum of 8 students is needed to offer a course.

NURS 300B Wellness in Nursing (3). This course is an introduction to the nurse's role in health promotion and health education for self-care. Selexcted theories related to wellness are explored and applied to individual group and community situations, (RN-BSN students). Pre-requisites all general education core courses. Co-requisites: NURS 332.

NURS 300C Family Health Nursing Concepts (3). Identification and discussion of different concepts of family interaction, impact of culture, communication across the life span, and implications for nursing intervention, (RN-BSN students). Pre-requisities all general education core courses NURS 300B, 332. Co-requisites NURS 325, NURS 422.

NURS 328 Maternal-Child Nursing (6). A family centered approach to maternal-child nursing, using the nursing process is presented. The focus is on the normal maternity client and clients with common health alterations from pre-conception through the post-partum period. Care and management the normal newborn, well children, and those with selected problems are explored. Three lecture and nine clinical hours each week. Pre-requisite NURS 250. Co-requisites NURS 325 and 332.

NURS 325 Health Assessment (3). Basic physical and health assessment techniques are taught. The focus is on the adult client with emphasis on expected findings. Appropriate modifications for different age-groups and selected unexpected findings are discussed. Relevance and application of findings to client needs and clinical decision-making are presented. Two lecture and two laboratory hours each week. Pre-requisite NURS 250; co-requisites NURS 328 and 332.

NURS 332 Professionalism in Nursing (3). Identification and discussion of professional and leadership processes as they relate to the emerging and changing roles of nurses. Selected legal, ethical, social policy, and research issues related the practice of professional nursing are explored. Three lecture hours each week. Pre-requisite NURS 250. Co-requisites NURS 325 and 328.

NURS 310 Basic Concepts of Chronic Care Nursing (6). Selected concepts of health and illness, as they relate to bio-psychosocial and cultural needs through the life cycle, are presented. Focus is on the delivery of care to individuals and families with common, chronic health problems. There is a special emphasis on the health and nursing needs of the aging population. Three lecture, two laboratory, and six clinical hours each week. Pre-requisite NURS 250, NURS 328, NURS 332. Co-requisites NURS 330 and 326.

NURS 330 Nursing Management (3). Introduction to the management process and the nurse's role in managing client care and supervising other health care workers. Selected legal, fiscal, ethical, and professional issues related nursing management are explored. Three lecture hours each week. Pre-requisites NURS 250, 325, 328. Co-requisites NURS 310 and 330.

NURS 326 Gerontological Nursing Concepts (3). Selected concepts related to psychosocial, cultural, legal, ethical, social policy, and research issues of the aging population and their families are explored. The role of the nurse in meeting the needs of this population is stressed. Three lecture hours each week. Pre-requisite NURS 250, 325, and 332. Co-requisites NURS 310 and 330.

NURS 414 Acute Crisis Nursing (9). Application of the nursing process in a variety of settings requiring nursing intervention for acute problems of adult patients in acute care settings. Concepts of leadership and management are integrated into clinical experiences. Students do comprehensive health assessments, provide care, and evaluate the care given to clients and families. Five lecture and twelve clinical hours each week. Pre-requisites NURS 250, 328, 325, 332, 328, 330, 326. Co-requisite NURS 422.

NURS 422 Nursing Research (3). Introduction to the research process and the nurse's role in applying research to nursing practice and client care. Selected legal, ethical, and social policy issues related to research are explored. Three lecture hours each week. Pre-requisites NURS 250, 328, 325, 326, 332, 310, 330, 326. Co-requisite NURS 414.

NURS 434 Mental Health Nursing (6). Focus is on the application of the nursing process in the delivery of care to clients and families with commonly occurring psychiatric health problems. Emphasis is on environmental factors and the application of developmental systems and stress theories as they relate to the care of young middle and older age adults. Three lecture and nine clinical hours each week. Pre-requisites NURS 250, 328, 325, 332, 310, 330, 326, 414, 422. Co-requisite NURS 436.

NURS 436 Community Health Nursing (6). The course provides a theoretical and practical background for the practice of community health nursing. The course is based on the synthesis of nursing theory and the public health sciences. Emphasis is on health promotion, health maintenance, and disease prevention among population groups. The course assists students to recognize and analyze the interrelationships between individuals, families, population groups, and communities in determining the health status of each. The impact of political, economic, social, environmental, and cultural concerns, on the health of populations, is examined. Three lecture and nine clinical hours each week. Pre-requisites NURS 250, 328, 325, 332, 310, 330, 326, 414, 422. Co-requisite NURS 434.

AEROSPACE STUDIES

Commander: Joe A. Wilson, Colonel, USAF
AFROTC Detachment 790, Floyd-Payne Student Center

GENERAL STATEMENT

The Air Force Reserve Officer Training Corps (AFROTC) is the largest and oldest source of commissioned officers for the U.S. Air Force. AFROTC's mission is the following: To produce leaders and better citizens for America. AFROTC's headquarters is at Maxwell Air Force Base, AL. We teach our students the same curricula that future officers learn at the U.S. Air Force Academy and Officer Training School. Additionally, planners have designed the AFROTC program to recruit, educate, and commission college students based on U.S. Air Force (USAF) requirements. As of April 2001, over 170 ROTC detachments are located on college and university campuses throughout the U.S. and Puerto Rico.

Through cross-town or consortium agreements, students from various universities and colleges in middle Tennessee participate in AFROTC at Detachment 790. Students may enter in their freshmen, sophomore, junior, or senior academic year. We also have opportunities for graduate students. Please consult our web site at URL: <http://www.tnstate.edu/rotc> for a list of schools that we service and other information concerning our program.

GENERAL MILITARY CORPS (GMC)

For students who enter as freshmen, the first two years of AFROTC, the General Military Corps (GMC) consists of one hour of classroom work and two hours of leadership laboratory each week. Note that your institution may accept two courses in Aerospace Studies in lieu of two courses in Physical Education. Please consult your counselor for details. Any full-time student can participate in AFROTC GMC provided they meet age and citizenship requirements. Non-scholarship GMC cadets are under **no service obligation** whatsoever. Upon completion of GMC requirements, cadets who wish to compete for entry into the last two years of the program, the Professional Officer Corps (POC), must do so under the requirements of the POC selection system. This system uses qualitative factors, such as grade-point average, cadre evaluation, aptitude- and physical-fitness test scores to determine a cadet's potential for service in the USAF. After selection, students must successfully complete a four or five-week, summer-field-training encampment at an assigned USAF base before entering the Professional Officer Corps.

PROFESSIONAL OFFICER CORPS (POC)

Cadets enrolled in the Professional Officer Corps (POC) attend class three hours per week and participate in a weekly leadership laboratory lasting two hours. In the POC, cadets apply what they have learned in the GMC and at field training encampment. The Commandant of Cadets entrusts POC cadets lead the leadership laboratories. The underlying goal of the leadership laboratory is for POC cadets to teach GMC cadets how to perform as airmen and master general military customs and courtesies. POC class sizes are small. The instructor places emphasis on group discussions and refining communications skills. Classroom topics include leadership, communication, and U.S. national defense policy. Once enrolled in the POC, cadets enlist into the Air Force Reserve and incur a service obligation. This entitles them to an initial monthly $200, nontaxable, subsistence allowance during the academic year. As the budget allows, this total may increase.

FIELD TRAINING

Field Training is, in most cases, a cadet's first exposure to a working USAF environment. The goal of Field Training is to develop military leadership and discipline and refine the skills cadets learned in the GMC. The Field Training environment allows commissioned officers to evaluate each cadet's potential to serve as an officer. Field Training includes aircraft and aircrew orientation, USAF professional development orientation, marksmanship training, junior officer training, physical fitness, and survival training. The USAF provides uniforms, lodging, and meals at no cost to the cadet. Additionally, the USAF pays cadets for their travel expenses if they opt to use their privately owned vehicles or commercial air conveyance to travel to and from summer encampment. Additionally, after applicable deductions, Field-Training cadets earn about $650 for the four-week encampment and about $750 for the five-week encampment.

UNIVERSITY CREDITS AND CURRICULUM

Students must work with their institutions and departments to determine whether AFROTC classes will receive core, core elective, or general elective, or any credit at all. A Tennessee State University minor in Aerospace Studies consists of 22 semester hours and is available to those students who successfully complete GMC and POC curricula.

FRESHMAN- (GMC)	
AERO 1010	1
AERO 1020	1
	2
SOPHOMORE- (GMC)	
AERO 2010	1
AERO 2020	1
	2
JUNIOR- (POC)	
AERO 351	3
AERO 352	3
ELECTIVE*	3
	9
SENIOR- (POC)	
AERO 451	3
AERO 452	3
ELECTIVE*	3
	9

*Cadets may take this course at any time during their junior or senior years. However, they must select from 300- to 400-level Social Science offerings.

SCHOLARSHIP PROGRAM

Current emphasis in the Air Force ROTC College Scholarship Program is to award scholarships to candidates pursuing all types of degrees. Any student who maintains a "B" average, is physically fit, and morally sound may compete for a scholarship regardless of his/her major field of study. We select our scholarship recipients on the "whole-person concept."

Scholarships are awarded in four, three-and-one-half, three, two-and-one-half, two, and one-year increments. Scholarships typically cover a student's tuition, books, and associated fee costs. Cadets

on scholarship also earn a $200/month subsistence allowance. Moreover, those students who are academic standouts may even earn monies to pay for room, board, or similar expenses. Lastly, students who attend Historically Black Colleges or Universities have unique opportunities in our program. Please telephone (615-963-5931) or visit our office to learn more about this.

In addition to these scholarships, Air Force ROTC has an incentive scholarship program for cadets who have signed contracts committing them to the Professional Officer Corps (POC). This POC incentive scholarship pays up to $2,000 annually and is available to nearly all POC cadets who are not already receiving scholarship benefits, but otherwise eligible for POC incentive entitlements. All scholarship cadets are required to meet certain academic, military, and physical fitness standards to earn and maintain scholarship benefits. In addition, non-prior service scholarship recipients must be under age 27 as of 30 June of the calendar year during which commissioning is scheduled. Prior-service applicants may have this age limit extended by the total days of active duty military service, up to a maximum of 35 years of age.

COURSE DESCRIPTIONS

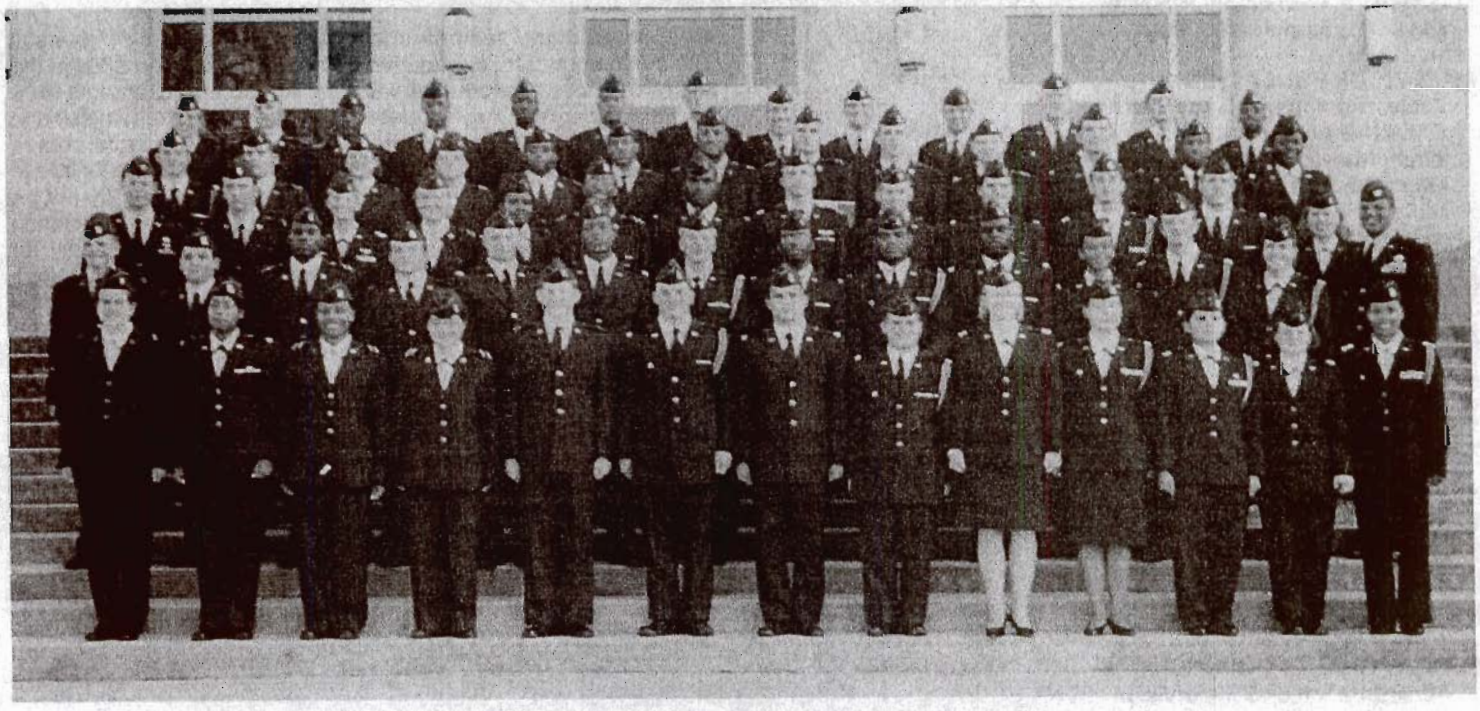
AERO 1010, 1020 The Foundations of the United States Air Force, is a survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, USAF officer opportunities, and an introduction to communication skills.

AERO 2010, 2020 Air Power History is designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF and space power.

AERO 351, 352 Air Force Leadership Studies, is a study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply advanced leadership and management principles.

AERO 451, 452 National Security Affairs/Preparation for Active Duty, examines the U.S. national security process, regional studies, advanced leadership ethics, and USAF doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting the military. Within this structure, we continue to emphasize the refinement of communication skills.

AERO 1011L-2021L; 351L - 452L Leadership Laboratory, all cadets enrolled in the GMC or POC must take leadership laboratory each semester. The one and one half hours per week is typically taken throughout a cadets' enrollment in AFROTC, but is not a requirement for participation in GMC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each cadets' leadership potential. Leadership laboratory involves a study of USAF customs and courtesies; drill and ceremony; career opportunities in the USAF, and the life and work of an USAF officer. Cadets develop advanced leadership skills in a practical laboratory. Co requisite: Cadets must enroll in the equivalent Aerospace Studies class.



The School of Graduate Studies and Research

Helen R. Barrett, Ph.D., Dean
Hubert Crouch Hall (Graduate Building)

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. The Graduate School was established in 1958.

Authorization to offer the doctorate in Education and in Public Administration was granted in 1980 and 1986 respectively. In 1986, the Doctor of Education degree in Educational Psychology and Guidance was changed to a Doctor of Education Degree in Psychology, and in 1996 the degree was changed to the Doctor of Philosophy.

Currently, the following graduate degrees and major fields are offered:

MASTER OF ARTS
- English

MASTER OF ARTS IN EDUCATION
- Family and Consumer Sciences
- Health, Physical Education, and Recreation

MASTER OF BUSINESS ADMINISTRATION

MASTER OF CRIMINAL JUSTICE
- (Joint Program with MTSU)

MASTER OF EDUCATION
- Administration and Supervision
- Curriculum and Instruction
- Elementary Education
- Special Education

MASTER OF ENGINEERING

MASTER OF PUBLIC ADMINISTRATION

MASTER OF SCIENCE
- Agricultural Science
- Biology
- Chemistry
- Computer and Information Systems Engineering
- Guidance and Counseling
- Mathematical Sciences
- Music Education
- Psychology
- Speech and Hearing Science

MASTER OF SCIENCE IN NURSING

EDUCATIONAL SPECIALIST
- Administration and Supervision
- School Psychology

DOCTOR OF EDUCATION
- Administration and Supervision
- Curriculum and Instruction

DOCTOR OF PHILOSOPHY
- Biological Sciences
- Psychology
- Public Administration

Requirements for these programs are described in the current Graduate School Catalog. Further information may be obtained by writing to:

The Dean of the Graduate School
Tennessee State University
3500 John A. Merritt Boulevard
Nashville, TN 37209-1561

All applications, test scores, and transcripts should be mailed to the above address.

See Graduate Catalog for application deadlines.

ADVANCED GRADUATE ADMISSION FOR UNDERGRADUATES

An undergraduate senior student at Tennessee State University with a minimum total cumulative GPA of 3.0 who is enrolled in the last term of coursework that will complete the requirements for a bachelor's degree, may request advanced graduate admission to enroll in 3 to 6 hours of graduate courses provided the total course load does not exceed 12 hours. Courses for seniors are limited to first-year graduate level courses. Graduate courses may not be used for credit toward an undergraduate degree. The Combination Senior is not considered a graduate student but may apply for admission to a graduate program upon completion of the bachelor's degree. However, advanced admission to take graduate courses does not guarantee subsequent admission to a graduate program. Courses taken for graduate credit may count toward a graduate degree when/if the student is admitted to a degree program at TSU and if approved by the program's graduate coordinator and Department Head. The form for Advanced Graduate Admission and an Application to the Graduate School must be completed six weeks prior to the beginning of the semester in which advanced admission is sought.

The University Honors Program

Sandra W. Holt, Ph.D., Director
Learning Resources Center

Faculty: W. Billings, K. Bryant, F. Chen, Y. Clark, D. Daniels, D. Elliott, P. Enochs, D. Gendron, S. Holt, H. Houston, J. Irby, L. James, G. Johnson, P. Kahlon, M. Karim, L. Lane, M. McDonald, C. McGinnis, W. McGowan, J. McKinney, M. Mazzone, D. Moore, E. Phillips, R. Simpson

General Statement: What is the University Honors Program? It is a spirited exchange with classmates who thrive on ideas, an inspiring seminar, a demanding teacher. It is a hayride and cook-out, an evening at the theater, or a jazz or gospel concert.

The UHP is special challenges and opportunities for some of the most talented and highly motivated of the University's undergraduate students. It is close, collaborative relationships between top students and distinguished faculty, small class sizes, and a chance to work at the cutting edge of an academic discipline.

Is it Difficult? The Honors student selects a major and carries a normal course load just as any other university student. However, a basic premise of the UHP is that special challenges and opportunities can help the academically advanced student excel. Honors students are encouraged to explore topics in greater breadth and depth to develop initiative, take an active role in the teaching-learning process.

How Does the University Honors Program Work? Only a select group of new students are admitted to the UHP each year as freshmen, though it is also possible to join the program on an off-cycle basis. Honors students may be enrolled in any undergraduate curriculum. Those who meet our retention requirements continue as UHP students during their entire undergraduate career.

UHP course work is concentrated in the freshman and sophomore years, when students take small enriched versions of general education courses. At the junior and senior level, when students are necessarily and appropriately involved in their major area of specialization, they can continue to receive the benefits of the UHP by supplementing their specialized course work with interdisciplinary honors seminars. A final requirement is the Honors senior thesis, which is to be defended before a committee, or a recital or the like for those students in the performing arts. In short, the UHP is directed at students who want to combine the best of liberal education and professional specialization.

The Honors Program does not require additional courses beyond those required of other students.

Grades awarded in honors courses coincide with those given for courses in the regular curriculum.

Benefits: While providing the advantages of a growing state university (low cost, vast resources, and cultural diversity), the UHP also harnesses the attractiveness of a liberal arts college (individual attention, small class size, and close interaction with faculty and fellow students). Other benefits include:

- scholarships designated specifically for honors students
- challenging courses designed especially for UHP students with enrollment usually limited to no more than 25 students
- intellectually-oriented faculty and peers
- grant opportunities to fund student research projects during the summer and to support student domestic international travel
- a variety of social and cultural activities
- notation on transcript of University Honors Program status
- use of the Honors Center which offers an atmosphere for study and relaxation
- special internships and graduate study opportunities

Admission/Retention Requirements: In addition to the general application for admission to the University, the prospective Honors student must also complete the application for admission to the UHP. There are no extra cost or additional fees associated with participation in the University Honors Program, not even an application fee.

Admission is made on the basis of the student's ACT/SAT scores and the high school record.

Baccalaureate students who do not participate in the Honors Program as entering freshmen may be admitted later by recommendation of a University faculty member. The latest point for a student to enter the Honors Program is the first semester of the junior year.

To remain in good standing in the Program, a student must maintain a minimum cumulative grade point average of 3.4, based on all course work. A student may withdraw from the Program at any time, but should first notify the Honors office.

Graduation with University Honors: At commencement, students who complete the requirements of the Honors Program will be graduated with "University Honors." They are awarded the Honors senior pin and the scarlet and gold cord.

These requirements include: 1) taking required Honors courses, 2) giving a recital or writing and defending a senior thesis. The student will select a topic for the Honors thesis with the approval of his or her major adviser and the instructor of the course. The topic may be related to his major field of interest or to a colloquium. Insofar as possible, advisers for the Honors thesis will be members of the Honors faculty. The student will select the topic in his or her senior year and defend it before the Honors Thesis Committee and such other persons who may be invited to sit for the defense, and 3) attain a cumulative average of at least 3.4.

Honors Courses

Freshman Year

Semester	Credit Hours
ENG 101-102H	3-3
BIO 111-112H	4-4
MATH 111H	3
THEA 120H	2
BIO 101-102H	3-3
CHEM 121H	3
CHEM 151H	3
HIST 201-202H	3-3
ART 133H	2
MUS 131H	2

Sophomore Year

ENG 211-212H	3-3
SPCH 220H	3

Junior Year

HP 300H	3
HP 301H	3

Senior Year

HP 400H	3
HP 401H	3
HP 403H	3
HP 410H	3

Course Descriptions

HP 300H Honors Junior Colloquium (3). Lectures, discussions, and student writing based upon a central theme—such as "The Twentieth Century"—which may vary from year to year. Original work and interpretations and adaptations of original works are bases for discussions. The faculty member who conducts the colloquium may invite outside experts to participate when he or she deems it advisable.

HP 301H Honors Special Topics (3). A junior level course designed to expose students to current issues, personalities, activities, and career opportunities in various areas of study offered by the University, through guest speakers, field trips, and the study of selected topics that will prepare them for excellence upon graduation.

HP 400H Honors Senior Colloquium (3). Lectures, discussions and student writing based upon a central theme—such as "The Educated Person" or "Black Arts"—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 401H Honors Special Topics (3). A course designed to expose students to current issues, personalities, activities, and career opportunities in various areas of study offered by the University, through guest speakers, field trips, and the study of selected topics that will prepare them for excellence upon graduation.

HP 403H Honors Summer Seminar (3-6). A course designed to expose students in the Honors program to different cultures through the study of cultural norms, government, schools, current issues, and career opportunities, and through actual travel to a specific culture studied. May also be offered in the Spring semester.

HP 410H Honors Senior Thesis (3). The student will be allowed freedom of choice in selecting a topic for his Honors thesis. The topic may, for example, be related to his major field of interest or to a colloquium. Insofar as possible, advisors for the Honors thesis will be members of the Honors faculty. The student will select his topic in the fall semester of his senior year and defend it before the Honors Thesis Committee and such other persons who may be invited to sit for the defense.

ACADEMIC ENRICHMENT, ADVISEMENT AND ORIENTATION

Monetha R. Reaves, D.A., Director
102, Harold M. Love Sr. Learning Resources Center

Faculty: J. Adams, H. Adi, M. Akbari, S. Arefin, J. Asamani, V. Batten, W. Buckley, J. Culp, J. Grimes, C. Helton, D. Hulbert, H. Kuzat, J. Mason, J. Sargent, M. Shirani, D. Thomas, J. Thompson, D. Wynn.

General Statement

Academic Enrichment, Advisement, and Orientation administers the University's Developmental Studies Program, operates the University's academic support laboratories (the Writing Center, the Math Lab, the Tutorial Computer Lab, and the Reading Lab); plans and implements advisement strategies and enrichment programs; and manages the Advisement Center for students who are enrolled in Developmental Studies courses and those who have not decided on a major.

Orientation and the Academic Advisement Center

All full-time students who have not declared a major must enroll in orientation. Orientation for Undecided Majors (ORN 100) introduces the student to University policies, exposes the student to career interests, and provides opportunities for selecting a major. Orientation for Non-Traditional Students (ORN 101) is designed for students who are 21 years of age or older who are returning to an academic setting. It also introduces the adult learner to the TSU community and to all facets of university life. Academic Recovery (ORN 102) is designed for students who are on academic probation or who have been re-admitted to the University after suspension.

The Developmental Studies Advisement Center is the academic counseling component of the Developmental Studies Program. The Center handles the academic matters of students who take basic/developmental courses or who have not yet chosen a major. Intrusive advisement is conducted by full-time academic advisors who staff the Center, and referrals to other University support services are made as needed. All services are provided daily on a first-come first-serve basis.

Academic Support Services

Academic Enrichment also provides a variety of academic support services for all students at the University whether they are taking basic, developmental, or college-level courses. There are tutorial labs for all levels of math, for problems in reading comprehension and speed, and for problems in writing from basic English skills to major term papers. The Academic Enrichment Academic Support Program offers a variety of tutorial delivery methods including one-to-one sessions, workshops, and small group sessions. There are computer tutorials, including special instructional software and on-line material. Tutorials are available not only for basic courses, such as reading, writing, and math, but also for such disciplines as business, chemistry, biology, literature, foreign languages, and psychology. There are special tutorials for students preparing for licensure examinations in health care areas. Services are available on both a walk-in and appointment basis depending on the nature of the assistance needed.

The Developmental Studies Program

The Tennessee Board of Regents of State University and Community College System required that, beginning in fall, 1985, freshman students seeking regular admission to a technical institute, community college, or university within the Tennessee State Board of Regents (TBR) who meet criteria listed below must participate in AAPP (as of Spring 2000, COMPASS [Computerized Adaptive Placement Assessment]) as a condition of enrollment:

- all freshman applicants for regular admission who are 21 years of age or older who have not taken the ACT or SAT within the last three years must take the complete COMPASS;
- all GED recipients who are seeking regular admission must take the complete COMPASS;
- all freshman applicants for regular admission who are 20 years of age or younger and who have a composite ACT or an SAT equivalent of 18 or lower must take the reading portion of the COMPASS;
- all freshman applicants for regular admission who are 20 years of age or younger and who have a subscore of 18 or lower on the ACT or an SAT equivalent on the math subtest must take the math portion of the COMPASS;
- all freshman applicants for regular admission who are 20 years of age or less and who have a subscore of 18 or lower on the ACT or an SAT equivalent on the English/Verbal subtest must take the Writing Skills portion of the COMPASS;
- all students who after enrollment are found to be deficient in one or more basic academic skills must be referred for further assessment and placement;
- all transfer students who have not been previously assessed and who have not earned credits in college-level English composition and/or college-level algebra-based math must undergo COMPASS assessment in the appropriate area(s).

No student may take basic or developmental studies classes without COMPASS assessment.

The COMPASS Test has three (3) components to measure the student's readiness for college-level courses. The three components are Writing, Reading Comprehension, and Mathematics.

The Testing Center periodically offers the COMPASS Test during each semester. Students may contact that office for dates and times.

Diagnostic Advancement

The Developmental Studies Program at Tennessee State University provides students in basic and developmental courses the opportunity for diagnostic advancement into the next level course at the beginning of each term. For details, the student should consult the course instructor or the Director of Academic Enrichment. Students who are taking basic or developmental courses to

remove high school deficiencies may not be diagnostically advanced.

Class Participation

Students are expected to attend regularly all courses in which they are enrolled. Student participation in developmental studies courses is mandatory, and monitoring is ongoing. 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 assignments and/or examinations. To be allowed to make up work, the student must secure an excused-absence form from the Vice President for Student Affairs's office before presenting it to the instructor of the course. Students who have excused absences must arrange with the course instructor to make up class and laboratory work immediately. Information on attendance and participation becomes a part of the student's file.

Class Withdrawals

Students placed and enrolled in DSP courses are not permitted to withdraw except for extenuating circumstances. Students who are denied permission to withdraw may appeal their denial to the individual designated by the institution to hear withdrawal appeals.

Credit Hours Earned

All credit hours earned in courses preceded by the course prefix DSP (DSPW 0700/0800, DSPM 0700/0800/0850, DSPR 0700/0800, etc.) will be an addition to the hours required for graduation. Grades earned in these courses, however, are computed in the student's grade point average.

Readmission After a Suspension

In order to be readmitted, a student in DSP who has been suspended must have the recommendation of the Director of Academic Enrichment and must comply with all readmission conditions.

Grading

Grades of completion in DSP courses are A, B, and C. A student will be judged to have achieved minimum competency if he/she achieves an average of at least 70 percent. D's are not awarded in DSP courses. Students who receive IP's or W's in DSP courses must re-enroll in the courses. The I may be awarded if the student cannot take the final examination because of extenuating circumstances. If the student receives an I, he/she does not re-enroll in the course.

Testing

All basic and developmental courses include a pretest, a post test, and an exit examination. These tests are integral parts of the course design. Students must complete all required tests as well as other course assignments satisfactorily in order to pass basic and developmental courses.

Transfer of Basic And Developmental Credit

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

Course Descriptions

Orientation

ORN 100 Orientation for Undecided Students (1). A course required of all full-time students who have not declared majors. It introduces students to University policies and procedures, exposes them to various careers and provides guidance in selecting majors. The course must be taken during the first term of enrollment.

ORN 101 Orientation for Non-Traditional Students (1). A course designed primarily for non-traditional adult students (21 years of age or older). It may be taken instead of the major orientation course. Students under the age of 21 may also take the course if there are problems scheduling the required orientation class. The adult learner will be introduced to the college community and to all facets of university life. Effective study habits, student support services, interpersonal skills, and basic computer skills are included. The class will meet three times during the semester. The remainder of the work will be completed via the Web. Must be taken during the first semester of enrollment.

ORN 102 Academic Recovery (0). A non-credit course designed to monitor students who have been readmitted to the University after suspension, including those students who have chosen to sit out for one semester. In addition to monitoring a student's progress, this course covers applied study skills and activities to assist students in regaining skills. The class meets one day a week for two hours. Academic and study skills are taught during the first hour, and tutorials in the area of weakness are covered in the second hour. ***IT IS REQUIRED OF ALL READMITTED STUDENTS IN*** **the DEVELOPMENTAL STUDIES PROGRAM.** The course is co-requisite to the DSP course that the student must repeat and must be taken upon re-enrollment into the University.

Basic Studies

RSEN 070E Elements of Written English (4). A course designed for students for whom English is the second language. It focuses on the development of communication skills with special emphasis on such matters as vocabulary, spelling, idioms, use of articles, verb forms and tense, English syntax, and punctuation leading to the writing of effective sentences and brief paragraphs. Students will spend three hours per week in the classroom and one hour per week in mandatory Writing Clinic. If the student is placed by the COMPASS, the course is prerequisite to DSPW 0800 and all college-level English and language courses.

DSPW 0700 Basic Writing (4). Development of language skills, with concentration on such matters as spelling, grammar, punctuation, and vocabulary, leading to writing proper sentences and brief paragraphs by the end of the semester. Students will spend three hours per week in the classroom and one hour per week in mandatory Writing Clinic. If the student is placed by the COMPASS, the course is pre-requisite to DSPW 0800 and all college-level English and language courses.

DSPM 0700 Basic Mathematics (4). An intensive study of the fundamental operations of addition, substraction, multiplication, and division with natural numbers, integers, decimals, and rationals, leading to computation with reasonable accuracy using these number systems upon completion of the course. A student who enrolls in the course will spend three hours per week in the class and one hour in the laboratory. If the student is placed by the COMPASS, the course is prerequisite to DSPM 0800-0850 and all college-level math and all math-based courses, such as chemistry, physics, accounting, and statistics.

DSPR 0700 Basic Reading (4). A course which develops basic reading skills and thinking skills, with emphasis on dictionary usage, structural and contextual analysis and interpretation, details, sequence, main ideas, drawing conclusions, relationships, and fact or opinion, leading to improve-

ment of the student's college-level vocabulary, and the ability to read for specific purposes. The course involves pre and post testing. Students will spend three hours per week in the classroom and one hour per week in the laboratory. If the student is placed by COMPASS, the course is prerequisite to DSPR 0800 and all intensive college-level reading courses, such as history, psychology, sociology, biology, and chemistry.

Developmental Studies

DSPW 0800 Developmental Writing (3). A course designed to focus on the writing of sentences, paragraphs, and short essays, with attention to grammar, spelling, punctuation, vocabulary and similar matters as needed. Readings in current events and popular literature will provide the basis for written assignments. Students will spend three hours per week in the classroom and at least one hour in the Writing Center, where they will receive both group and individualized instruction, including computer-assisted instruction. If the student is placed by the COMPASS, the course is prerequisite to all college-level English and language courses.

DSPM 0800 Elementary Algebra (3). Development of mathematical competencies prerequisite for studying college algebra. This course will provide the student with a foundation in the following topics for fulfilling the requirements of elementary algebra: fundamental operations and inequalities, graphing, factoring, exponents and polynomials. (Principal topics covered: integers, and rational numbers, introduction to algebra, equalities and inequalities, word problems, and polynomials.) A student who enrolls in the course will spend three hours per week in the classroom and one hour per week in the laboratory. If the student is placed by the COMPASS, the course is prerequisite to DSPM 0850 and all college-level math courses and all math-based courses, such as chemistry, physics, accounting, and statistics.

DSPM 0850 Intermediate Algebra (3). A course designed to develop mathematics competencies prerequisite for studying college algebra. This course will provide the student with a foundation in the following topics for fulfilling the requirements for intermediate algebra: algebraic fractions, graphing equations and inequalities, systems of equations, radical expressions, and quadratic equations. The ability to select and to use appropriate approaches in solving problems that arise in everyday life and as a tool for thinking logically and reasoning critically in decision-making will be emphasized. Prerequisites: successful completion of DSPM 0800, one year of high school algebra, or the equivalent. A student who enrolls in this course will spend three hours per week in the classroom and one hour per week in the laboratory. If the student is placed by the COMPASS, the course is prerequisite to all college-level math courses and all math based courses, such as chemistry, physics, accounting, and statistics.

DSMA 099 Geometry (3). A basic course in geometry for students who did not have geometry in high school. It may be used for removal of high school unit deficiency.

DSPR 0800 Developmental Reading (3). A course designed as an experience in reception and processing of ideas in the evaluation, application, and retention of textual materials and designed to provide strategies, applying high-level reasoning skills to identify, formulate, and solve problems. Emphasis will be placed upon methods and procedures for use with interdisciplinary textbooks designed to provide a link across the disciplines for directive work in all fields of college study. If the student is placed by the COMPASS, the course is prerequisite to all intensive college-level reading courses, such as history, psychology, sociology, biology, and chemistry.

DSPS 0800 Learning Strategies (3). A course designed to provide an integrated system of instruction, application and assessment in major college survival skills essential for success. Modules on general study skills and specific techniques for studying reading, English, and math are included. The course must be taken during the first semester of enrollment.

CENTER OF EXCELLENCE FOR RESEARCH AND POLICY ON BASIC SKILLS

Barbara A. Nye, Ph.D.
Executive Director
Avon Williams Campus

The Center for Research and Policy on Basic Skills at Tennessee State University is one of Tennessee's accomplished Centers of Excellence. Centers were established by action of the Tennessee General Assembly in 1984 to expand research and contribute to the overall economic and community development base of the state. The mission of the Center for Research and Policy on Basic Skills is to conduct multidisciplinary research and demonstrations concerning the practices, policies and programs of institutions and communities that influence the educational, social, physical, and psychological well-being of children and families. The Center produces and disseminates research and information to support the formation of public policy and the programmatic decisions of schools, agencies and communities in Tennessee and in the nation.

Center goals are:

- To provide an environment and facilities to conduct significant research studies.
- To demonstrate research capability, which denotes the Center as accomplished among peer institutions and in the broader research community.
- To disseminate research that has an impact on policies, programs and practices which can improve opportunities for children and families to succeed and strengthen community infrastructures.

The Center for Research and Policy on Basic Skills continues to expand its research agenda to achieve these goals as a part of Tennessee State University's commitment to excellence. The Center has three research departments:

- Academic Skills Acquisition
- Child and Family Studies
- School/Community Partnerships

The Center's research departments interface with the University's Bureau of Evaluation and Research Services (BERS). This unit administers projects and programs of a research, service, and academic nature. These provide laboratories and demonstration sites for conducting and disseminating research, promoting innovation, and enhancing collaboration with various agencies and organizations. BERS also provides linkages with funding agencies for accessing additional Center research funding.

Bureau of Evaluation and Research Services (BERS)

Barbara A. Nye, Ph.D.
Executive Director

The Bureau of Evaluation and Research Services (BERS) administers the Centers projects and programs, which provide training, research demonstration projects, and/or research services to education and human service agencies, as well as to other organizations. BERS units encompass research demonstration, continuing education, academic instruction, in-service training, consultation, training and public service activities. Several types of activities are administered and conducted through BERS, including activities related to specific grants and contracts, sponsored programs and projects; for example, the Teacher Enhancement and Materials Management (TEMM) Center provides professional development for teachers and school administrators, consultation, and material distribution on systemic change in K-12 science education. Another project manages the Tennessee Multi-age Research Network, which provides professional development experiences in selected public schools. Additional Bureau projects include school-community and private sector partnerships, and conferences, as well as coordination with state offices and federal projects. BERS also publishes research reports and educational/training materials. The units currently located in the Bureau are described as follows:

Tennessee CAREs Early Head Start Program

The Tennessee Comprehensive Area Resource4 Efforts (CAREs) unit administers the Early Head Start Program, one of the original 68 national Early Head Start research and demonstration programs. The Early Head Start program focuses on prevention and early intervention with low-income children and families. The unique program provides and coordinates comprehensive, intensive, and continuous support services to enable families to attain self-sufficiency, while recognizing the integrity and unique needs of families and children. The Tennessee CAREs unit also administers two of the newly funded (1998) state pilot preschool programs for low-income children. CAREs manages these programs for public school systems. The goals of Tennessee CAREs encompass successful health, economic, and educational outcomes, and long-term academic success. The Early Head Start Program is funded by the Administration for Children, Youth, and Families and is part of the national laboratory for research on best practices for infant-toddler and family programs.

Tennessee Early Childhood Training Alliance (TECTA) Programs

The Tennessee Early Childhood Training Alliance (TECTA) Program is part of the Research and Policy Centers Child and Family Studies research department. TECTA provides management and technical assistance to Tennessee Board of Regents (TBR) institutions and consortia, who serve as subcontractors to implement a statewide system of certificate and degree training programs for early childhood education teachers and administrators. TECTA includes center-based, family and group home models, including infant-toddler, preschool and school age.

Science and Technology Programs and the National Science Foundation Project

The Research and Policy Center administers one of the original 26 National Science Foundation Local Systemic Change (LSC) Projects

in partnership with Metro-Nashville Public Schools, and with Rutherford, Sumner, and Williamson Counties public schools. The project promotes systemic reform focused on national standards, scientific literacy for all, and provides professional development for 3,400 teachers, and 149 elementary and middle schools to enhance K-12 science teaching and learning. The Center is also a partner on the NSF-Urban Systemic Program for improving science, mathematics and technology instruction and student performance.

A hands-on science and technology consortium involving six Tennessee school systems is administered by the Bureau. Areas of emphasis include teacher and administrator enhancement, material management and evaluation. The Bureau houses a Teacher Enhancement and Materials Management (TEMM) Center that serves as a state and national model for science and technology distribution. The TEMM Center distributes nationally validated, standards-based science/technology curriculum materials, and provides custom-designed training for teachers and principals.

State Employee Child Care Center (SECCC)

The states employee child care center is administered by the Centers Bureau of Evaluation and Research through a contract with the state of Tennessee. The Center serves 72 children from 6-weeks through 5 years of age, and meets national accreditation guidelines set by the National Academy of Early Childhood Professionals. SECCC has provided qualified teachers and services to offer a quality early childhood education program for the last decade. SECCC is located at 110 Stockyard Street, in the downtown Nashville area.

Head Start State Training and Technical Assistance Center

The State Training and Technical Assistance Center has operated as the principle training resource for Head Start Programs in Tennessee since the 1970s. A variety of academic and continuing education courses and programs as well as training and technical assistance programs are offered to Head Start personnel and parents through contractual arrangements. The State Training and Technical Assistance Center also provides services on a contractual basis to Head Start agencies and their grantees throughout the United States. Major programs include:

- **Child Development Associate Training Program**
  The Child Development Associate (CDA) Training Program is a national credentialing effort to improve the quality of performance of individual staff members in their role as child caregivers. The program emphasizes competency-based instruction, including supervised field experiences. BERS administers the CDA program, and CDA courses are offered through the Department of Home Economics. The CDA program is coordinated with the Tennessee Early Childhood Training Alliance (TECTA) to promote degree preparation. In 1998, the Centers CDA program celebrated credentialing the 100,000th CDA in the United States, who completed her CDA Program at TSU.

- **Vision 2003: Tennessee Head Starts Academic Excellence Model**
  Vision 2003 creates a statewide uniform model for Head Start program staff to pursue Early Childhood Education (ECE) degrees, and offers the necessary professional and career development classes for those staff with degrees other than in ECE in order to meet the Reauthorization requirements. The Academic Excellence Model initiative builds on the Tennessee Early Childhood Training Alliance (TECTA) model and is enhanced by the specially designed 60 hour ECE associate degree program for Head Start staff. Vision 2003 supports the CDA credential requirement by offering the academic and practical preparation and advisement for the direct assessment method. Additionally, it provides review for advanced standing credit for current CDA credentialed teachers, who have earned valid college credits. Administration, management, quality assurance, and coordination of program development is provided through TSUs Research and Policy Center, in collaboration with the Tennessee Board of Regents Higher Education System, the Tennessee Head Start Association, and Region IV ACF.

- **Social Services Competency Based Training Program**
  The Social Services Competency Based Training Program (SSCBT) is a national training program for the development of generic competencies through the improvement of job practice skills of human service workers. The program was developed through the BERS during a 3-year research and evaluation project that resulted in the publication of a competency-based curriculum. In conjunction with the Tennessee Conference on Social Welfare, a Social Service Practitioners credential is awarded to interns enrolled in the SSCBT Program. BERS was funded to implement the program throughout the Southeast and also has program adopters in several other states.

Business, Youngsters, Technology, and Education Consortium

Barbara A. Nye, Ph.D.
Director

The Business, Youngsters, Technology, and Education (BYTE) Consortium is a non-profit public service which provides the following services in the area of technology and learning: 1) teacher, parent and administrator training, 2) child enrichment classes, 3) research, 4) conferences, 5) technical assistance, and 6) a variety of public-private partnership programs.

The Consortium is administered through the Bureau of Evaluation and Research Services. The BYTE Consortium also sponsors programs, which offer credit from the College of Education in the area of technology and learning, and conducts statewide preschool projects with microcomputer demonstration sites in schools and preschool classrooms. BERS has offered many services through its technology and learning laboratory supported through contributions to the BYTE Consortium. An advisory committee works with the Consortium on local, state, regional, and national programs.

CENTER FOR EXTENDED EDUCATION AND PUBLIC SERVICE

Ken J. Looney, Dean
Avon Williams Campus

General Statement

Almost every institution of higher education today finds itself involved in an ever-increasing role for credit and non-credit public service and extended education courses, programs, and activities. More than ever before, adults are engaged annually in some type of planned continuing education activity. Credit and non-credit adult and continuing education programs have become a major component of America's educational systems. Tennessee State University is committed to playing a significant role in these activities by providing relevant extended education and public service programs of quality for professional and public agencies, business, industry, government, and the public in general.

Tennessee State University has a particular commitment to providing extended education and public service programs for a society confronted with problems of economic growth, energy, health care, civil rights, aging, high technology and many other issues. These issues demand the attention of special interest groups and the public who seek the University's support as they struggle to maintain professional competence and a sense of real worth in the midst of competing forces.

Mission

The Center for Extended Education and Public Service is the administrative unit of the University responsible for coordinating the institution's overall efforts to serve non-traditional students at off campus sites. The Center's responsibility for these students includes credit, non-credit, Continuing Education Units (CEU), special training, and technical assistance programs. The Center plans, conducts, and evaluates these programs in conjunction with the academic schools of the University.

Programs offered through the Center are designed to meet the professional, career development, personal, and civic awareness needs in the University's service area and among selected client groups on a statewide basis. In particular, programs are planned and coordinated to meet the needs of students who are unable to attend current academic programs of the University. Specific needs are identified, and instruction or assistance is provided on and off campus at times convenient to the learner or the sponsoring organization. All services are designed to facilitate individual adult participation, learning, achievement and/or organizational development.

The Center is responsible for managing those activities of the University which are identified in the accrediting standards for continuing education and public service by the Commission on Colleges of the Southern Association of Schools and Colleges. The Center is also responsible for initiating new and innovative, self-supporting programs which may become part of the on-going institutional structure and effort of the University.

Student Population

The students served by this unit of the University cover the widest range of age, professional and economic status. Efforts by the Center include special learning programs for children; continuing education and public service programs for high school students, working adults, senior citizens and low-income elderly, professional organizations, state agencies, business, industry, government employees and managers.

Goals and Developmental Plans

1. Extend evening and daytime course offerings at the off-campus centers for adults who are unable to undertake regular full-time, or part-time study at the main campus.
2. Provide non-credit programs, courses, conferences and institutes for special groups and the general public.
3. Provide continuing education and public service programs designed to meet the occupational, vocational and avocational needs of adults in the community.
4. Provide opportunities for employment training to improve skills and knowledge needed in current and projected occupations.
5. Improve managerial skills of individuals employed in business, industry, and government.
6. Provide assistance in planning programs of community health, community development, family life and leisure-time activities.
7. Increase citizen participation in civic affairs through greater awareness of public affairs; community and national problems; local, state and national government.
8. Provide cultural enrichment for the community in such areas as art, literature, music, drama, speech and reading.
9. Seek and obtain external funding for public services and special projects of both short-term and long-term duration which can either supplement or be adopted into on-going programs and educational services of the University.
10. Increase cooperative planning and delivery of educational services with other state agencies and institutions and selected private institutions.
11. Provide outreach sites and centers for the delivery of credit classes and special programs.
12. Provide and coordinate necessary student support services for the adult learner.

Organization and Structure

Consistent with the University's commitment to public and community service, the Center offers assistance in the following major areas:

- Off-campus centers and extended credit.
- Distance Education
- Conferences and Institutes.
- Non-credit instruction.

Guidelines of the South Association of colleges and Schools are followed in the development, presentation and awarding of all continuing education units (CEU's) and distance education programs. Additionally, public service programs and activities reflect local, state and national issues and trends identified by the National University Extension Association and the University's Continuing Education Advisory Committee.

Off-Campus Centers and Instruction

Vacant, Director

Special courses of study delivered on and off-campus have long been a distinct service at Tennessee State University. Presently, Continuing Education activities are also being fused with innovative, non-traditional, flexible modes through which credit and degrees may ultimately be earned.

In cooperation with other agencies and educational institutions as well as through its own initiatives, Tennessee State University provides a variety of undergraduate and graduate credit courses within the Middle Tennessee area. Some of the present locations where courses are offered include: Volunteer State Community College McGavock High School, Columbia State Community College, Lawrenceburg, Waynesboro and other Middle Tennessee sites. Undergraduate credit courses are offered at other Davidson County locations and the Rivergate, Green Hills and Bellevue Centers. Course are offered through traditional on campus classes, off-campus site locations and through various technologies such as interactive compressed television, web based courses and video independent study.

The Center and various academic departments provide opportunities to take academic classes at off-campus location and at businesses or at home. Courses offered through these distance education modes carry the same credit and learning experiences as on campus classes. Students wishing to take classes through distance education should work closely with their academic advisors. Industries wishing to provide on site instruction to their employees may contact the Center to arrange such classes. A minimum number of students are required to establish cycles of classes at on site location.

Students taking classes at those locations must meet all entrance requirements as established by this catalog.

Distance Education

Ken Looney

The Center is the designated arm of Academic Affairs to coordinate the distance education activities of the University. Classes are offered through various technological modes to provide additional opportunities for students to access the course offerings of the University. The university provides classes through various means including interactive video instruction allowing on site classes and faculty to simultaneously enrolled students at off campus sites. Classes are also offered via Video Independent Studies where students complete the majority of their classes by viewing quality instructional programs and independently completing assignments. Students also have the opportunity to complete selected courses via the internet by taking classes by web enhanced and delivered instruction. All distance education classes are planed and conducted in accordance with participating academic colleges and schools.

Academic Conferences and Institutes

Conferences and Institutes provides an opportunity for participants, members of the University community, and highly qualified resource persons to share new information and explore new ideas that will improve their job performance or complement their academic interest. These conferences and institutes are tailored to reflect the needs of the requesting client group.

The format used in short workshops and seminars varies with the type of program, but always is designed and tailored to meet expressed needs of the services groups. Whether credit or non-credit oriented, institutes and conferences are designed by the Center to reflect the sponsorship of selected academic schools of the University.

Special emphasis is also placed upon assisting potential students entering University life by offering preparatory workshops for ACT, AAPP, GRE, GMAT and MAT tests required for admission to the University.

Continuing Education and Non-Credit Instruction

Raylean Henry, Director

One of the largest areas of instructional effort at the University occurs through the Department of Non-Credit Instruction. The Department of Non-Credit Instruction plans both on an academic term and in response to special needs of client groups and the public on and off-campus.

The instruction is supported by regular and part-time faculty alike and is designed to meet the special needs of learners, both vocationally and avocationally. Planning for such learning occurs with direct input from learners and businesses and industry, and all instruction is based upon participatory evaluation rendered by those who enrolled. Most instructional activities are offered for enrollment on an individual fee basis, but selected activities are planned with client groups and delivered under special contracts. Continuing Education Units (CEU) are awarded to participants in selected instruction approved within the published guidelines. Institutional records of such learning are maintained by the Admissions and Records Office and are available upon written request by the student.

The following is a selected listing of non-credit courses offered by the University. Other courses are offered to meet specific needs expressed by the public and by local business and industry. These courses and others not listed may be provided to local business and industry on a contractual basis.

Non-Credit Courses

1505 Professional Engineering License Review - Civil (CEU 3.0). A review concentrating on the general areas covered on the Professional License exam. Topics covered will be environmental engineering, concrete, steel, soils, highway engineering, engineering economy, structural engineering, and some aspects of fluid mechanics.

1508 Professional Engineering License Review - Mechanical (CEU 3.0). A review of topics in Mechanical Engineering to prepare students for the Professional Examination required for an engineering license.

1509 Engineer-In-Training Review (CEU 3.0). A review concentrating on the general areas covered on the first day of the EIT exam. Topics include mathematics, statics, dynamics, and strength of materials.

1511 Professional Engineering License Review - Electrical (CEU 3.0). A course designed to prepare electrical engineers for the Professional License Examination. Topics include electronics, power, motors, and circuits.

2822 Writing and Selling Magazine Articles (CEU .6). A course emphasizing magazine writing and selling one's articles, but authoring books may also be included. A critique session will be held after students write articles.

2827 Writing and Speaking Correctly (CEU 2.5). A course designed to help anyone who needs to improve in the area of writing and speaking correctly.

2828 Positive Communication (CEU 2.5). A course designed for those who wish to communicate in a positive and self-assured manner.

2836 Crafting the Novel (CEU 3.0). A course which focuses on establishing of character, structuring plot, and creating and developing suspense. Students will receive student and instructor criticisms on work produced in class.

5101 Conversational Spanish I (CEU 2.5). A course focusing on learning spoken Spanish which will be useful to travelers and business persons. In addition, there will be a short review of grammar and written Spanish.

5106 Conversational Russian for Travel and Business I (CEU 2.5). A course focusing on basic Russian for the traveler and the business person. Students can expect to have a speaking vocabulary of 350 to 500 words upon completion of the course. In addition, the participants will have an opportunity to learn different dialects, cultural aspects and points of interest in Russia.

5126 Conversational Japanese for Travel and Business (CEU 2.5). Conversational Japanese for travel and business is designed to familiarize the traveler and the business person with basic words, phrases and pronunciation useful in travel or in conducting business. A review of Japanese traditions, culture and society will be included in the language learning process.

5130 Conversational German for Travel and Business I (CEU 2.5). A course designed to provide a speaking vocabulary of 350 to 500 German words which will enable the participant to travel or conduct business with a measure of confidence and ease.

5800 Script Writing for Movies and TV Films (CEU 3.0). A practical workshop on writing and selling the full-length film script. The course will emphasize proper script format and the use of the students own creativity, within the format, to write his/her own script.

9402 Refresher Course for Nurses (CEU 12.0). This course provides an individualized, self paced refresher course for inactive nurses who wish to reactivate their licenses or for nurses who wish to update skills. The course requires a preceptor from the School of Nursing.

9626 Basic Management Skills (CEU 1.8) The participants will learn techniques in planning, organizing, staffing, directing and controlling. The process of managing change and total quality management process.

9627 Introduction to Supervision (CEU 1.3) Topics covered will include transition to supervisor, communication, leadership, ethics, diversity in the work place.

9628 Management of Time (CEU 1.0) Emphasis will be on the planning process, setting priorities, scheduling work and helping others manage their time.

9629 Decision-Making (CEU (1.2) Participants will learn the process of making decisions, behavior's effect on decision-making and combining decision-making process and skills.

9630 Group Performance (CEU 1.2) The emphasis will be on matching leadership style with group maturity, the dynamics of group change and conflict and a basic understanding of the team building process.

9631 Understanding Human Behavior (CEU 1.2) The participants will learn various behavior theories, the factors that influence behavior and the "Games People Play" and how to deal with them.

9730 Powerpoint (CEU .65). A one session workshop that introduces the Power point program. The student will learn to use Power point to create a presentation, modify, work with charts, provide on screen slides, and insert or remove material into Power point.

9731 Microsoft Word Basic (CEU .65).

9732 Microsoft Word Advanced (CEU .65). These courses (9731 & 9732) provide a two day workshop in basic and advanced Microsoft Word processing. Courses maybe taken separately but basic Word knowledge is required before enrolling in the advanced class. Students will learn to launch, close and exit files, create and save a document, exit existing documents via menus and icons, edit text files using cut, copy and paste commands and using the help functions. Numerous other functions will be covered in each course.

9733 Internet/E-mail (CEU .65). Participants will learn to compose and send messages, attach files to a message, print a message, forward a message and attach extract files to mail. The student will also learn the various protocols and other functions associated with the E-mail/Internet system.

9734 Internet/Netscape/WWW (CEU .65). Using the Internet environment, the student will be able to start Netscape, use menus, toolboxes, and directory buttons, use help and exit Netscape. Participants also learn how to navigate the world wide web by subject guide, location and content.

9735 Excel Basic (CEU .65).

9736 Excel Advanced (CEU .65). These course (9735 and 9736) provide two day instruction in using the Excel Spreadsheet software. The courses maybe taken separately but basic Excel knowledge is required before taking the advanced course. These two sessions will provide instruction in the various functions of a spreadsheet package including building a spreadsheet, replacing, edit cell contents, change column width, create and print pie charts and bar graphs, underline labels and values, specify titles, legends and axis labels.

9737 Access Basic (CEU .65).

9938 Access Advanced (CEU .65). These two courses (9737 and 9738), will offer students an opportunity to create a database, how to open, close, "save as" and exit a database. They will learn to create a table, format table changes by direct manipulation, create index and search for records within a table, sort results and various other functions. Courses maybe taken separately but basic Access knowledge is required before taking the advanced course.

OFFICE OF SPONSORED RESEARCH

Maurice Mills, Ph.D., Director
114 Agricultural Research and Extension Complex

The Office of Sponsored Research (OSR) provides leadership, information and services to encourage faculty, research associates, adjunct professors, post doctoral fellows, and staff to engage in research and creative activity. The University receives awards from federal agencies and private foundations for research, training and technical assistance.

The Office of Sponsored Research is an investment in the future of Tennessee State University. Through scientific research, technological development, and educational reform and systemic change, the university is positioning itself to be at the forefront of knowledge and on the leading edge of research. OSR seeks to provide the best environment for study and research through a creative association of faculty and students as a community of scholars in expanding the boundaries of science, education, and technology. It serves as a liaison between funding agencies, principal investigators (PIs) and administrative units of the University. The OSR staff provides the following services:

- Locates potential funding sources
- Coordinates compliance on human subjects, animal care and use, and biosafety involving biological, chemical, electrical, and radiation hazards with university, local, state, and federal regulations
- Coordinates research partnerships, collaborations and cooperative agreements
- Guides faculty and staff through the grant application process
- Routes proposals through proper administrative channels for approvals and endorsements
- Maintains university award files
- Assists in matters relating to patents, copyrights and publication agreements
- Maintains application kits, source materials, bulletins, announcements and guidelines
- Disseminates announcements and information through the OSR WEB site at **www.tnstate.edu/osr/** and Information Edge publication on availability and deadlines of external funding sources
- Maintains files on time and effort certifications of PIs
- Coordinates the University's RISE (Research, Initiation, Supplement and Enhancement) Incentive Program and EARDA (Extramural Associates Research and Development Award) initiative.
- Tracks equipment purchased under federal grants and contracts

Strengthening the university's research infrastructure is a major priority of OSR. The level of creative thinking and the compilation of sponsored research projects are reflections of the competitive grantsmanship of the faculty and staff at TSU. The University displays a broad spectrum of sponsored research programs including: basic and applied research, along with product and service deliverables. The research programs range from single PI projects at the local level to major international team collaboratives. Paramount among these activities are the centers of excellence, the Cooperative agricultural Research Program (CARP), RIMI Neuroscience Center, Center for Neutral Engineering, and the Center for Health Research. Increasing the university's capacity to conduct research at the leading edge level, while strengthening its instructional programs and expanding its research infrastructure, is a major on-going goal of the University. The long-range goals of sponsored research with special relevance to this priority are to:

- Increase the capacity of the university to conduct scientific and technological research and creative activity in education,
- strengthen the university's research infrastructure to improve the health status of the United States and the State of Tennessee through enhanced biomedical and biobehavioral research, and
- improve the quality of education for all students through their meaningful participation in research and special projects.

Tennessee State University conducts research in computer modeling and simulations, advanced controlled systems, astronomy and astrophysics, conditioned-based maintenance, biomedical applications of signal processing, hazardous waste management, neural networks, robotics and machine vision, AI/expert systems, fuzzy logic, stress analysis, software engineering, microcircuit packaging and material processing, heat transfer, transportation planning and modeling, and hydraulics.

The University also conducts research in large-scale control and distributed computing systems under stochastic structural perturbations, and light scattering of cylindrically shaped objects from the ocean. On-going research programs in photocatalytic Dissociation of water, topology, biostatistics, harmonic analysis, organic synthesis, theoretical chemistry, drug binding to DNA, polymer chemistry, neuroscience, plant genetics, radiation effects on mammalian cells, gene expression, biofeedback, molecular biology, nutrition, liquid crystals, economics, identification of new germ plasm, plant protection and production, and animal physiology are well established research areas at the University.

New advances in research on family violence, statistical AIDS research and computational epidemiology, basic skills research in science education, and international affairs are currently being made. In addition, the university provides creativity in the arts, foreign languages, journalism, public policy, electronic media, and multicultural education.

CENTER OF EXCELLENCE INFORMATION SYSTEMS ENGINEERING AND MANAGEMENT

Michael R. Busby, Ph.D., PE
Director
Avon Williams Campus

MISSION STATEMENT

The mission of the Center of Excellence (COE) is to provide an environment conducive to and facilities in support of interdisciplinary research in selected areas of information systems.

INTRODUCTION

The COE at Tennessee State University is a multidisciplinary research unit founded in 1986 as part of the state-wide Centers of Excellence program whose mission is to expand the research base of the state of Tennessee. The Center consists of researchers, support staff, and students in the areas of astronomy, advanced control systems and systems identification, applied mathematics, and management information systems. Graduate and undergraduate students are drawn from the computer science, physics, mathematics, and engineering curricula. The Center is located in the Avon Williams Building of TSU's downtown branch campus.

FUNDING SOURCES

Original funding for the COE came from the State of Tennessee Centers of Excellence Program with additional matching funds from Tennessee State University. Due to patterns of recent external funding, TSU's Center of Excellence has become a Center of research centers. The National Aeronautics and Space Administration (NASA) funds research in astrophysics and control systems through the Center for Automated Space Science (CASS). The National Science Foundation (NSF) funds additional research in control systems, applied mathematics, complex fluid flows, and astrophysics through the Center for Systems Science Research (CSSR). Through the Network Resource and Training Site (NRTS) program, NASA also funds internet connectivity to all Tennessee and Kentucky Historically Black Colleges and Universities (HBCUs) as well as the development of distance-learning capabilities among all NRTS sites. Finally, NASA funds education outreach programs at TSU through the Tennessee Space Grant Consortium (TSGC).

MAJOR RESEARCH AREAS

Astronomy with Automated Telescopes - Center astronomers are developing the capabilities to make a wide variety of astronomical observations with automatic telescopes in order to conduct long-term research projects that would be too difficult or too expensive to accomplish without the benefits of automation. TSU astronomers currently operate four 10-inch to 32-inch automatic photoelectric telescopes (APTs) that make highly precise measurements of stellar brightness changes. Three additional 32-inch APTs are under construction as well as a 24-inch automatic imaging telescope (AIT) and an 81-inch automatic spectroscopic telescope (AST). All telescopes are located in the Patagonia Mountains of southern Arizona where they are maintained for TSU by Fairborn Observatory, a non-profit scientific research organization. Astronomers in the Center use the telescopes to measure brightness changes in sun-like stars, search for planets around other stars, study magnetic activity in cool stars, measure the fundamental properties of double and multiple stars, and a variety of other projects.

Advanced Control Systems - Center researchers are studying fundamental issues of controlling modern systems that are increasingly complex. Current research projects include developing new control design methods to deal with plant and controller sensitivity, robust stability, and robust performance. The areas of research include robust and fixed structure controller design, system identification, and adaptive control using artificial neural networks. The researchers are also contributing to research in robust control and modeling of space structures, satellite control, and scheduling of autonomous telescopes. Researchers are developing techniques to model systems with uncertainties, and theories to analyze the performance and behavior of such systems. New and efficient control design methodologies that ensure stability and performance of the systems under various changing environments are under study. An algorithm to determine an optimal schedule for autonomous robotic telescopes is also under development. The algorithm aims to produce an optimal schedule that drastically improves the quality of astronomical observation as well as utilization of telescopes by fairly allocating users and observation tasks. The Center's advanced control system laboratory is equipped with several state-of-art experiment facilities including the DSPACE driven flexible structures.

Applied Mathematics - Center applied mathematicians are developing the tools to study the fundamental characteristics of large-scale complex dynamic systems. Our current research projects include investigation of dynamic reliability, controllability, estimation and stability of complex dynamic systems under both structural and environmental randomly varying perturbations. In this context, we are developing (1) stochastic approximation procedures under various modes of convergence, (2) stochastic stability via Lyapunov's techniques and comparison results, and (3) implicit and explicit numerical schemes and algorithms. Our investigation includes real world problems from multi-species communities, multiple market systems, image processing problems, dynamics of fluids and gas flows, immigration and emigration, and complex environmental systems. We work collaboratively with the Advanced Controls Group in various joint projects, especially in the development of an algorithm to determine optimal schedules for automatic telescopes operated by the Center astronomers.

COOPERATIVE AGRICULTURAL RESEARCH PROGRAM

Stephen H. Kolison, Jr., Ph.D., Director
125 Farrell-Westbrook Agricultural Research and Extension Complex

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General Statement

The Cooperative Agricultural Research Program is the principal agricultural and natural resources research division of Tennessee State University. With some 22 researchers holding terminal degrees in their fields, 8 master's degree level researchers, and 14 research and administrative support staff, CARP is one of the three major research centers at Tennessee State University. Annually, it receives about $2.3 million appropriation from the United States Department of Agriculture for research and facilities, and about $900,000 in State and University funds specifically for woody ornamental crop research. In addition, researchers in CARP attract an average of more than $250,000 annually through grantsmanship efforts. CARP researchers received their education from outstanding universities throughout the United States and from several countries around the globe. At CARP, we are committed to improving the lives of all the citizens of Tennessee and other regions. We attach great importance to serving the population of our state and nation that has traditionally been underserved. As the economic boundaries between countries rapidly disappear, CARP is also committed to exploring opportunities that will enhance the ability of the food systems industry of Tennessee and the nation to compete in the global marketplace.

To take these commitments to new frontiers, our scientists are involved in research activities related to animal production systems, biotechnological applications to food safety concerns, the production of plants with desired characteristics, rural development, sustainable agriculture, and the marketing of agricultural commodities that are economically important to our state and other regions. To facilitate these efforts, we have a research complex that consists of excellent facilities in Nashville and McMinnville.

The Cooperative Agricultural Research Program is organized into six multidisciplinary research teams: Animal and Alternative Livestock Research Team; Economics and Policy Research Team; Environmental Protection and Enhancement Research Team; Food Safety, Nutrition and Family Well-Being Research Team; Medicinal and Alternative Food Crops Research Team; Nursery Crop Production Systems Research Team.

Animal and Alternative Livestock Research Team

Richard Browning, Jr., Ph.D.
Acting Team Coordinator

Animal agriculture in Tennessee and the nation is diverse, with farmers and ranchers raising traditional livestock as well as considering non-traditional livestock alternatives. The thrust of this team is to address issues concerning the basic physiology, general performance, and marketing of selected alternative livestock for Tennessee and other farmers, while maintaining research activities in traditional areas of relevance to the economy of our state. Research efforts in the area of non-traditional alternative livestock include guinea fowl and goats. Our research activities in traditional areas are represented by beef cattle and chickens. Specific goals of the team are based on the following concerns: 1) the desire for alternative meat is increasing because of an increasingly diverse U.S. consumer demographic; 2) the demand for tobacco products, a major cash crop in Tennessee, is decreasing due to health concerns; and 3) the limited acreage typically found on small farms and the decreasing amount of available pastureland affect the economic viability of producing beef cattle.

Priority Research Areas:

- Develop and introduce a competitive goat production system for small farmers in Tennessee as an alternative to beef cattle production, tobacco farming, and other farming activities for which they are losing markets, or are likely to lose market share.
- Provide an alternative to traditional poultry production to small farmers in Tennessee by developing and introducing management practices for improving reproductive efficiency of guinea fowl breeders.
- Assess metabolic indices in cattle consuming endophytic tall fescue to identify mechanisms through which ergopeptine alkaloids linked to fescue toxicosis reduce productivity in the beef cattle production systems.
- Determine the effect of vitamin E on reproductive efficiency of beef cows in small beef cattle operations in Tennessee.

Economics and Policy Research Team

Surendra P. Singh, Ph.D.
Team Coordinator

In a highly dynamic global economy, the challenges facing applied economists and policy makers continue to change and expand. In the Southeastern region of the United States, including Tennessee, issues of rural economic development, agriculture and the food system - production, marketing, management, the environment - and public policy related to agribusiness are among the most challenging and rewarding areas of agriculture/agribusiness. The Economics and Policy Research Team strives to generate knowledge, enhance skills, and disseminate unbiased information derived from application of economic and business principles to the above issues at the state, regional, national, and global levels. Findings from the team's research are expected to provide useful input for policy makers.

Priority Research Areas:

- Rural economic development.
- Production, marketing, management, and environmental aspects of agriculture and the food system.
- Public policy related to agribusiness.

Environmental Protection and Enhancement Research Team

Robert E. Harrison, Ph.D.
Team Coordinator

The invasion of highly destructive pests and diseases into agriculture has necessitated the rapid development of pest and disease control programs, most of which rely on the use of toxic chemicals. Public perception about the safety of those chemicals requires studies of their persistence and movement in soil and surface waters, as well as studies of alternative pest and disease control methods. CARP's Environmental Protection and Enhancement Research Team members direct their research efforts toward identifying and reducing the effects of hazardous agricultural chemicals in the environment. The team's research goals have been established in several priority areas.

Priority Research Areas:

- Japanese beetle control measures in nursery production.
- Alternative control measures for plant-parasitic nematodes in nursery crop production.
- Environmentally friendly alternatives to fungicides for powdery mildew disease management in dogwood production.
- Studies on the soil and pesticide interactions in nursery soils, soil mixes, and various soil separates.
- New alternatives for the removal of pesticides from nursery sites.
- GIS education for agriculture faculty, researchers, and students at Tennessee State University.

Food Safety, Nutrition and Family Well-Being Research Team

Sandria L. Godwin, Ph.D.
Acting Team Coordinator

The Food Safety, Nutrition and Family Well-being team's major objective is to improve the health and well-being of Americans through a safer food supply, adequate food distribution and greater knowledge of nutrition and dietary assessment methodology. Team members have formal collaborative projects with the following: Food Surveys Research Group of the Agricultural Research Service/U.S. Department of Agriculture (USDA), Economic Research Service/USDA, National Center for Health Statistics of the Centers for Disease Control and Prevention, Department of Health and Human Services (DHHS), Food and Drug Administration/DHHS, Second Harvest of Middle Tennessee, The Sensory Analysis Center, Department of Nutrition of Kansas State University, the Cooperative Extension Program, TSU, and Health Technomics, Inc.

Priority Research Areas:

- Evaluating the effectiveness of food safety messages with various population groups.
- Assessing food safety related knowledge and practices.
- Analyzing effects of stress conditions on *Salmonella* in poultry.
- Increasing food security of economically disadvantaged populations through nutrition education and improved food purchasing practices.
- Evaluating the accuracy of reporting dietary intake when using different portion size estimation aids.

Medicinal and Alternative Food Crops Research Team

Roger J. Sauve, Ph.D.
Team Coordinator

The overall goal of this team is to develop and introduce medicinal and other plants as alternative agronomic crops for small farm operators. Included in this objective is the identification and improvement of selected genera for their pharmaceutical and other values using conventional and biotechnological means. Propagation and production protocols are being developed for superior plants. Once perfected, these production methods will be made available to farmers.

Priority Research Areas:

- Evaluation of purple coneflower (*Echinacea purpurea*) for anti-carcinogenic activity and other pharmaceutical values.
- Evaluation of St. John's Wort (*Hypericum* spp.) for pharmaceutical activity of hypericin.

Nursery Crop Production Systems Research Team

Nick J. Gawel, Ph.D.
Team Coordinator

The overall goal of the Nursery Crop Production Systems Research Team is to improve selected plant genera to broaden their consumer appeal and contribute to the enhancement of Tennessee's standing as a national leader in the nursery industry. This goal also includes the development of hands-on teaching and demonstration areas on the CARP research farm in Nashville. The demonstration areas will strengthen teaching and aid in our efforts to stimulate interest in the plant sciences among Metro Nashville high school students and to transfer new discoveries into the hands of limited resource nursery owners. Among the plant genera targeted by the team for improvement are *Helleborus*, *Pulmonaria*, *Hemerocallis*, *Castanea*, and *Ulmus*. Areas for teaching and demonstration will include tree fruits (peaches, apples, pears), vine fruits (grapes), small fruits (strawberries, blackberries, raspberries), turf plots, nursery plants, and other plants to be added in the future.

Priority Research Areas:

- Improve selected plant genera to broaden consumer appeal.
- Enhance Tennessee's standing as a national leader in the nursery industry.
- Develop hands-on teaching and demonstration areas.
- Strengthen teaching and stimulate interest in the plant sciences among high school students.
- Transfer new discoveries to limited resource nursery owners.

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Published By
TENNESSEE STATE UNIVERSITY
3500 John Merritt Blvd.
Nashville, Tennessee 37209-1561
Publication Number: TSU-01-0058(B)-3-251045

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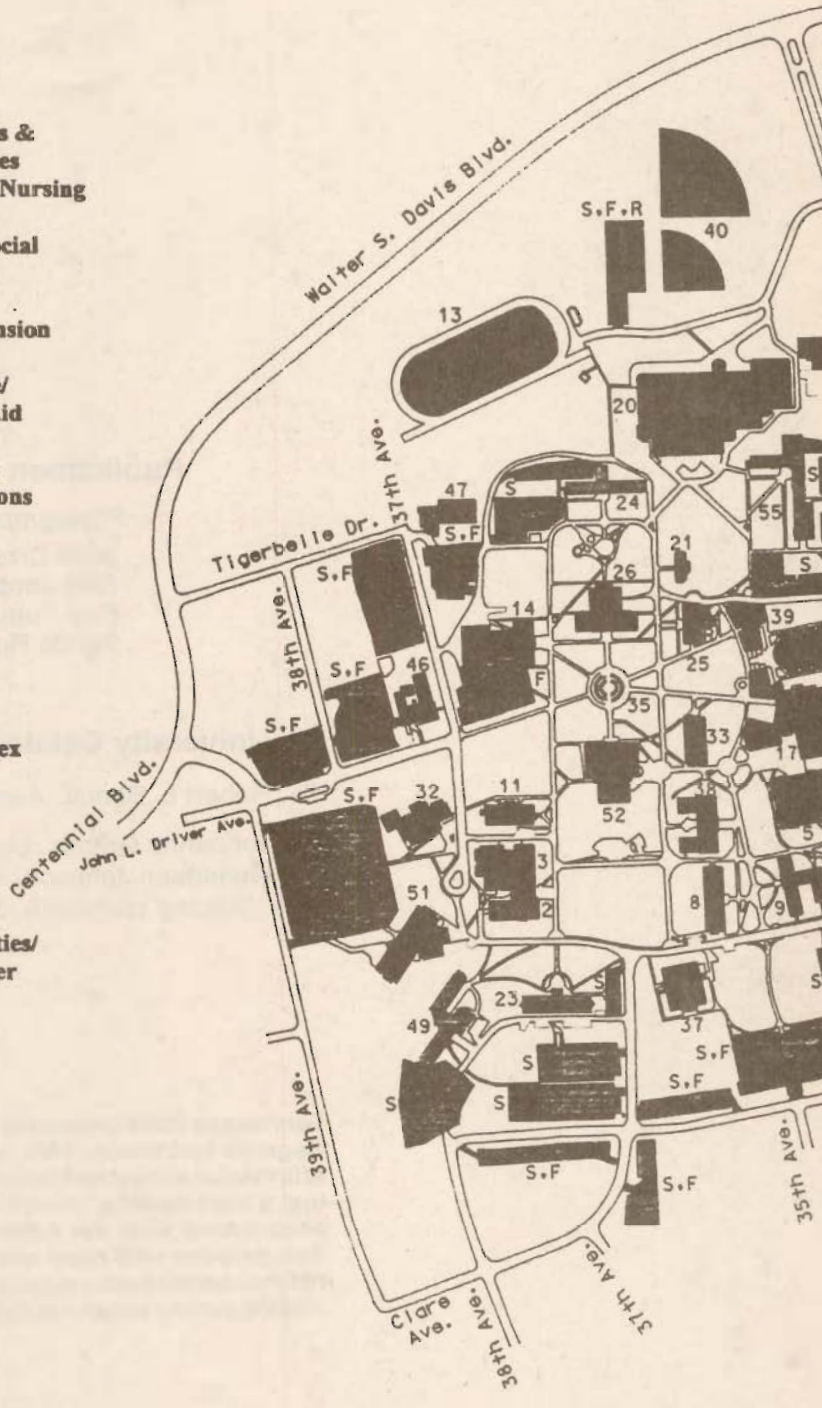
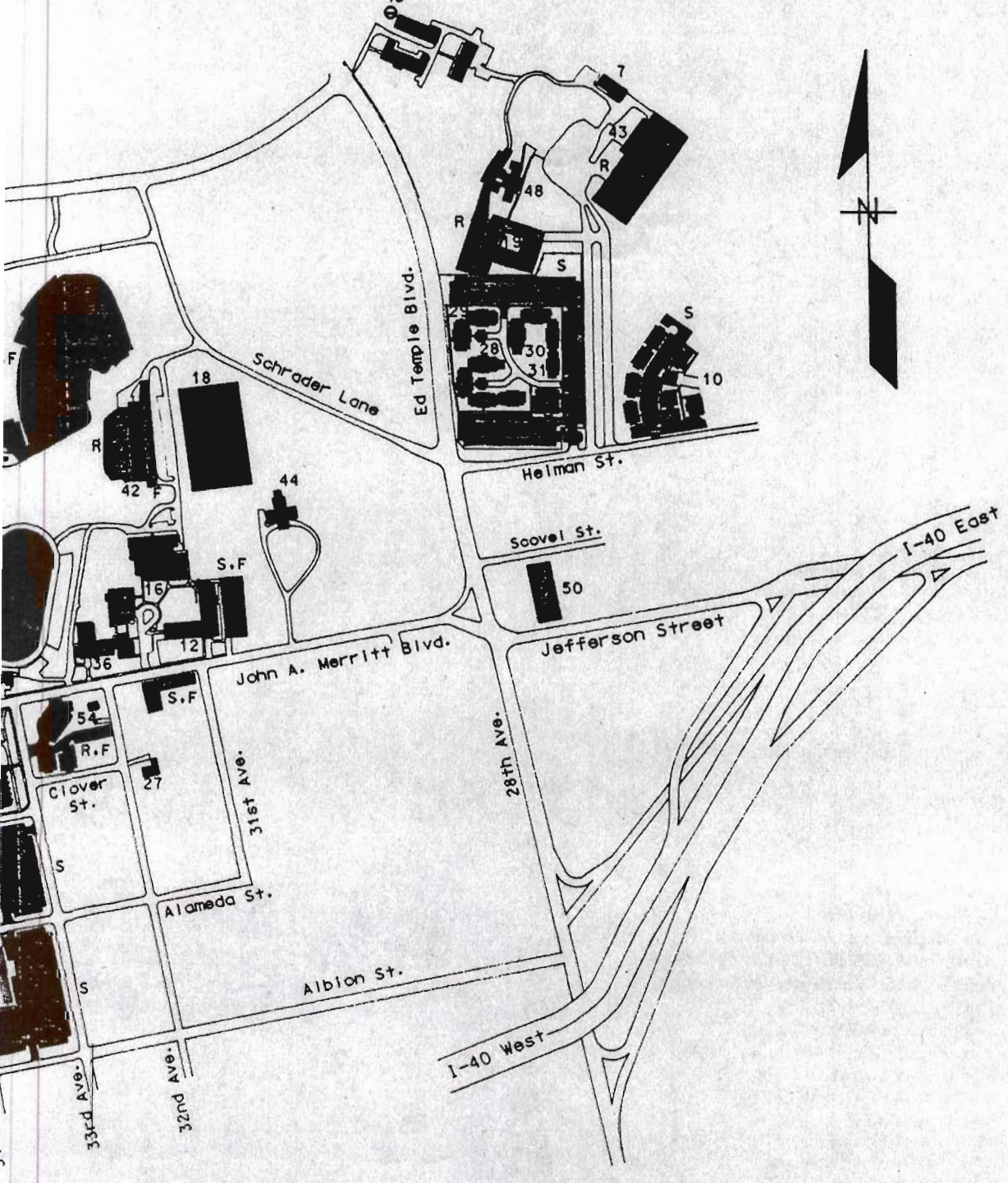
35. Laura M. Averitte Amphitheater
36. Lawson Hall – Agriculture/ Hospitality
37. Marie Brooks Strange Music Building Future Performing Arts Center
38. McCord Hall – Computer Science/ Biology
39. McWherter Administration Building
40. Softball Fields – NCAA/ Intramural
41. Former AFROTC, Football Fieldhouse
42. Facilities Management
43. Facilities Storage/ Recycling/ Vehicle Ops.
44. President's Residence
45. Poultry Research Plant
46. Power Plant
47. Queen Washington Health Center
48. Read Hall – Printing Plant
49. Wilma Rudolph Residence Center
50. Thomas Jones Apartments
51. Torrence Hall – Engineering
52. Walter S. Davis Humanities Building – Language/ Literature/ Philosophy; CIT
53. Watson Residence Center
54. Wesley Center Chapel
55. Wilson Residence Center





Academic/Administration Facilities

Residence Centers

Roads/Walkways

Athletic Fields

Parking Lots
F-Faculty
S-Students
R-Restricted (Administrators /Visitors Only)