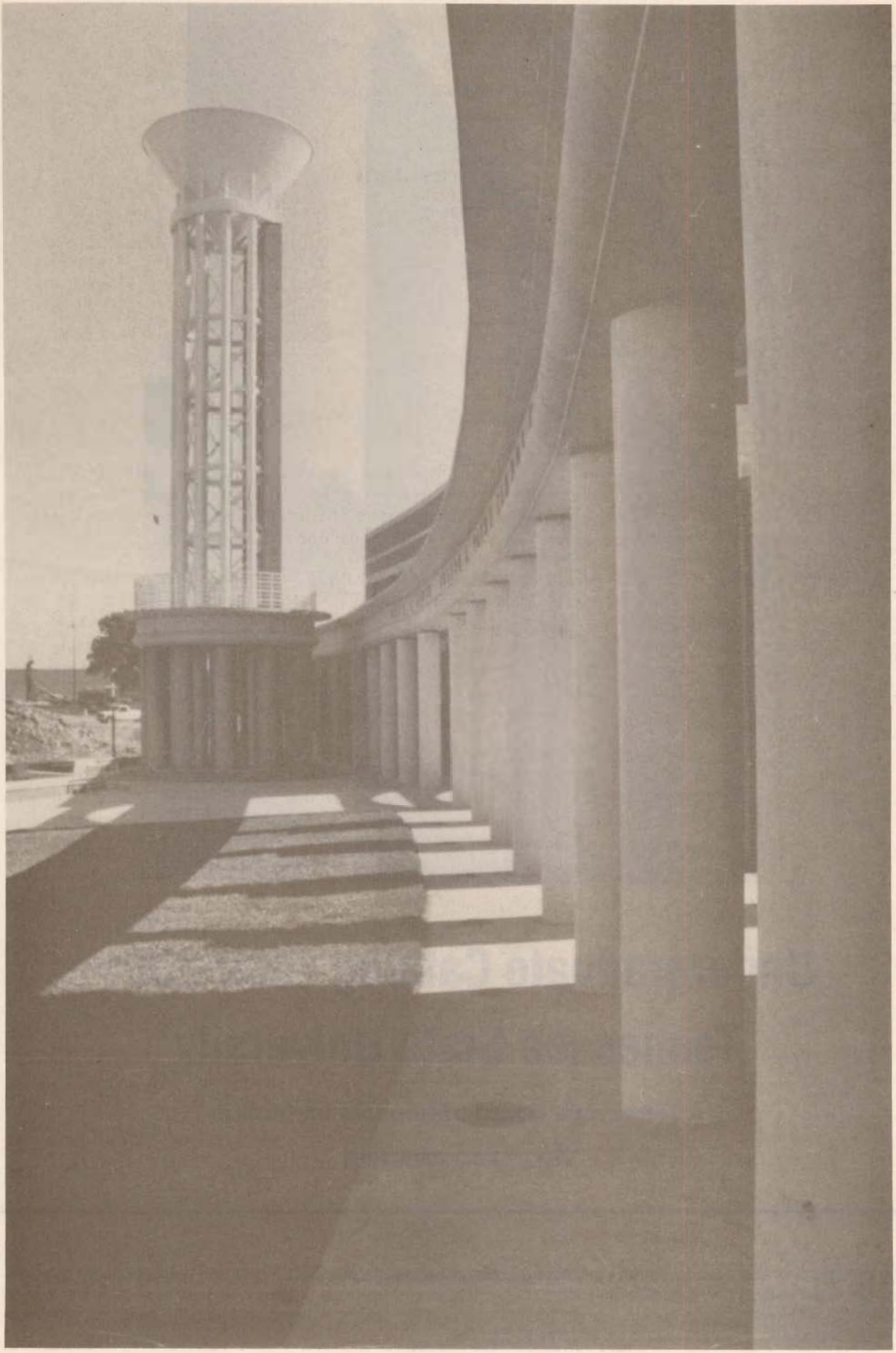


UNDERGRADUATE CATALOG 1999-2001

TENNESSEE STATE UNIVERSITY

Nashville, Tennessee



Office of the President
Tennessee State University
3500 John A. Merritt Blvd.
Nashville, TN 37209-1561



James A. Hefner
President

Dear Tennessee State University Student:

Welcome to the University. On behalf of the students, faculty, staff and alumni, I congratulate you for selecting TSU. In doing so, you have become part of a tradition of excellence that is placing TSU in the spotlight locally, regionally, nationally, and internationally. In fact, TSU has been listed among the nation's best colleges and universities in ***U.S. News & World Report*** for the fifth consecutive year.

We are pleased to offer you the highest quality programs so that you may reach your educational and career aspirations. In recent years, Tennessee State University has exploded with new programs and new facilities that are second to none. We have launched a program in Africana Studies—the only one of its kind in the Southeast or at a historically black institution. We have also initiated master's programs in nursing and environmental engineering—just more evidence that TSU may be the place for you to begin your graduate studies. Our annual Research Symposium has grown to a two-day event because of the surge in student research—I encourage you to prepare for a presentation yourself.

The University also has inaugurated a chapter of Phi Kappa Phi, the nation's most prestigious honor society encompassing scholars from all academic disciplines. Undergraduate and graduate programs in the College of Business are fully accredited by the AACSB—The International Association for Management Education, making TSU the only institution in Nashville—and one of fewer than 24 percent of colleges nationwide—to have achieved such distinction. Of course, we work to maintain accreditation for each of our academic programs.

In support of your academic endeavors, TSU is completing its $112 million capital improvements project through which we have built, or are about to complete, eight new facilities and have renovated virtually every structure on campus. Designed to provide the best in technology and offer you a pedestrian friendly campus, TSU is becoming a remarkable 21st century campus—one in which you can take pride, because it is, indeed, one of the nation's finest!

I challenge you to take advantage of all the valuable programs available to you at TSU and wish you much success as you work toward your undergraduate degree.

Sincerely,

James A. Hefner
President

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER M/F

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.

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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.

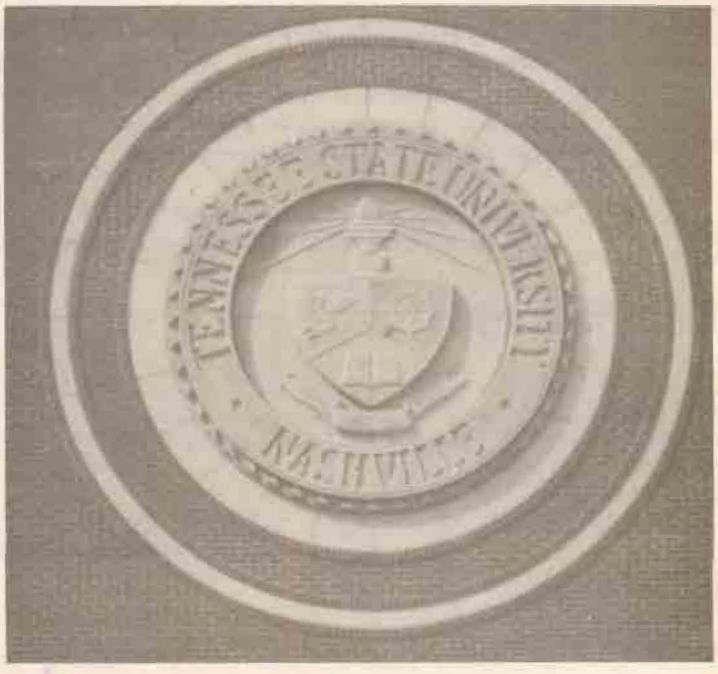
Students who have questions concerning their academic progress, curricula or academic standing should consult their advisors or their academic deans. Those students with specific questions concerning specialized areas of study should consult with each specific department.

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.



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- Vice President 963-7411
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- Counseling Center 963-5611
- Assistant Vice President for Student Affairs/ Dean of Students 963-5648
- Health Services 963-5291
- Housing 963-5361

University Relations and Development
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Book Store 963-7511
Security 963-5171

Mailing Addresses

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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 Home Economics, 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 governed by the Tennessee Board of Regents. This unique combination of characteristics-land-grant, urban, and comprehensive-differentiates the University from all others in the State and distinctively shapes its instructional, research, and public service programs. In carrying out its diverse mission, the University serves the City of Nashville and Middle Tennessee, the State, the nation, and the international community.

As an 1890 land grant institution, Tennessee State University provides instructional programs, state-wide cooperative extension services, cooperative agricultural research, and food and agricultural programs of an international dimension.

As a comprehensive institution, Tennessee State University provides programming in agriculture, allied health, arts and sciences, business, education, engineering and technology, family and consumer sciences, human services, nursing, and public administration. The institution is broadly comprehensive at the baccalaureate and master's levels. While doctoral programs are focused in education and public administration, future doctoral programs will continue to address the needs of an urban population.

As a major urban institution, located in the capital city, Tennessee State University provides both degree and non-degree programs (day, evening, weekend, and at off-campus sites) that are appropriate and accessible to a working urban population. To address the needs in health care throughout Middle Tennessee, Tennessee State University offers a limited number of associate degree programs in nursing and allied health. To address the needs in government, business, and industry, the University seeks to embody distinct excellence by providing the state's most comprehensive programming in public administration, through the doctoral level, as well as in business administration and engineering, through the master's level; in these areas the University emulates those institutions in other capital cities that have traditionally served as primary resources to state and local governments and provided resources to the private sector.

The University supports an athletics program which reflects a commitment to students' overall development; the University also promotes positive and life-long learning, scholarly inquiry, and a commitment to the service of others. It serves a diverse population of students – traditional, non-traditional, commuter, residential, undergraduate, graduate, and non-degree, full-time, and part-time. In doing so, it seeks to develop the talents of its students including those with special academic talents as well as those who have educational, cultural, environmental, or socio-economic constraints. The University is committed to providing educational opportunities to all qualified individuals without regard to age, sex, color, race, religion, national origin, disability, or other non-merit reason.

The University's objectives mirror these general and specific purposes. They also reflect the University's priorities. Tennessee State University projects itself to the students, faculty, alumni, and to the citizens of the State through the motto: "Think, Work, Serve."

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 Center for Labor-Management Relations, 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 **"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 **Agricultural-Research and Extension Building** (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.

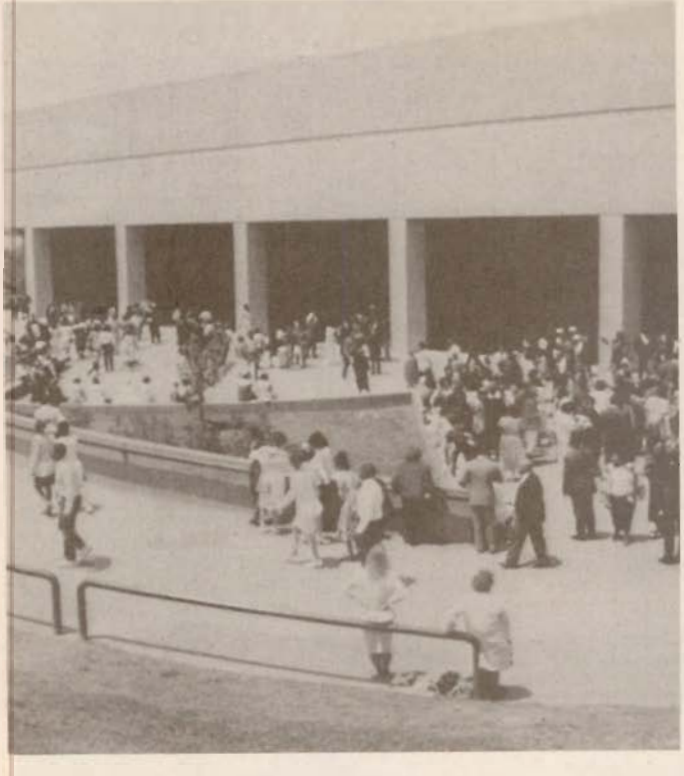
The **Alger Boswell Science Complex**, completed in the fall 1965 and since renovated and enlarged, is located south of Crouch Hall. It houses research laboratories, classrooms, two auditoriums, and faculty offices, as well as the departmental offices of the Department of Chemistry, the Department of 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. It has 82,000 square feet of space with special study and research facilities for faculty and graduate students. A unique special collections room houses the Library's historical archives, theses, dissertations, art objects, and special collections including documents related to the University's unique and colorful history. The Library houses 378,650 book volumes, subscriptions to 1,272 periodicals with over 84,941 bound periodicals, 15,202 microfilm reels, and 754,955 microfiche sheets. Media Centers on the main and downtown campuses offer audio visual services and a variety of computer based information is available. A full-range of services, including books, microfilm, microfiche, periodicals and computerized data bases is also available at the downtown Avon N. Williams, Jr. facility.

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 **Walter S. Davis Home Economics 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; Languages, Literature, and Philosophy; 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.

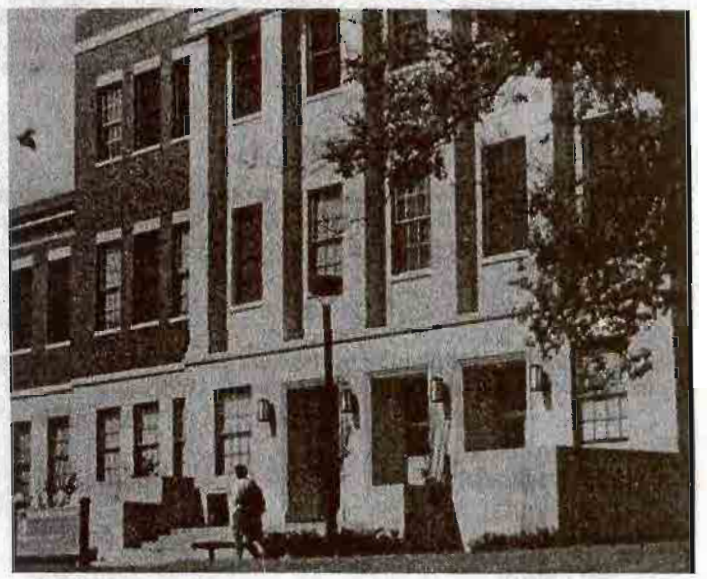
The **Marie Brooks Strange Music Building**, erected in 1968, contains the offices of the Head and faculty of the Music Department, classrooms, listening laboratories, studios for piano and instrumentation, and a recital hall seating 226. It is located at the south end of the campus near 35th and Alameda.

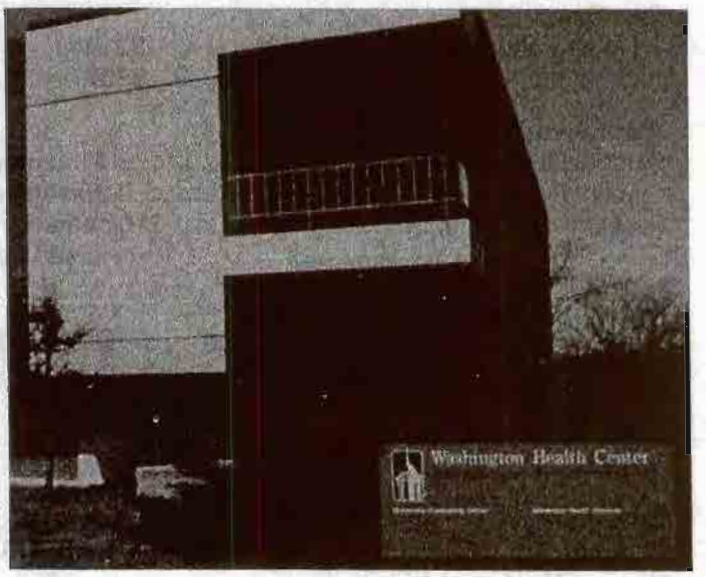
The **Andrew P. Torrence Engineering Building** is located behind the Alger Boswell Science Complex. Its laboratories are equipped with up-to-date equipment for instruction and research in civil, mechanical, architectural and electrical engineering. The building was completed in 1982.

The **University Learning Resources Center,** 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 the Academic Intervention Program, 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 room rents are for the academic year 1998-1999 and are subject to change by action of the Tennessee Board of Regents. The listing of any fee or incidental charges 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 fee(s) 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 fees listed below are for the 1998-1999 academic year. Fees for 1999-2001 will be published when approved by the Tennessee Board of Regents.

FEES

All fees are subject to change by the Tennessee Board of Regents. Changes, if made, will be effective July 1, 1999.

	In-State	Out State
Full-Time:		
Undergraduate (12+ hours)	$1,154	$3,567
Graduate (9+ hours)	$1,481	$3,894
Part-Time:		
Undergraduate	$102/hr	$313/hr
Graduate	$146/hr	$357/hr

Additional Registration Fees:

Student Government	$1/semester
Student Activity	$35/semester
Post Office Box	$10/semester for 7+ credit hours

Residence Facility Fees:

	On-Campus	Heiman	Off-Campus
Single	$1,165	n/a	n/a
Double	$905	n/a	$1,200
Triple	$710	n/a	n/a
Quad	n/a	$1350	n/a

Meal Plans:

19 meals	$675.00
10 meals**	$575.00
10 meals + 200	$775.00
5 meals	$225.00

Residents of Heiman and off-campus University 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:

Orientation Fee	$30
International Student Fee	$30/year
Parking Student Fee	$45/year

65-Year-Old/Disabled Student Credit

Persons 65 years of age or older or permanently and totally disabled persons (T.C.A. Section 49-7-113) who are domiciled in Tennessee may register for classes for credit on a space-available basis and after regular registration is completed by paying a minimum registration fee. The fee is one-half the semester hour 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 Williams Campus (1.50/hour each additional child)	2.00/hr
Class Audit (same as for credit)	—
Thesis - Microfilming	40.00
Dissertation - Microfilming	50.00
Copyright	35.00
Drop/Add per form (non-refundable)	5.00
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	45.00
Mailing Fee	5.00
Housing/Room Deposit	50.00
I.D. Card Replacement (non-refundable)	10.00
Incomplete Project Writing (after three semester hours)	25.00
Incomplete Thesis Writing (after four semester hours)	25.00
Late Registration Fee	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 (non-refundable)	30.00
Post Office Box (after seven credit hours)	10.00
Returned check charge	20.00
Room and Board Deferment Fee	5.00

Testing Fees (non-refundable)	
ACT (Residual)	21.00
Credit by Exam (per credit hour)	15.00
CLEP (per test)	10.00
GED (5 sub tests) ($9.00 per test)	45.00
DANTES	35.00
GRE - General (National)	80.00
GRE - Subject (National)	80.00
NCLEX	28.00
NLN - Single Exam	13.00
NLN - Comprehensive - Associate Degree	28.00
NLN - Comprehensive - Baccalaureate Degree	28.00
MAT	33.00
Speech Pathology and 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 (Non-refundable)

This is a one-time fee paid by an 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 - $30.00 (Non-refundable)

A fee charged to first time Tennessee State University students enrolled for 12 or more hours for credit in a semester or 6 credit hours if first enrollment occurs in a Summer term or those students enrolled with an accumulation of 36 semester hours.

Late Registration - $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 the vehicles (including motorcycles) with the Safety and Security Department. A parking fee is assessed and decals are required to be displayed on vehicles. Persons desiring to register vehicles must pay the appropriate fee at the Bursar's Office. Parking fees are non-refundable.

Graduation Fee

This fee shall be assessed according to degree level and shall include the cost of the diploma and rental of academic regalia. The fee is refundable only if the University has incurred no costs 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 given the University are expected to clear the bank upon which they are drawn. If a check is returned, all fees are considered unpaid and a $20.00 service charge is assessed on each check in addition to a $25.00 late fee if applicable. Check writing privileges may be revoked for any individual who has a check returned by a bank.

Drop/Add Fee - $5.00 Per Form

Any student who adds or drops a course or section is charged this fee. There is no charge if the change is caused by the Institution.

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 only with the approval of the course instructor. Such persons must follow the regular registration procedures and pay fees equivalent to those required as if the course is to be taken for credit.

Traffic Fines

All fines imposed by the University for traffic violations are due to the University and must be paid at the Office of the Bursar. Fines will be assessed for violations of University Safety and Security regulations.

Financial Regulations

No student is allowed to register, obtain grades, diploma, degree or transcript until all accounts are paid. A student is not officially enrolled until all fees are paid through the Office of the Bursar.

Refund of Fees

Registration fees will be refunded for canceled classes and in 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*

Those students who withdraw from the University 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 refunds 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 second Summer session courses but drop or withdraw before the first day of class or 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 Book.

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

The full rent will be refunded if:

1. The applicant is prevented from entering the University because of medical reasons confirmed in writing by a licensed physician.
2. The applicant 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 when a student is forced to withdraw from a residence hall (a week is to consist of three days) 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 $50.00 Housing/Room deposit will be paid only once and remains on file as long as the student maintains, by occupancy or reservation, an active status. The deposit will be refunded after the last semester the signee maintains an active status provided the following conditions are met:

1. The student officially checks out with the residence hall director at the end of the appropriate semester or upon withdrawal;
2. The student turns in his/her room key to the residence hall director;
3. The assigned living space is clean;
4. There is no damage, defacement, or missing fixtures and/or furnishings;
5. There are no deductions for public area damage.

If all the above conditions are not met, there will be an appropriate deduction from the $50.00 deposit. Charges for damages, 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 changes. Questions should be discussed with personnel in the Bursar's Office. A written appeal can be made to the Office of the Vice President of Business and Finance; his/her determination may be appealed to the President of the University, whose decision will be final.

Pro Rata Refund Policy for Financial Aid Recipients

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.

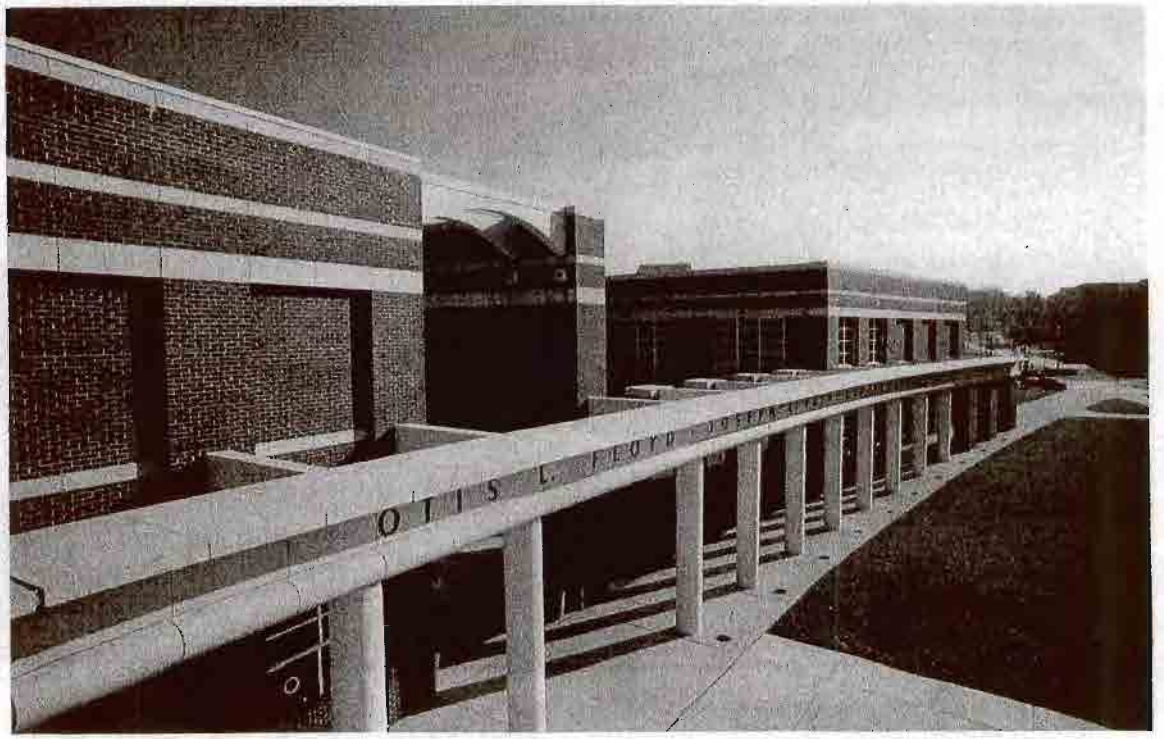
A student is considered to be attending an institution ***for the first time*** if the student has not previously attended at least one class at the institution. A student who previously attended but received a 100% refund of tuition and fees (less any permitted administrative fee) under the institution's 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 to award the Associate, Bachelor's, Master's, Specialist in Education, and Doctor's degrees.

Program Accreditations

Art	National Association of Schools of Art and 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)
Architectural & Mechanical Engineering	Accreditation Board for Engineering and Technology
Civil & Environmental Engineering	
Electrical & Computer Engineering	
Family & Consumer Sciences	American Association of Family and Consumer Sciences
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
Occupational Therapy	Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association
Physical Therapy	Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association
Speech Pathology and Audiology	Council of Academic Accreditation of the American Speech-Language-Hearing Association
Nursing	National League for Nursing Accreditation Commission



INSTITUTIONAL MEMBERSHIPS

- American Council on Education
- AACSB - The International Association for Management Education
- American Association of Administrators of Family and Consumer Sciences
- 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 Services
- 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 of Graduate Schools
- Council of Historically Black Graduate Schools
- 1890 Council of Family and Consumer Sciences
- Council of 1890 Presidents
- Nashville Area Chamber of Commerce
- Teacher Education Council of State Colleges and Universities
- National Association for Business Teacher Education
- National Association of Collegiate Directors of Athletics
- National Association for Equal Opportunity in Higher Education (NAFEO)
- National Association of Schools of Art and Design
- National Association of Schools of Music
- 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
- Southern Association of Colleges and Schools, Inc.
- Southern Business Administration Association
- Southern Regional Education Board
- Tennessee Association of Colleges for Teacher Education
- Tennessee College Association



Undergraduate Degree Programs

Tennessee State University is authorized to grant the following degrees:

School/College	Program	Degree(s)
Agriculture and Home Economics	Agricultural Sciences	B.S.
	Family and 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.
	Physical 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.
	Computer Science	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	Health, Physical Education, and Recreation	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.
	Electrical Engineering	B.S.
	Mechanical Engineering	B.S.
Nursing	Nursing	A.A.S., B.S.N.

1999 – 2001 ACADEMIC CALENDAR

FALL SEMESTER, 1999

Aug.	2	Priority deadline for applications for Admission to the University for Fall 1999
	16	Faculty Institute
	17	College/School Advisement and Registration for freshmen and new students
	18-20	Registration
	23	Classes begin
	23-24	Late Registration Drop/Add
Sept.	1	Holiday
	7	Opening Convocation
Oct.	8	Applications due in major departments for students completing undergraduate and graduate degree requirements in Spring 2000
	11-15	Mid-Term Examination Week
	18	Mid-Semester grades due in the Office of Records - 12:00 Noon
	29	Last day to withdraw from courses - Office of Records
	29	Last day to withdraw from University - University Counseling Center
Nov.	25-26	Holiday
Dec.	1	Priority deadline for applications for admission to the University for Spring 2000
	1	Last day of classes
	2-10	Final Examinations for Fall 1999
	13	Faculty Conference
	15	Final grades due in the Office of Records at 12:00 Noon

SPRING SEMESTER, 2000

Jan.	4	University Re-Opens 8:00 a.m.
	6-7	Registration
	10	Classes begin
	10-12	Late Registration Drop/Add
	17	Holiday
Feb.	4	Applications due in major department for students completing undergraduate and graduate degree requirements in Summer 2000
Mar.	6-10	Mid-Term Examination Week
	13-17	Spring Break
	20	Mid-semester grades due in the Office of Records - 12:00 Noon
	24	Last day to withdraw from courses - Office of Records
	24	Last day to withdraw from University - University Counseling Center
Apr.	3	Priority deadline for Financial Aid applications for Fall 2000
	14	Applications due in major department for students completing undergraduate and graduate degree requirements in December 2000
	21	Holiday
	27-28	Final Examinations for all students completing degree requirements in May.
May	1	Priority deadline for applications for admission to the University for Summer term
	3	Last day of classes
	3	Grades for Spring Graduates due in the Office of Records - 12:00 Noon
	4-12	Final Examinations for Spring 2000
	13	Spring Commencement
	17	Final grades due in the Office of Records - 12:00 Noon

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 SESSION

Summer Intersession – May 15-June 2, 2000

1st Five Week Session

June	1-2	Registration - All Summer Sessions
	5	Classes begin
	5	Late Registration Drop/Add
	23	Last day to withdraw from courses - Office of Records
		Last day to withdraw from University - University Counseling Center
July	4	Holiday
	7	Last day of classes (Final Examinations)

2nd Five Week Session

July	5-7	Priority Fall Orientation/Advisement/ Registration
	10	Classes begin
	10	Late Registration Drop/Add
	12-14	Priority Fall Orientation/Advisement/ Registration
	28	Last day to withdraw from courses - Office of Records
		Last day to withdraw from University - University Counseling Center
Aug.	3	Final Examinations for Summer Graduates
	8	Grades for Summer Graduates due in the Office of Records - 12:00 Noon
	11	Last day of classes (Final Examinations)
	12	Summer Commencement

10 Week Session

June	1-2	Registration - All Summer Sessions
	5	Classes begin
	5	Late Registration Drop/Add
July	4	Holiday
	14	Last day to withdraw from courses - Office of Records
		Last day to withdraw from University - University Counseling Center
Aug.	3	Final Examinations for Summer Graduates
	8	Grades for Summer Graduates due in the Office of Records - 12:00 Noon
	11	Last day of classes (Final Examinations)
	12	Summer Commencement

FALL SEMESTER, 2000

Aug.	1	Priority deadline for applications for Admission to the University for Fall 2000
	21	Faculty Institute
	22	College/School Advisement and Registration for freshmen and new students
	23-24	Registration
	25	Classes begin
	25-28	Late Registration Drop/Add
Sept.	4	Holiday
	7	Opening Convocation
Oct.	6	Applications due in major departments for students completing undergraduate and graduate degree requirements in Spring 2001
	16-20	Mid-Term Examination Week
	23	Mid-Semester grades due in the Office of Records - 12:00 Noon
Nov.	3	Last day to withdraw from courses - Office of Records
	3	Last day to withdraw from University - University Counseling Center.
	23-24	Holiday
Dec.	1	Priority deadline for applications for admission to the University for Spring 2001
	6	Last day of classes
	7-15	Final Examinations for Fall
	18	Faculty Conference
	20	Final Grades due in the Office of Records at 12:00 Noon

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.

SPRING SEMESTER, 2001

Jan.	2	University Re-Opens 8:00 a.m.
	3-4	Registration
	5	Classes begin
	5, 8-9	Late Registration Drop/Add
	15	Holiday
Feb.	2	Applications due in major department for students completing undergraduate and graduate degree requirements in Summer 2001
Mar.	5-9	Mid-Term Examination Week
	12-16	Spring Break
	19	Mid-semester grades due in the Office of Records - 12:00 Noon
	23	Last day to withdraw from courses - Office of Records Last day to withdraw from University - University Counseling Center
Apr.	2	Priority deadline for Financial Aid applications for Fall 2001
	13	Holiday
	20	Applications due in major department for students completing undergraduate and graduate degree requirements in December
	26-27	Final Examinations for all students completing degree requirements in May.
	30	Grades for Spring Graduates due in the Office of Records - 12:00 Noon
May	1	Priority deadline for applications for admission to the University for Summer term
	2	Last day of classes
	3-11	Final Examinations for Spring
	12	Spring Commencement
	16	Final grades due in the Office of Records - 12:00 Noon

SUMMER SESSION

Summer Intersession – May 14-June 1, 2001

1st Five Week Session

May	28-29	Registration - All Summer Sessions
	30	Classes begin
	30	Late Registration Drop/Add
June	15	Last day to withdraw from courses - Office of Records
	15	Last day to withdraw from University - University Counseling Center
July	3	Last day of classes (Final Examinations)
	4	Holiday

2nd Five Week Session

	5	Classes begin
	5	Late Registration Drop/Add
	11-13	Priority Fall Orientation/Advisement/ Registration
	18-20	Priority Fall Orientation/Advisement/ Registration
	27	Last day to withdraw from courses - Office of Records
	27	Last day to withdraw from University - University Counseling Center
Aug.	2	Final Examinations for Summer Graduates
	7	Grades for Summer Graduates due in the Office of Records - 12:00 Noon
	10	Last day of classes (Final Examinations)
	11	Summer Commencement

10 Week Session

May	28-29	Registration - All Summer Sessions
	30	Classes begin
	30	Late Registration Drop/Add
July	4	Holiday
	13	Last day to withdraw from courses - Office of Records
	13	Last day to withdraw from University - University Counseling Center
Aug.	2	Final Examinations for Summer Graduates
	7	Grades for Summer Graduates due in the Office of Records - 12:00 Noon
	10	Last day of classes (Final Examinations)
	11	Summer Commencement

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.

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 134
Biology	3	4	BIOL 101, 102 or 111 w/lab
	4,5	8	BIOL 111 & 112 w/lab
Chemistry	3	3	CHEM 121 w/lab
Lang & Comp.	3	3	ENGL 101
	4,5	6	ENGL 101 & 102
French	3	3	FREN 101
	4,5	6	FREN 101 & 102
Gov't Politics	3	3	PISI 221
Comparative	4,5	6	PISI 221 & 222
European Hist	3	3	HIST Elective
	4,5	6	HIST Elective
United States	3	3	HIST 201
	4,5	6	HIST 201 & 202
Calculus (ab)	3	3	MATH 113
	4,5	6	MATH 113 & 114
Calculus (bc)	3	3	MATH 113 & 114
	4,5	9	MATH 113, 114 & 161
Theory	3,4,5	2	MUSC 131
Listen & Lit.	3	3	MUSC 140
	4,5	5	MUSC 131 & 140
Physics	3	3	PHY 211 w/lab
(B) Mechanics	4,5	6	PHYS 211 & 221 w/lab
	3	3	PHYS 211 w/lab
(C) Elect/Mag.	4,5	8	PHYS 311 & 312
Language	3	3	SPAN 101
	4,5	6	SPAN 101 & 102
Computer Sci	3	3	CS 121
CS (A)	3	3	CS 121
CS (AB)	4,5	6	CS 121 & 211
Economics	3	3	EC 211
	4,5	6	EC 211 & 212
Psychology	3	3	PSY 201
	4,5	6	PSY 201 & 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 1997-99:

A. ACT Score of 19 or 890 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 1997-99.

A. ACT Score of 19 or 890 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.

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 890), **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 AAPP 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 AAPP Test) and abide
Algebra I	1	Take AAPP Test)– by
Algebra II	1	Take AAPP Test) placement
Advanced Math	2	DSMA 099
Nat/Phy Sci.	2	Bio 101 & Lab, Chem 100+100 Lab Chem 121+121L, Chem 122+122L, Bio 111 & Lab, Bio 112 & Lab, Bio 221 & Lab, Bio 232 & Lab (1 or 2 courses may be needed)
U. S. History	1	History 201
Social Studies	1	Enroll in Hist 121, Hist 122, Hist 121H, Hist 122H
For. Lang.	2	FR 101 & 102, GR 101 & 102, SPN 101 & 102 (1 or 2 courses may be needed)
Visual/ Performing Arts	1	ART 134, ART 135, PE 28, THEA 110

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 AAPP assessment for purpose of placement. Students under 21 who are in the following categories must undergo AAPP 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 AAPP.

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 AAPP 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 AAPP 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 AAPP subtests in math and writing.

5. Transfer students who are under 21 years of age and, have fewer than 60 semester hours of credit, and who have not earned college-level math or English credits should undergo AAPP assessment in the appropriate area(s) if the ACT sub-score or SAT Equivalent in the subject is below the level set for screening.

6. Non-degree students who have not completed the first college-level course in English or mathematics must undergo AAPP assessment in the appropriate subject area and must complete courses indicated by AAPP 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 AAPP 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 AAPP 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 an AAPP 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 AAPP placement will not be used as a basis for waiving requirements.

If there are extenuating circumstances, a student may retake the AAPP ninety (90) days after first taking it, providing the student has taken no coursework 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.

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 AAPP 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 AAPP 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 AAPP testing.
(7) Students who have not had remedial and developmental courses at TBR institutions must undergo AAPP 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 to furnish a letter of good standing from the college or university in which he/she is enrolled. The transient student who wishes to become a regular student must file an appropriate application and meet the same requirements for admission as a transfer student.

Transient students who have taken the AAPP 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 AAPP 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 AAPP 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.

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

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	47
Biology 111,112 and Labs	6 hr. cr.	General Biology	50
Biology 101, 102 and Labs	6 hr. cr.	Intro to Biophysical Science	48
Business Law 323	3 hr. cr.	Business Law	51
Chemistry 131, 132, and Labs	8 hr. cr.	General Chemistry	50
Economics 211	3 hr. cr.	Macroeconomics	48
Economics 212	3 hr. cr.	Microeconomics	47
English 101	3 hr. cr.	English Composition with Essay (B on essay)	48
English 102	3 hr. cr.	Freshman College Composition (B on essay)	50
English 211D, 212D	6 hr. cr.	English Literature	48
English 211, 212	6 hr. cr.	American Literature	48
History 201	3 hr. cr.	American History I: Early Colonization to 1877	
History 202	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	47
Marketing MK 301	3 hr. cr.	Introductory Marketing	48
Mathematics 111	4 hr. cr.	College Algebra	55
Mathematics 161	3 hr. cr.	College Algebra-Trigonometry	55
Mathematics 162	3 hr. cr.	Trigonometry	55
Mathematics 163, 164	8 hr. cr.	Calculus w/Elementary Functions	51
Political Science 221	3 hr. cr.	American Government	50
Psychology 201	3 hr. cr.	General Psychology	55
Psychology 373	3 hr. cr.	Educational Psychology	50
Sociology 211	3 hr. cr.	Introductory Sociology	46

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	49
Economics 320	3 hrs.	Money and Banking	48
Finance 330	3 hrs.	Principles of Finance	47
EC 101	3 hrs.	Introduction to Business	46
Management MG 301	3 hrs.	Organizational Behavior	48
Marketing MK 301	3 hrs.	Basic Marketing	47

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 "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 hours attempted—	No minimum GPA
15-29 hours attempted—	Not less than a 1.4 cumulative average
30-50 hours attempted—	Not less than a 1.7 cumulative average
51-67 hours attempted—	Not less than a 1.9 cumulative average
above 67 hours attempted—	Not less than a 2.0 cumulative average; **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 — 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 (P.E. 11-94 series, or one semester hour credit of aerospace studies at the 100 or 200 level may be added to the normal load).

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.

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.

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 101 and 102 (Freshman English). Students who earn a "D" grade in English 101 or 102 are required to repeat Freshman English and earn a "C" or better.

Students for whom transfer equivalence of A, B, or C in English 101 and 102 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 101 or 102 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. The Dean's decision is final.

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.

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.

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 physician).

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

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

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

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

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

1. TSU officials and staff who have legitimate educational interest;
2. Officials of other schools in which the student seeks admission;
3. Appropriate persons in connection with a student's application for, or receipt of, financial aid;
4. Federal or State officials as defined in paragraph 99.37 of the regulations concerning this law;
5. State and local officials authorized by State statute;
6. Organizations conducting studies for, or on the behalf of TSU for the purpose 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**. Students may also elect to meet the requirements of the current catalog.

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 101, 102H (3)	
English 102, 102H (3)	
Humanities	9
Literature	(3 hours required)
English 211, 211A-H (3)	
English 212, 212A-H (3)	
Foreign Languages (6 to 12 hours required)	
French 101 (3)	
French 102 (3)	
French 201 (3)	
French 202 (3)	
German 101 (3)	
German 102 (3)	
German 201 (3)	
German 202 (3)	
Spanish 101 (3)	
Spanish 102 (3)	
Spanish 201 (3)	
Spanish 202 (3)	
Art 133, 133H (2)	
Art 134 (3)	
Music 131, 131H (2)	
Philosophy 201 (3)	
Philosophy 210 (3)	
Philosophy 211 (3)	
Religious Studies 200 (3), 201 (3), 210 (3), 211 (3)	
Theatre 110 (3)	
Theatre 120, 120H (2)	
Mathematics	3
(Prerequisites: 2 units of high school algebra or 1 unit of algebra and 1 unit of geometry)	
MATH 111, 111H (3)	
MATH 112, 112H (3)	
MATH 113 (3)	
MATH 161, 161A (3)	
MATH 162 (3)	
MATH 163, 163A (4)	
MATH 164, 164A (4)	
Natural Sciences	6-8
Biology 101, 101H (3), 101L, 101K	
Biology 102, 102H (3), 102L, 102K	
Biology 111, 111H (4), 111L, 111K	
Biology 112, 112H (4), 112L, 112K	
Chemistry 121, 121H (3); 121L (1)	
Chemistry 122, 122H (3); 122L (1)	
Chemistry 131 (3), 132 (3), 131L, 132L (1)	
Physics 211, 212 (3), 211L, 212L (1)	
Physics 221, 222 (3), 221L, 222L (1)	
Physical Education Activity (one course a semester)	2
PE 11 - 53 (or 91 - 94 for students with certified disabilities)	
or AERO 151, 152, 251, 252 or Music 306A	
Social Sciences	9
History 201, 201H (3)	
History 202, 202H (3)	
Social Science Elective	
Africana Studies 201 (3)	
Anthropology 230 (3)	
Economics 211 (3)	
Geography 171 (3), 172 (3)	
Political Science 221, 221H (3)	
Psychology 201 (3)	
Sociology 211, 211H (3)	

For the Bachelor of Science Degree

	Required Sem. Hrs.
English	6
English 101, 101H (3)	
English 102, 102H (3)	
Humanities	9
Literature	(3 hours required)
English 211, 211A-D, 211H (3)	
English 212, 212A-D, 212H (3)	
Foreign Languages	
French 101 (3)	
French 102 (3)	
French 201 (3)	
French 202 (3)	
German 101 (3)	
German 102 (3)	
German 201 (3)	
German 202 (3)	
Spanish 101 (3)	
Spanish 102 (3)	
Spanish 201 (3)	
Spanish 202 (3)	
Art 133, 133H (2)	
Art 134 (3)	
Music 131, 131H (2)	
Philosophy 201, 210, 211 (3)	
Religious Studies 200, 201, 210, 211 (3)	
Theatre 110 (3)	
Theatre 120, 120H (2)	
Mathematics	3
(Prerequisites: 2 units of high school algebra or 1 unit of algebra and 1 unit of geometry)	
MATH 111, 111H (3)	
MATH 112, 112H (3)	
MATH 113 (3)	
MATH 161, 161A (3)	
MATH 162 (3)	
MATH 163, 163A (4)	
MATH 164, 164A (4)	
Natural Sciences	6-8
Biology 101, 101H (3), 101L, 101K	
Biology 102, 102H (3), 102L, 102K	
Biology 111, 111H (4), 111L, 111K	
Biology 112, 112H (4), 112L, 112K	
Chemistry 121, 121H (3); 121L (1)	
Chemistry 122, 122H (3); 122L (1)	
Chemistry 131 (3), 132 (3), 131L, 132L (1)	
Physics 211, 212 (3), 211L, 212L (1)	
Physics 221, 222 (3), 221L, 222L (1)	
Physical Education Activity (one course a semester)	2
PE 11 - 53 (or 91 - 94 for students with certified disabilities)	
or AERO 151, 152, 251, 252 or Music 306A	
Social Sciences	9
History 201, 201H (3)	
History 202, 202H (3)	
Social Science Elective	
Africana Studies 201 (3)	
Anthropology 230 (3)	
Economics 211 (3)	
Geography 171 (3), 172 (3)	
Political Science 221, 221H (3)	
Psychology 201 (3)	
Sociology 211, 211H (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, ENG 101 and 102. 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 (BIO 101 and 102, BIO 111 and 112, CHEM 121 and 122, CHEM 131 and 132, PHY 211 and 212, or PHY 221-222, 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 111).

7. Six semester hours of a survey of American history (HIST 201 and 202). 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 ENG 211 or 212 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 class (ANTH 230, EC 211, GEOG 171 or 172, PISI 221, PSY 201, SOC 211 or AFAS 201).

10. A course in computer literacy or a course in which computer literacy is demonstrated.

11. Two one-semester courses in Physical Education (PE 11-53 or PE 91 - 94 for students with certified disabilities), Aerospace Studies (AERO 151, 152, 251, 252), 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. A minimum of 24 of the last 30 degree hours in residence at Tennessee State 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 ENG 101 and 102 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 DO 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.

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.

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.

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.

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.

General Education Requirements for the Associate of Applied Science Degree

	Required Sem. Hrs.
English	6
English 101 (3)	
English 102 (3)	
Humanities	2-3
Art 133 (2)	
French 101 (3)	
French 102 (3)	
German 101 (3)	
German 102 (3)	
Music 131 (2)	
Philosophy 201 (3)	
Philosophy 202 (3)	
Philosophy 250 (3)	
Spanish 101 (3)	
Spanish 102 (3)	
Theatre 110 (3)	
Theatre 120 (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 211 (3)	
Psychology 201 (3)	
Psychology 351 (3)	
Oral Communication	3

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
University Counseling Center
Career Center
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 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 $50.00 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 $50.00 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.

Heiman Street Residence Center is a co-educational residence center which hours 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 wit 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 assistant director.

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 and graduate 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 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. This service also functions to identify and aid in the removal of physical barriers which prevent free and open access to University facilities. A vocational rehabilitation counselor is available to provide 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: W. S. Davis Home Economics/Nursing 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 twenty-four 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 the means for students to enter the world of work, and assists students in exploring the scope and variety of career alternatives in their efforts to seek self-fulfillment and to contribute to the well-being of society. It also insures that students at the University have sufficient career and employment information to understand the implication of their educational program decisions. This is accomplished through a specialized professional staff for Permanent Employment, Student Employment (off-campus) and Cooperative Education, a comprehensive Resource Center/Library and annual activities of Career Fair, Freshman Orientation, Teacher Fair, and Student Motivation Task Force Sessions.

Permanent Employment (Graduates, Seniors, and Alumni)

The Career Center assists seniors, alumni and special students in securing positions for which they are qualified. Career counseling services are available by appointment, and there are group sessions on:

1. Résumé development
2. Interview skill development
3. Job Search
4. Resource center utilization
5. Alumni and networking

Also offered is a computerized career/decision-making program entitled System of Interactive and Guidance Information (SIGI), and interviews are arranged between prospective employees and employers.

The Career Center maintains graduates' placement credentials including recommendations and ratings for a period of five years. Credentials may be retained for a longer period of time, if a written request is submitted to the Director of the Career Center. These records serve as the source of information which is frequently requested by prospective employees. Mailing forms, including scholastic achievement scores, work experience records, faculty recommendations, and other pertinent information are compiled and sent to prospective employers at the request of the graduate, a faculty member, or the employer.

Upon the completion of 90 semester hours, graduating seniors are required to register with the Career Center, located in Suite 304 of the Floyd-Payne Campus Center. The services of the Career Center are free to employers, students, and alumni of the University.

Students are also assisted in obtaining part-time, summer and cooperative education employment and internships which enhance their employability.

Student Employment (Off-Campus)

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

On-Campus Student Employment

The federal College Work-Study Program (CWSP) provides part-time employment on campus to currently enrolled eligible students. Eligibility for this federally-funded, need-based program is determined by the Financial Aid Office. It is a program designed to assist students in meeting educational expenses through part-time employment during the academic year and/or summer.

Placements for CWSP are coordinated by the Career Center. Students are required to attend an orientation session where they are given information on how to read a job board, resume writing skills, interviewing techniques, general work ethics and expectations. Interviews with supervisors are required before students are placed in on-campus positions.

Academic Work Scholarship recipients are provided services indicated for College Work-Study students.

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 2.5 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 was established as a Presidential Initiative in August of 1995 to encourage, prepare, and support students who desire to pursue graduate and professional studies upon graduation from the University. As a student services support program, it targets students during their freshman year and tracks them throughout their matriculation. The program is designed to equip students with the tools necessary to make informed decisions about opportunities for educational advancement. The program supports students through a variety of services, including the annual Graduate & Professional School Fair; Personal Statement Workshops; Campus Visitation Programs; the KAPLAN-TSU Test Preparation Program; Informational Forums in Law, Medicine, Business, and Engineering/Science; and Guidance and Counseling Services. Additionally, the program co-sponsors a reference library for information on scholarships and grants for advanced study. 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 is a state-sponsored summer enrichment program for African-American residents of Tennessee who wish to pursue a career in law, dentistry, medicine, pharmacy, and veterinary medicine. The program will pay for students who have completed their freshman or sophomore year to take up to eight credit hours at any UT or Tennessee Board of Regents two-year institution during the summer session. Additionally, freshman and sophomore students may participate as Associates for two summer sessions.

All students in the program are responsible for paying the technology and activity fees and are required to have a cumulative GPA of 3.0.

Junior and senior level students, can participate in the program as Scholars I and II respectively. For the scholars segment, the TPFP provides a summer enrichment program for pre-law and pre-medical students. The cost for the program is underwritten by the state of Tennessee. In order to participate as a Scholars I, you must have completed your junior year of college. In order to participate as a Scholars II, you must have completed your senior year of college and have been formally admitted to 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.

MINORITY STUDENT AFFAIRS

The Office of Minority Student Affairs' overall purpose is to provide programs and services for the Caucasian students 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 life style 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.

The University accepts College Scholarship Service, American College Testing Service, and the U.S. Department of Education as the major clearing houses for need determination. All students who want to be considered for aid are requested to complete a TSU Application for Financial Aid and a Financial Aid Form (FAF). The Financial Aid Form, Family Financial Statement, Application for Federal Student Aid and the Application for Financial Aid may be obtained at the local high school guidance counselor's office, or from the Financial Aid Office at the University. All students are required to submit a valid Student Aid Report (SAR) to the Financial Aid Office in order to receive financial aid, including the loan programs. 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 educational purpose/selective service and anti-drug requirements.
- not be in default on a loan or owe a repayment on a grant.

Sources of Aid

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

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

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

Pell Grant Program - Provides entitlement grants to eligible students.

Minority Grant Program - Provides grants to eligible Caucasian undergraduate students who have a 2.5 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 2.9 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 3.0 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.

Stafford Loan Program - Provides low interest loans from banks, credit unions, savings and loan associations, and other financial institutions.

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.

Tennessee Student Assistance Award - Provides grants to assist undergraduate Tennessee students in financing a post-secondary education.

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

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. This program is designed especially for students who are not eligible for the Stafford loan program.

(**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 our satisfactory progress standard, their progress will be measured at the end of the spring and/or summer semesters to get students who enter the University at different times on the same Full-time measuring schedule. A student who attends the fall and spring semesters and is not in compliance with our 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 on the student's level of matriculation). A student's maximum time allowed to complete his/her degree is six years including all non credit remedial courses taken.

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

A student who 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 3.0. When a student has completed nine or more graduate hours with a GPA less than 3.0, 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	1.4
	2nd	44	1.7
	3rd	66	1.9
	4th	88	2.0
	5th	110	2.0
	6th	132	2.0
3/4-time	1st	17	1.4
	2nd	34	1.4
	3rd	51	1.7
	4th	68	1.9
	5th	85	1.9
	6th	102	2.0
	7th	119	2.0
	8th	132	2.0
1/2-time	1st	11	1.4
	2nd	22	1.4
	3rd	33	1.7
	4th	44	1.7
	5th	55	1.9
	6th	66	1.9
	7th	77	2.0
	8th	88	2.0
	9th	99	2.0
	10th	110	2.0
	11th	121	2.0
	12th	132	2.0

GRADUATE

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

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. 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.

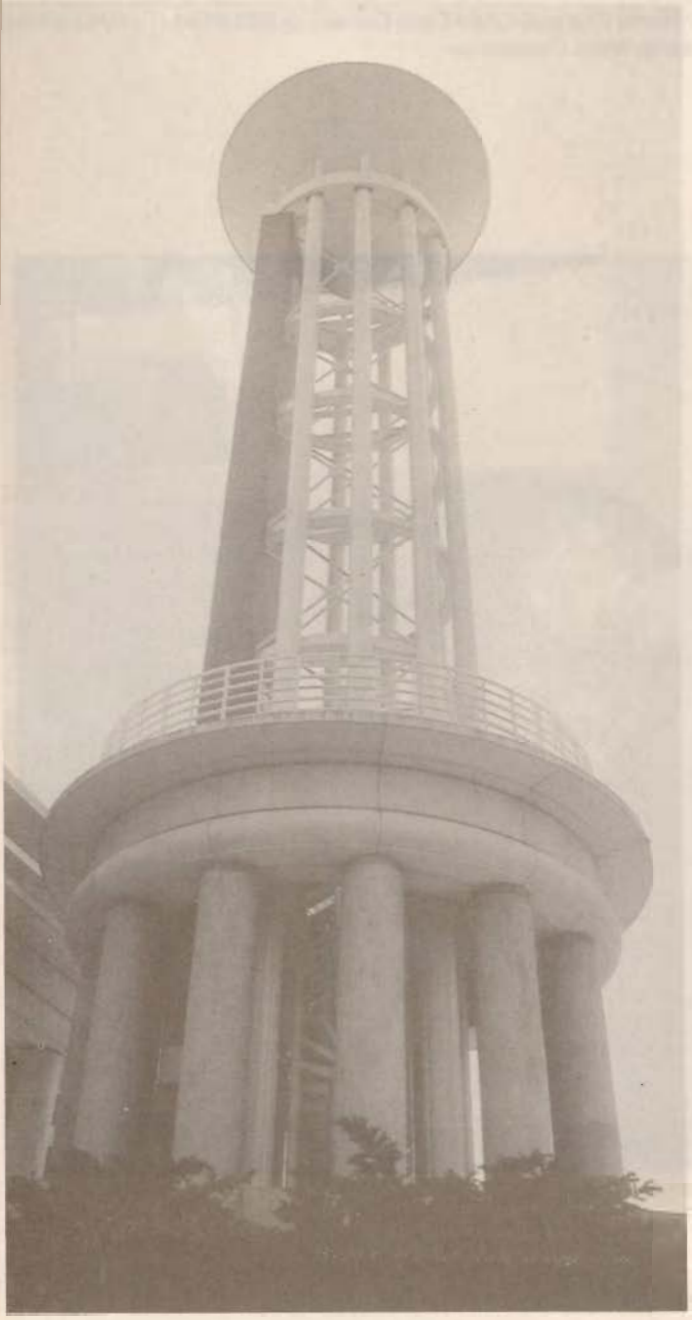
The Early Learning Center, located in the W. S. Davis Home Economics Nursing Complex, is based on a strong commitment to quality education for children and for the University students it serves. The philosophy of the program is derived from a combination of the major theories of child development: Jean 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 on the assumption that children are unique individuals developing in stages at different rates. The Center 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 HOME ECONOMICS
- 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 twelve 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 and compressed video.

Accreditation

Individual academic programs in the College of Arts and Sciences are accredited by the national, regional, and state agencies which accredit programs. All Art programs are accredited by the National Association of Schools of Art and Design (NASAD), the Music programs are 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). In addition, all teacher certification programs in the College are accredited by the National Council on the Accreditation of Teacher Education (NCATE) and the Tennessee Department of Education. The College also shares in the University's overall accreditation by the Southern Association of Colleges and Schools (SACS).

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 growth and development), 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 2.5 cumulative quality 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 129-130 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 33-35 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.

Admission to Upper Level of Programs: Starting in spring, 1999, student majors in all Arts and Sciences programs must be formally admitted to the upper-level 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 level: 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 level 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. 6 semester hours of English composition (ENG 101, 102), with a minimum grade of C in all courses
   c. 6 semester hours of sophomore literature
   d. 6 semester hours of American history (HIST 201, 202)
   e. a college-level mathematics course (MATH 111 or above)
   f. two semesters of science, including the laboratories accompanying the lectures
   g. an acceptable social science course beside HIST 201, 202
   h. 2 humanities courses from 2 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. 2 semesters of physical education activity (PE 11-94), marching band (MUS 306A), and/or AERO 151, 152, 251, 252.

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 level 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 129-130 of the Catalog.

Students may seek a temporary status of tentative admission to begin work on the upper level 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-level 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 (ENG 101 and 102).

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.

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 suggested 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 or 221	Economic Principles I or Development of the American Economy	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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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, 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.

The degree is especially useful for some preprofessional curricula, such as pre-law, pre-medical, and pre-dental, 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.

Students must be officially enrolled in the program at least two semesters before receiving the degree.

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

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	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.)	4-6
MATH 111, 112, or 111, 113, or 161, 162, or 163, 164	College Algebra I, II College Algebra I, Basic Calculus Precalculus Mathematics I, II Calculus and Analytic Geometry, Calculus II	6-8
BIO 111, 111L, 112, 112L or 221, 221L, 222, 222L	General Biology I, II and Labs Human Anatomy and Physiology I, II and Labs	8
CHEM 121, 121L, 122, 122L or 131, 131L, 132, 132L or BIO 101, 101L, 102, 102L or PHY 211, 211L, 212, 212L	General Chemistry I, II and Labs General Chemistry I, II and Labs Intro to Biophysical Science I, II and Labs College Physics I, II and Labs	6-8
CS 121	Introduction to Computing	3

SOCIAL SCIENCES Six hours in any of the following: 6
anthropology, geography, political science, psychology, sociology, economics, except courses specifically designed for teacher certification.

SPCH 220 or 230	Public Speaking or Business and Professional Speech Communication	3
PE 11-94, AERO, or MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100A, B, or C	Orientation	1

Upper-level Admission

For admission in the upper-level 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 coursework, 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 and Psychology are treated as Arts and Sciences disciplines, although they are administered through other colleges in the University.

(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 and Psychology.

Bachelor of Science Degree in Arts and Sciences

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111, 161, OR 163	3	MATH 112, 113, 162, OR 164	3
PHYSICAL SCIENCE	3 or 4	PHYSICAL SCIENCE	3 OR 4
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
CS 121	3	HUMANITIES	2 OR 3
ASOR 100C	1		
	17 OR 18		15-17

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 211	3	ENG 212	3
BIO 111-111L OR 221-221L	4	BIO 112-112L OR 222-222L	4
SOCIAL SCIENCE	3	SOCIAL SCIENCE	3
SPCH 220 OR 230	3	ELECTIVES, ANY LEVEL	6
HUMANITIES	2 OR 3		
	15 OR 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 ARTS AND SCIENCES	3	ELECTIVE, 300-400 ARTS AND SCIENCES	3
ELECTIVE, ANY LEVEL	6	ELECTIVE, 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
ELECTIVE, 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 growth and development, 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 (63 hours), a major concentration of content and knowledge courses (33 or 34 hours), and a professional education core (39 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 2.5 cumulative quality point average and earn acceptable scores 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. 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 129-130.

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

General Education Core **63 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

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211 or 212	Sophomore Literature I or II	3
HIST 201, 202	American History I, II	6
HIST 121 or 122	World History I or II	3
HIST 491 or 492	Afro-American History I or II	3
MATH 111, 112	College Algebra I, II	6
BIO 101, 101L, 102, 102L	Introduction to Biophysical Science I, II and laboratories	6
MUS 131	Music Appreciation	2
ART 133	Art Appreciation	2
SOC 211	Introduction to Sociology	3
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
GEOG 171 or 172	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
PE 11-94	Physical Education Activity (2 semesters required)	2
PE 310	Play and Lead-up Games	2
EDCI 101	Orientation	1
		63

Professional Education **39 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)	3
EDAD 400	Professional Rights and Responsibilities (formerly EDCI 400)	2
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	4
EDSE 333	Education of Exceptional Children	3
		39

Content and Knowledge in Arts and Sciences **33-34 Hours**

The student must complete a major of 33 or 34 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 **34 Semester Hours**
Licensure for Grades 1-8, Endorsement for Grades 5-8

BIO 301, 301L or 413	Earth and Space Science or Contemporary Problems in Ecology I	3
BIO 332, 332L	General Botany	4
ENG 372	Adolescent Literature	3
ENG 373	Children's Literature	3
ENG 410 or 413	History of the English Language or Advanced English Grammar	3
GEOG 430	Social Geography	3
HIST 341	History of Tennessee	3
MATH 211	Structure of the Number System	3
PISI 221	American National Government	3
PSY 312	Measurement and Evaluation for the Classroom in Public Schools	3
SPCH 449	Speech and Theatre for Children	3
		34

Science and Mathematics **34 Semester Hours**
Licensure for Grades 1-8, Endorsement for Grades 5-8

BIO 301	Earth and Space Science	3
BIO 332, 332L	General Botany and Laboratory	4
BIO 413, 414	Contemporary Problems in Ecology I, II	6
ENG 373	Children's Literature	3
HIST 341	History of Tennessee	3
MATH 211	Structure of the Number System	3
PHIL 250	Logic and Critical Thinking	3
SOC 360	The Family	3
PSY 312	Measurement and Evaluation for the Classroom in Public Schools	3
STAT 291	Introduction to Probability and Statistics	3
		34

Child Growth and Development **33 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
ENG 373	Children's Literature	3
HIST 341	History of Tennessee	3
PSY 201	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 310	Introduction to Human Communication	3
		33

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
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	MATH 112	3
BIO 101, 101L (FORMERLY SCI 121)	3	BIO 102, 102L (FORMERLY SCI 122)	3
SPCH 220	3	ART 133	2
EDCI 101	1	GEOG 171 OR 172	3
PE, 2-DIGIT	1		
	17		17

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 211 OR 212	3	MATH 211	3
HIST 121 OR 122	3	CS 121	3
PISI 221	3	SOC 211	3
PSY 242	3	MUS 131	2
EDCI 201	3	BIO 332, 332L	4
HEA 151	3	(FORMERLY BIO 232, 232L)	
PE, 2-DIGIT	1	PSY 312	3
	19		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 372	3	ENG 373	3
SPCH 449	3	HIST 341	3
GEOG 430	3	HIST 491 OR 492	3
EDAD 301 (FORMERLY EDCI 301)	3	EDCI 387	3
EDSE 333	3	HEA 306	3
PE 310	2		
	17		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 410 or 413	3	EDCI 470B	3
BIO 301 OR 413 (FORMERLY SCI 381 OR 481)	3	EDCI 472M	12
EDCI 390A, B	6		
EDAD 400 (FORMERLY EDCI 400)	2		
EDRD 424	4		
	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
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	MATH 112	3
BIO 101, 101L (FORMERLY SCI 121)	3	BIO 102, 102L (FORMERLY SCI 122)	3
SPCH 220	3	ART 133	2
EDCI 101	1	GEOG 171 OR 172	3
PE, 2-DIGIT	1		
	17		17

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 211 OR 212	3	MATH 211	3
HIST 121 OR 122	3	CS 121	3
STAT 291	3	SOC 211	3
EDCI 201	3	BIO 332, 332L (FORMERLY BIO 232, 232L)	4
PSY 242	3	MUS 131	2
HEA 151	3		
PE, 2-DIGIT	1		
	19		15

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 413 (FORMERLY SCI 481)	3	BIO 414 (FORMERLY SCI 482)	3
SOC 360	3	ENG 373	3
EDAD 301 (FORMERLY EDCI 301)	3	HIST 341	3
EDSE 333	3	HEA 306	3
PSY 312	3	HIST 491 OR 492	3
PE 310	2	EDCI 387	3
	17		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 301 (FORMERLY SCI 381)	3	EDCI 470B	3
PHIL 250	3	EDCI 472M	12
EDCI 390A, B	6		
EDAD 400 (FORMERLY EDCI 400)	2		
EDRD 424	4		
	18		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
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	MATH 112	3
BIO 101, 101L (FORMERLY SCI 121)	3	BIO 102, 102L (FORMERLY SCI 122)	3
SPCH 220	3	GEOG 171 OR 172	3
EDCI 101	1	ART 133	2
PE, 2-DIGIT	1		
	17		17

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 121 OR 122	3	ENG 211 OR 212	3
MUS 131	2	HIST 341	3
PSY 201	3	SOC 211	3
HEA 151	3	CS 121	3
EDCI 201	3	PSY 242	3
ECCD 201	3	PE, 2-DIGIT	1
	17		16

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 373	3	SOC 360	3
SPCH 449	3	HEA 306	3
SPTH 310	3	PSY 312	3
EDAD 301 (FORMERLY EDCI 301)	3	PSY 315 OR 424	3
PE 310	2	EDCI 387	3
EDSE 333	3	ECCD 332	3
	17		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 491 OR 492	3	EDCI 470B	3
EDCI 390A, B	6	EDCI 472M	12
EDAD 400 (FORMERLY EDCI 400)	2		
EDRD 424	4		
ECCD 361	3		
	18		15

Department of Africana Studies

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301 Jane E. Elliott Hall (Women's Building)
Telephone 615-963-5561
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Faculty: M. Monanabela, W. Yefru.

General Statement: The Department of Africana Studies is guided by an analysis of the cultural, economic, political, and social conditions of persons born on the African continent and of persons of African descent living in the United States and other regions of the Diaspora (areas outside Africa inhabited by significant numbers of persons of African descent).

The primary goal of the Department of Africana Studies is to educate and train practical scholars, intellectuals, and leaders who are committed to the development and elevation of African peoples around the world. Students majoring in Africana Studies gain fundamental knowledge of the culture, history, religion, philosophy, political economy, and social organization of the peoples of African descent on the African continent and in the Diaspora.

The core curriculum is interdisciplinary and is designed to give students a logical, historically grounded, and scientific perspective on the social and natural phenomena that are unique to the African World. While the primary focus is on the particularities of the African World, the program subscribes to a universal discourse that has implications for the whole of the human community. For it is important to locate African peoples as authors and subjects of world history rather than always being portrayed as victims and objects of world history.

The B.S. degree in Africana Studies is designed to produce competent and creative graduates. It is established particularly for those with a developed interest in the field of studies related to persons of African descent.

A second goal of the Department of Africana Studies is to provide a rigorous curriculum of study that contributes to the scientific reconstruction of the history, culture, and values of peoples of African descent. The Department further seeks to train generations of students who will contribute to the development, consciousness, self-reliance, and self-determination of the African-American community.

Career Opportunities: federal, state, and local government; social agencies; teaching; law; foreign services in Africa, the Caribbean, and South America; civil and human rights organizations; the ministry; cultural centers; museums; general business; and Affirmative Action coordinator. The program also prepares students for graduate and professional school.

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-five 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.

Beyond the major core, students are required to take nine hours in one of three concentrations: development studies, cultural studies, or international affairs. These concentrations allow students to focus their knowledge gained from the major core and the internship into a practical application. Students can thus arrive at development strategies and tactics that can help solve the serious problems facing African peoples.

Students must earn at least a C in all thirty-six hours of the major core and nine hours of the concentration. If they earn less than a C in any of these courses, they must repeat them until they earn a C or better.

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

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211C, 212C	Black Arts and Literature I, II	6
HIST 201, 202	American History I, II	6
EC 211	Principles of Economics I	3
MATH 111	College Algebra I	3
BIO 111,112, 111L,112L	General Biology I, II or	8
CHEM 121, 122,121L,122L	General Chemistry I, II or	
PHY 211,212, 211L,212L	College Physics I, II	
PHIL 250	Logic and Critical Thinking	3
ART 133 or MUS 131	Art Appreciation or Music Appreciation	2
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
PE 11-94 or AERO or MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100B	Orientation for Social Science Majors	1

Upper-level Admission

Before students are admitted to the upper level of the degree program, they must have completed all of the above general education courses, in addition to AFAS 201 and two semesters of a single African language (Arabic, Kiswahili, or Yoruba). They must have earned at least a C in ENG 101 and 102, AFAS 201, 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 coursework.

Major Core

AFAS 101-102, 103-104, or 105-106	African Languages I, II	6
AFAS 201	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 450W	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

Concentrations: three courses in one of the following areas.

Development Studies
AFAS 385 Caribbean Societies and Modernization
AFAS 400 Political Economy of African Nations
AFAS 407 Political Economy of the African-American Community
NTR 201 Basic Nutrition Principles

International Affairs
AFAS 385 Caribbean Societies and Modernization
AFAS 392 African Societies and Modernization
AFAS 400 Political Economy of African Nations

Cultural Studies
AFAS 300 The African Male
AFAS 362 The African-American Family
AFAS 420 Media, Social Change, and Mass Empowerment
AFAS 432 African Spiritual Traditions

Bachelor of Science Degree in Africana Studies

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
AFAS 201	3	MATH 111	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
*FR/SPN 201 OR HIGHER	3	FR/SPN 202 OR HIGHER	3
ART 133 OR MUS 131	2	HEA 151	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100B	1		
	16		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
ENG 211C	3	ENG 212C	3
BIO/CHEM/PHY	4	BIO/CHEM/PHY	4
PHIL 250	3	ELECTIVES OR MINOR	3
CS 121	3	EC 211	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 OR MINOR	15
AFAS CONCENTRATION	6		
ELECTIVE OR MINOR	3		
	15		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
AFAS 450W	3	AFAS 440	3
AFAS 451	3	AFAS 490	3
HIST 491 OR 492	3	HIST 485 OR 486	6
ELECTIVES OR MINOR, 300-400 LEVEL	6	ELECTIVE, 300-400 LEVEL	3
AFAS CONCENTRATION	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 201 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.

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.

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.

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.

AFAS 395 The Great Debate (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.

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.

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.

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. Prerequisite: AFAS 201.

AFAS 432 African Spiritual Traditions (3). An introduction to African spiritual traditions. Course examines selected sacred texts within the context of African history and culture. Included is a study of classical teaching and rituals, and the rise of the African spiritual paradigm in contemporary liberation theologies.

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.

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. Prerequisite: AFAS 201.

AFAS 451 Africana Studies Internship (3). 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. Prerequisite: permission of Department head.

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: AFAS 450 and 451.

Department of Art

31 Jane Elliott Hall (Women's Building) Telephone 615-963-5921

Faculty: H. Beasley, B. Chappell, 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 National Council on the Accreditation of Teacher Education (NCATE) and the Tennessee Department of Education.

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 134 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 2.5 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 129-130. 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

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
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 labs	6
SOC 211	Introduction to Sociology	3
SPCH 220	Public Speaking	3
MUS 131	Music Appreciation	2
PHIL 201	Introduction to Philosophy: Moral Issues	3
CS 121	Introduction to Computing	3
PE 11-94, MUS 306A, or AERO	Physical Education Activity (2 semesters required)	2
ASOR 100C	Orientation for Humanities Majors	1

(Teacher certification students should take EDCI 101.)

Upper-level Admission

For admission into the upper-level 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
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
CS 121	3	MATH 111	3
ASOR 100C	1	MUS 131	2
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	15		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 210	3	ART 220	3
ART 221	3	ART 302	3
ART 301	3	ENG 212	3
ENG 211	3	BIO 102, 102L	3
BIO 101, 101L	3	PHIL 201	3
SOC 211	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 OR	6
ART ELECTIVES, 300 OR 400 LEVEL	6	400 LEVEL	
		ART ELECTIVE	3
ART HISTORY ELECTIVE, 300 OR 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
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
CS 121	3	MATH 111	3
SPCH 220	3	PE, AERO, OR MUS 306A	1
EDCI 101	1		
	17		16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 221	3	ART ELECTIVE*	3
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	3
SOC 211	3	ART HISTORY ELECTIVE	3
MUS 131	2	PHIL 201	3
EDCI 201	3	PSY 242	3
PE, AERO, OR MUS 306A	1		
	18		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	3	EDCI 387	3
PSY 312	3	EDAD 400	2
		EDCI 419	1
		HEA 151	3
	18		19

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ART 450	3	ART 472	12
ART ELECTIVES*	6	EDCI 470A	3
ART HISTORY ELECTIVE, 300 OR 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 133 Art Appreciation (2). 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 133H Honors Art Appreciation (2). 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 134 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 110-220 or 121-122 or 132.

ART 220 Drawing and Pictorial Design II (3). Composition stressing figure and environmental situation. Prerequisites: ART 110-120 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 110-120 or 121-122 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 B 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 Afro-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 Afro-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. For the M.S. and Ph.D. programs in Biology, see Graduate Catalog.

General Education Core

ENG 101, 102	Freshman English I, II (minimum grades of C)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	American History I, I	6
MATH 162 or higher	*Precalculus Mathematics* II (Cellular and molecular biology students must take 163.)	3
CHEM 121, 121L, 122, 122L	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 111, 111L, 112, 112L	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	4-6
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
ASOR 100A	Orientation for Science Majors (Teacher certification students should take EDCI 101.)	1
PE 11-94, AERO, or MUS 306A	Physical Education Activity (two semesters)	2

Upper-level Admission

For admission into the upper-level 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-level 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 138 semester hours is required in the teacher preparation program (62 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 2.5 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 pages 129-130.

A major in Biology with emphasis in General Biology or Cellular and Molecular Biology requires 131 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 111-111L, 112-112L; 211-211L (Cell Biology); and 212-212L (Genetics). General Chemistry 121 and 122, 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 National Council on the Accreditation of Teacher Education (NCATE) and the Tennessee Department of Education.

Completing Degree in Biology While Earning Advanced Degree at Another Institution

Biology 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 Biological Sciences 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 Biology 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 Biological Sciences and the Dean of Arts and Sciences before students begin study at the other institution. Students cannot apply for the degree from TSU without having advanced to candidacy at the other institution or completed three years of fulltime study there. In most cases the students would follow the four-year program spelled out below for the cooperative program with Meharry Medical College; departures from that program must be agreed to in advance by the Department head.

Joint Program in Dentistry and Medicine with Meharry Medical College

In cooperation with Meharry Medical College, the Department offers a curriculum preparatory to the study of medicine and dentistry. The curricula are joint programs between the two institutions and qualify students for the bachelor's degree at TSU, as well as shorten the time for earning a degree at Meharry. The first three years of this program consist of the basic curriculum for a major in Biology at TSU. All the required courses in this curriculum, including all of the general education courses, must be completed before the student matriculates at Meharry. The fourth year of the joint program is offered at Meharry Medical College to those students who are admitted to the College. Upon successful completion of the freshman year curriculum in the School of Dentistry or the School of Medicine at Meharry, the student applies to Tennessee State University for the Bachelor of Science degree. The student must satisfy all degree requirements at TSU to be awarded a degree.

Bachelor of Science Degree in Biology General Biology Emphasis

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 111, 111L	4	BIO 112, 112L	4
CHEM 121, 121L	4	CHEM 122, 122L	4
ENG 101	3	ENG 102	3
HUMANITIES	2 OR 3	MATH 162 OR HIGHER	3
ASOR 100A	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	15 OR 16		18

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
ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
SPCH 220 OR 230	3	HUMANITIES	2 OR 3
	17		16 OR 17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PHYSIOLOGY ELECTIVE (BIO 321- 321L, 340-340L, OR 430-430L)	4	BIO 412, 412L	4
BIO ELECTIVE, 300-400 LEVEL	4	CHEM 341, 341L	4
PHY 211, 211L	4	NON-BIO ELECTIVE	3
FR, GER, OR SPN	3	PHY 212, 212L	4
PSY 201	3	FR, GER, OR SPN	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 OR 400 LEVEL	4	ELECTIVES, 300-400 LEVEL	6
ELECTIVES, 300 OR 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
BIO 111, 111L	4	BIO 112, 112L	4
CHEM 121, 121L	4	CHEM 122, 122L	4
ENG 101	3	ENG 102	3
HUMANITIES	2 OR 3	MATH 163	3
ASOR 100A	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	15 OR 16		18

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
ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
SPCH 220 or 230	3	HUMANITIES	2 OR 3
	17		16 OR 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	SOC ELECTIVE, 300-400	3
PHY 211, 211L	4	CHEM 342, 342L	4
FR, GER, OR SPN	3	PHY 212, 212L	4
PSY 201	3	FR, GER, OR SPN	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 LEVEL	4	NON-BIO ELECT., 300-400	6
NON-BIO ELECTIVE, 300-400 LEVEL	3		
NON-BIO ELECTIVE, ANY LEVEL	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
BIO 111, 111L	4	BIO 112, 112L	4
CHEM 121, 121L	4	CHEM 122, 122L	4
ENG 101	3	ENG 102	3
MUS 131	2	CS 121	3
HEA 151	3	MATH 162 OR HIGHER	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
EDCI 101	1		
	18		18

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
ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
PSY 242	3	EDCI 201	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
PHY 211, 211L	4	BIO ELECTIVE, 300 OR 400 LEVEL	4
SPCH 220 OR 230	3	PHY 212, 212L	4
ART 133	2	SOC 211	3
EDAD 301 (FORMERLY EDCI 301)	3	EDCI 387	3
PSY 312	3		
	19		18

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 OR 400	3		
EDAD 400 (FORMERLY EDCI 400)	2		
EDCI 419	1		
EDRD 491	3		
EDSE 333	3		
	16		15

Bachelor of Science Degree in Biology Cooperative Program in Pre-Medicine and Pre-Dentistry

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
BIO 111, 111L	4	BIO 112, 112L	4
CHEM 121, 121L	4	CHEM 122, 122L	4
ENG 101	3	ENG 102	3
HUMANITIES	2 OR 3	MATH 162 OR HIGHER	3
ASOR 100A	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	15 OR 16		18

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
ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
SPCH 220 OR 230	3	HUMANITIES	2 OR 3
	17		16 OR 17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PHYSIOLOGY ELECTIVE (BIO 321-321L, 340-340L, OR 430-430L)	4	BIO 412, 412L	4
BIO 311 or PSY 311	3	CHEM 341, 341L	4
BIO 417	1	SOC ELECTIVE, 300 OR 400	3
PHY 211, 211L	4	PHY 212, 212L	4
FR, GER, OR SPN	3	FR, GER, OR SPN	3
PSY 201	3		
	18		18

All of these courses must be completed before the student begins work at Meharry Medical College.

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.

BIO 101, 101L and 102, 102L 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)

BIO 101H, 101K and 102H, 102K Honors Introduction to Biophysical Sciences and Laboratory (3, 3). Honors version of BIO 101, 101L, 102, 102L. Courses limited to students in University Honors Program.

BIO 111, 111L and 112, 112L General Biology I, II and Laboratory (4, 4). Structure, function, and life characteristics of organisms.

BIO 111H, 111K and 112H, 112K Honors General Biology I, II and Laboratory (4, 4). Honors version of BIO 111, 111L, 112, 112L. 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: BIO 111, 111L, 112, 112L. (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 111, 111L, 112, 112L. (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: BIO 111, 111L or CHEM 121, 121L, 122, 122L. (Formerly MCB 250)

BIO 301, 301L Earth and Space Science and Laboratory (4). 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 161, BIO 111, 111L, 112, 112L, 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: BIO 111, 111L, 112, 112L and CHEM 121, 121L, 122, 122L, 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: BIO 111, 111L, 112, 112L. (Formerly ZOO 330)

BIO 330, 330L Plant Morphology and Laboratory (4). Consideration of the structure, embryology, and phylogeny of higher vascular plants. Prerequisites: BIO 111, 111L, 112, 112L, 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 and CHEM 311, 311L 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 121, 121L, 122, 122L. (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 and 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: BIO 111, 111L, 112, 112L, 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: BIO 111, 111L, 112, 112L, 212, 212L, 411, 411L and CHEM 121, 121L, 122, 122L.

BIO 416 Evolution (3). A study of current evolutionary theory, including systematics, with an examination of macroevolutionary patterns and microevolutionary processes.

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: BIO 111, 111L, 112, 112L, 212, 212L, 411, 411L. (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 111, 111L, 112, 112L, 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: BIO 111, 111L, 112, 112L, 212, 212L, 411, 411L. (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: BIO 111, 111L, 112, 112L, 212, 212L, 411, 411L. (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: BIO 111, 111L, 112, 112L or BIO 221, 221L, 222, 222L and CHEM 311, 311L. (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: BIO 221, 221L, 222, 222L.

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 121, 121L, 122, 122L. (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: BIO 111, 111L, 112, 112L, CHEM 121, 121L, 122, 122L.

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., Acting Head
201 Chemistry Building
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Faculty: M. Asson-Batres, K. Carr, F. Chen, T. Gardner, D. Holder, P. Iyere, M. Karim, Y. Lin, M. Whalen, G. Zimmerman.

General Statement: The purpose of the Department of Chemistry is the preservation, interpretation, dissemination, and advancement of chemical ideas 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, chemical analysis, 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 to 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.

A Professional Chemistry concentration consists of 53 semester hours of chemistry with at least 33 hours upper-level.

A Chemistry concentration consists of 35 semester hours of Chemistry with at least 15 hours upper-level, while a minor in Chemistry consists of 20 semester hours of Chemistry (121, 122, 210, 211, 212, and accompanying laboratories).

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 National Council on the Accreditation of Teacher Education (NCATE) and the Tennessee Department of Education.

Departmental Requirements For Bachelor of Science Chemistry — **32-44 Semester Hours**

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	American History I, II	6
MATH 161, 162	Precalculus Mathematics I, II (Professional Chemistry concentration requires MATH 163A, 164A; Pre-Professional/Biochemistry concentration requires 163, 164.)	6
BIO 111, 111L, 112, 112L	General Biology I, II and labs (not required in Professional Chemistry concentration)	8
Humanities	2 courses from 2 different disciplines	4-6
Social Science	One three-hour course	3
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
ASOR 100A	Orientation for Science Majors (Teacher certification students should take EDCI 101.)	1
PE 11-94, AERO, or MUS 306A	Physical Education Activity (must consist of two courses)	2

Upper-level Admission

For admission into the upper-level 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 121, 121L, 122, 122L, 210, 210L, 211, 211L, 212, 212L.

Curriculum 1-Professional Chemistry Curriculum 53 Hours

This program requires 130-132 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 of chemistry is required, 33 of which must be in 300- or 400-level courses. The required courses are 121H, 122H, 210, 211H, 212H, 321, 322, 341, 410, 420, 421, 432, 450, 491, 492, and accompanying laboratories, plus one additional course at the 300 or 400 level. CHEM 460 is strongly recommended. This curriculum is based upon recommendations by the American Chemical Society.

Curriculum 2-Professional Chemistry/ Biochemistry 45 Hours

This program requires 134-136 hours for graduation and is designed for students pursuing a professional career in medicine, dentistry, pharmacy, or veterinary medicine.

A minimum of 45 semester hours is required, 25 of which must be in 300- and 400-level courses. The required courses are: 121H, 122H, 210, 211H, 212H, 300, 331, 332, 341, 342, 410, 470, 491, 492, and accompanying laboratories.

Curriculum 3-Chemistry Concentration 35 Hours

This program of study requires 130-132 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: 121, 122, 210, 211, 212, 300, 331, 332, 410, 491, 492, and the accompanying laboratories.

Curriculum 4-Major in Chemistry with Teacher Certification, Licensure for Grades 7-12 39 Hours

All candidates for certification in secondary education must complete a minimum of 140-141 semester hours, which includes a general education core (70-71 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 (34 hours). The required courses in Chemistry are 121, 122, 210, 211, 212, 300, 320, 331, 332, 371, 491, 492, and accompanying laboratories. 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 2.5 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 129-130.

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 Professional Chemistry/Biochemical concentration and the pre-pharmacy requirements for Howard University. Required Chemistry courses are: 121H, 122H, 210, 211H, 212H, 300, 320, 331, 332, 491, 492, and accompanying laboratories. 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 121H, 121L	4	CHEM 122H, 122L	4
ENG 101	3	ENG 102	3
MATH 163A	4	MATH 164A	4
HUMANITIES	2-3	HUMANITIES	2-3
CS 121	3	SPCH 220	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100A	1		
	18-19		17-18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 211H, 211L (FORMERLY CHEM 311, 311L)	4	CHEM 212H, 212L (FORMERLY CHEM 312, 312L)	4
ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
MATH 263A	3	CHEM 210, 210L (FORMERLY CHEM 310, 310L)	3
PHY 221, 221L	4	PHY 222, 222L	4
	17		17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 321, 321L	4	CHEM 322, 322L	4
SOCIAL SCIENCE	3	CHEM 410	2
MATH/SCIENCE ELECTIVE, 300-400 LEVEL	3	MATH/SCIENCE ELECTIVE, 300-400 LEVEL	3
ELECTIVES, 300-400 LEVEL	6	ELECTIVE, 300-400	3
		ELECTIVE, ANY LEVEL	3
	16		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 420, 420L	4	CHEM 421	3
CHEM 450A	2	CHEM 432, 432L	4
CHEM 491	1	CHEM 450B	2
CHEM 341	3	CHEM 492	1
ELECTIVES, ANY LEVEL	6	CHEM ELECTIVE, 300-400	3
	16		13

Bachelor of Science Degree in Chemistry

Curriculum 2-Professional Chemistry/Biochemistry Concentration

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 121H, 121L	4	CHEM 122H, 122L	4
ENG 101	3	ENG 102	3
BIO 111, 111L	4	BIO 112, 112L	4
MATH 163	4	MATH 164	4
ASOR 100A	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	17		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 211H, 211L (FORMERLY CHEM 311, 311L)	4	CHEM 212H, 212L (FORMERLY CHEM 312, 312L)	4
SOCIAL SCIENCE ELECTIVE	3	CHEM 210, 210L (FORMERLY CHEM 310, 310L)	4
HUMANITIES	2-3	ENG 212	3
ENG 211	3	HIST 202	3
HIST 201	3	HUMANITIES	2-3
	15-16		16-17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 331	3	CHEM 332	3
CHEM 341, 341L	4	CHEM 342, 342L	4
BIO 221, 221L	4	BIO 222, 222L	4
PHY 211, 211L	4	PHY 212, 212L	4
SPCH 220	3	CHEM 410	2
	18		17

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 470, 470L	4	CHEM 300	3
CHEM 491	1	CHEM 492	1
BIO ELECTIVE, 300-400	4	BIO ELECTIVE, 300-400	4
ELECTIVES, 300-400	6	ELECTIVES, 300-400	9
	15		17

Bachelor of Science Degree in Chemistry

Curriculum 3-Chemistry Concentration

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 121, 121L	4	CHEM 122, 122L	4
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 161	3	MATH 162	3
ASOR 100A	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	15		17

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 211, 211L (FORMERLY CHEM 311, 311L)	4	CHEM 212, 212L (FORMERLY CHEM 312, 312L)	4
SPCH 220	3	CHEM 210, 210L (FORMERLY CHEM 310, 310L)	4
HUMANITIES	2-3	HUMANITIES	2-3
ENG 211	3	BIO 112, 112L	4
BIO 111, 111L	4	ENG 212	3
	16-17		17-18

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	6	ELECTIVES, 300-400	6
	17		16

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 491	1	CHEM 300	3
ELECTIVES, 300-400	9	CHEM 492	1
ELECTIVES, ANY LEVEL	6	ELECTIVES, 300-400	12
	16		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 121, 121L	4	CHEM 122, 122L	4
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 161	3	MATH 162	3
HEA 151	3	HUMANITIES	2-3
EDCI 101	1	SPCH 220	3
	17		18-19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 211, 211L (FORMERLY CHEM 311, 311L)	4	CHEM 212, 212L (FORMERLY CHEM 312, 312L)	4
CHEM 210, 210L (FORMERLY CHEM 310, 301L)	4	SOCIAL SCIENCE	3
ENG 211	3	EDCI 201	3
PHY 211, 211L	4	ENG 212	3
PSY 242	3	PHY 212, 212L	4
	18	PE, AERO, OR MUS 306A	1
			18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 331, 331L	4	CHEM 332, 332L	4
CS 121	3	CHEM 320	3
BIO 111, 111L	4	BIO 112, 112L	4
GEOG 121	3	GEOG 122	3
EDAD 301 (FORMERLY EDCI 301)	3	EDCI 387	3
PE, AERO, OR MUS 306A	1	MUS 131	2
	18		19

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 371	3	CHEM 472S	12
CHEM 450	2	EDCI 470A	3
CHEM 491	1	CHEM 492	1
EDAD 400 (FORMERLY EDCI 400)	2		
EDCI 419	1		
EDRD 491	3		
EDSE 333	3		
PSY 312	3		
	18		16

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 121H, 121L	4	CHEM 122H, 122L	4
ENG 101	3	ENG 102	3
MATH 161	3	MATH 162	3
BIO 111, 111L	4	BIO 112, 112L	4
HUMANITIES	2-3	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100A	1		
	18-19		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 211H, 211L (FORMERLY CHEM 311, 311L)	4	CHEM 212H, 212L (FORMERLY CHEM 312, 312L)	4
SPCH 220	3	CHEM 210, 210L	4
MATH 163	4	(FORMERLY CHEM 310, 310L)	
ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
HUMANITIES	2-3	SOCIAL SCIENCE	6
	19-20		20

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CHEM 331, 331L	4	CHEM 332, 332L	4
CHEM 491	1	CHEM 492	1
PHY 211, 211L	4	PHY 212, 212L	4
BIO 211, 211L	4	SOC ELECTIVES	6
BIO 221, 221L	4	CHEM 410	2
	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. The course is designed for students with no high school chemistry. Three lectures and one three-hour laboratory per week. Offered in fall and spring.

CHEM 101 (2) and 101L (1) Fundamentals of Chemistry and Laboratory for Dental Hygiene Students. A study of the fundamentals of general chemistry, organic chemistry, and biochemistry. Three lectures and one three-hour laboratory per week. Enrollment limited to Dental Hygiene majors. Offered in fall.

CHEM 121, 122 (3, 3) and 121L, 122L (1, 1) General Chemistry I, II and Laboratory. Introduction to the fundamental concepts and basic principles of chemistry. Lectures deal with the basic theories of chemistry: atomic structure, kinetic theory, chemical stoichiometry, the chemical bond, oxidation-reduction, solutions, chemical equilibrium. Prerequisites: high school chemistry or CHEM 100, 100L, and two years high school algebra or MATH 111. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 121H, 122H (3, 3) Honors General Chemistry I, II. For Chemistry majors and University Honors Program students only. These students also register for CHEM 121L-122L. Three lectures and one three-hour laboratory per week. CHEM 121H offered in fall, 122H in spring.

CHEM 131, 132 (3, 3) and 131L, 132L (1, 1) General Chemistry and Laboratory. A course for non-science majors that covers the particle nature of matter, substance and chemical change, kinetic theory, and selected topics from the fields of inorganic chemistry, biochemistry, and environmental chemistry. Must be taken in sequence. Three lectures and one three-hour laboratory per week.

CHEM 151 (3) and 151L (1) General Chemistry and Laboratory for Engineers. Fundamental concepts of general chemistry, including atomic and molecular structure, gas laws, liquids, solids, solutions, kinetics, equilibrium, thermodynamics, and electrochemistry. Prerequisites: high school chemistry or CHEM 100, 100L, and two years high school algebra or MATH 161. Three lectures and one three-hour laboratory per week.

CHEM 151H (3) Honors General Chemistry for Engineers. Honors Program version of general chemistry for engineering majors. Students must also register for CHEM 151L, which is the laboratory component of the course. Prerequisite: membership in University Honors Program.

CHEM 210 (3) and 210L (1) Introduction to Analytical Chemistry and Laboratory. Qualitative and quantitative analysis. Prerequisites: CHEM 122, 122L. 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, 212 (3, 3) and 211L, 212L (1, 1) Organic Chemistry I, II and Laboratory. A systematic study of the source, nomenclature, physical properties, and chemical behavior of aliphatic, aromatic, and heterocyclic compounds of carbon. Prerequisites: CHEM 122, 122L. Three lectures and one three-hour laboratory per week. Formerly CHEM 311, 311L, 312, 312L. Courses required of all Chemistry majors. Offered in fall, spring, and summer.

CHEM 211H, 212H (3, 3) Honors Organic Chemistry I, II. Honors version of CHEM 211, 212, with advanced topics such as nuclear magnetic resonance, infrared and ultraviolet-visible spectroscopy. For Chemistry majors and University Honors Program students only; these students also register for CHEM 211L, 212L. CHEM 211H offered in fall, 212H 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.

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 and spring.

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 in spring.

CHEM 321, 322 (3, 3) and 321L, 322L (1, 1) Physical Chemistry I, II and Laboratory. First semester covers properties of ideal and real gases, kinetic molecular theory of gases, chemical thermodynamics, chemical equilibria, solutions of electrolytes and non-electrolytes, electrochemistry, liquid and solid states. Second semester covers rates and mechanisms of chemical reactions, introductory quantum mechanics, atomic and molecular spectroscopy, and photochemistry. Prerequisites: MATH 164A, PHY 222, 222L, CHEM 210, 210L, and CHEM 212, 212L. Three lectures, one three-hour laboratory, and one two-hour problem session per week. CHEM 321, 321L offered in fall, 322, 322L in spring.

CHEM 331, 332 (3, 3) and 331L, 332L (1, 1) Fundamentals of Physical Chemistry I, II and Laboratory. A non-calculus survey of physical chemistry. Topics include properties of gases, liquids, and solids; elementary thermodynamics; kinetics; and molecular structure. Prerequisites: CHEM 210 and 210L, 212 and 212L, MATH 164. Not available to students having credit for CHEM 321, 322. Three lectures and one three-hour laboratory per week. CHEM 331, 331L offered in fall, 332 and 332L in spring.

CHEM 341, 342 (3, 3) and 341L, 342L (1, 1) General Biochemistry I, II and Laboratory. A comprehensive study of the chemistry and biochemistry of carbohydrates, lipids, proteins, enzymes, vitamins, and minerals important in metabolism and nutrition of animals and plants. Prerequisites: CHEM 210, 210L, 212, and 212L. Three lectures and one three-hour laboratory per week. Offered in fall and spring.

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. Prerequisite: CHEM 122, 122L. Not available for students having credit for CHEM 211, 212. Three lectures and one three-hour laboratory per week. Offered 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 322, 322L or 332, 332L. Two one-hour lectures per week. Offered in spring.

CHEM 420, 421 (3, 3) and 420L (1) Inorganic Chemistry I, II and Laboratory. Study of the principles and modern theories of inorganic chemistry, including atomic and molecular structure. Pre- or corequisites: CHEM 322, 322L. Three lectures and one three-hour laboratory per week.

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 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, aromaticity and pericyclic reactions, elimination and addition reactions, and the reactive intermediates involved. Prerequisites: CHEM 322, 322L. Three lectures per week. Offered in spring.

CHEM 450A, 450B (2, 2) Senior Project I, II. A special laboratory investigation carried out under the direction of the instructor. Results are written up scientifically. Prerequisites: CHEM 322, 322L or 332, 332L. Corequisites: CHEM 491, 492. Hours arranged. Required in Professional Chemistry curriculum. CHEM 450A offered in fall, 450B 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 "Two Dimensional" (2-D) NMR in solving problems, mass spectroscopy (MS), and x-ray crystallography. Prerequisites: CHEM 212, 212L. Three lectures and two three-hour laboratories per week. Offered 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 322, 322L or permission of instructor. Three lectures and one three-hour laboratory per week. CHEM 461 offered in fall, 462 and 462L 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 materials. Prerequisites: CHEM 210, 210L, 332, 332L, 342, 342L. Three lectures and one three-hour laboratory per week. Offered 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 in fall.

CHEM 491, 492 (1, 1) Seminar. Required of all senior Chemistry majors. Prerequisites: CHEM 322, 322L or 332, 332L. CHEM 491 offered in fall, 492 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. 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 2.5 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 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 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. For a complete list of requirements for admission to and retention in the Teacher Education Program, see pages 129-130.

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 2.25 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 National Council on the Accreditation of Teacher Education (NCATE) and the Tennessee Department of Education.

Departmental Requirements For Bachelor of Arts And Bachelor of Science Speech Communication and Theatre — **47 Semester Hours**

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	American History I, II	6
BIO 101, 101L, 102, 102L	Introduction to Biophysical Science I, II and Labs	6
MATH 111	College Algebra I	3
PISI 221	American National Government	3
ART 133	Art Appreciation	2
MUS 131	Music Appreciation	2
THEA 120	Appreciation of Drama	2
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
ASOR 100B	Orientation for Social Science Majors (Teacher education students should take EDCI 101.)	1
PE 11-94, AERO, or MUS 306A	Physical Education Activity (2 semesters required)	2

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-level Admission

For admission into the upper-level 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 THEA 120. Students seeking the B.A. degree must have completed the foreign language requirement before upper-level admission.

Major Core

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 — **44 Semester Hours**

Major Core: RTV 362; SPCH 200, 320, 322, 354, 410, 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 **30 Semester Hours**

Major Core: RTV 360, 362, 364, 370; SPCH 200, 450; a practicum course (choice of RTV 391 or SPCH 442); and at least three courses from the following: JOUR 420; RTV 424, 438, 440, 444; 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 OM 121 with a grade of C or better. Students use the Department's state-of-the-art color television studio, carrier-current radio laboratory, and a computer laboratory equipped for word-processing, graphics, and desktop publishing.

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 Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 200	3	CS 121	3
THEA 111 OR 112	2	MATH 111	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
BIO 101, 101L	3	BIO 102, 102L	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100B	1		
	16		16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 220	3	ART 133	2
THEA 120	2	MUS 131	2
THEA 240	3	PISI 221	3
ENG 211	3	ENG 212	3
ELECTIVES, ANY LEVEL	6	ELECTIVES, ANY LEVEL	6
	17		16

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 OR 400 LEVEL	7	ELECTIVES, 300 OR 400 LEVEL	9
	16		18

Students desiring one of the optional areas of emphasis will substitute the following courses. Optional courses for Teacher Certification: JOUR 301, RTV 360, SPCH 320, 420, THEA 341.

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 OR 400 LEVEL	12	SPCH 450	3
		ELECTIVES, 300 OR 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 OR 400 LEVEL	9
ELECTIVES, 300 OR 400 LEVEL	6		
	15		15

Option 3 - Mass Communication Emphasis

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
THEA 111 OR OM 121	2	MUS 131	2
THEA 120	2	ART 133	2
ENG 101	3	ENG 102	3
BIO 101, 101L	3	BIO 102, 102L	3
ELECTIVE, LOWER LEVEL	3	ELECTIVE, LOWER LEVEL	3
ASOR 100B	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	15		17

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPCH 200	3	SPCH 220	3
THEA 240 OR ELECTIVE	3	PISI 221	3
ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
MATH 111	3	ELECTIVE, ANY LEVEL	3
ELECTIVE, ANY LEVEL	3		
	18		15

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
RTV 360	3	RTV 362	3
RTV 364	3	RTV 370	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
SPCH 442 OR ELECTIVE	3	SPCH 442 OR ELECTIVE	3
ELECTIVES, 300-400 LEVEL	9	SPCH 450	3
		ELECTIVES, 300-400 LEVEL	6
	15		15

*Students must complete at least three courses from the following list: JOUR 420; RTV 424, 438, 440, 444; 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 111	3	THEA 120	2
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
BIO 101, 101L	3	BIO 102, 102L	3
EDCI 101	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	17		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPTH 305	3	SPCH 354	3
ENG 211	3	ENG 212	3
ART 133	2	MUS 131	2
PISI 221	3	RTV 360	3
PSY 242	3	EDCI 201	3
HEA 151	3	PSY 312	3
	17		17

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	3	RTV OR SPCH ELECTIVE, 300 OR 400 LEVEL	3
EDCI 387	3		
EDRD 491	3	EDSE 333	3
	18		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 OR 400 LEVEL	3		
EDAD 400	2		
EDCI 419	1		
	15		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 111	3	THEA 120	2
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
BIO 101, 101L	3	BIO 102, 102L	3
EDCI 101	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	17		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
THEA 240	3	THEA 301	3
PISI 221	3	THEA 352	3
ENG 211	3	ENG 212	3
ART 133	2	MUS 131	2
PSY 242	3	EDCI 201	3
HEA 151	3	PSY 312	3
	17		17

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	3	EDRD 491	3
EDCI 387	3	EDSE 333	3
	18		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	2		
EDCI 419	1		
	15		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 401 Editorial Writing (3). Critical analysis of structure and content of newspaper editorials; practice in writing editorials and columns. Prerequisite: JOUR 405.

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.

JOUR 480 Independent Projects (3). Supervised individual study, media experience, or research. Prerequisite: permission of Department Head.

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 375 Communicative Skills (3). Focus on students' communicative skills, verbal and written, preparing them for the professional world.

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 persuasive 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. Only students who have been officially accepted into the Teacher Education Program may enroll.

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 THEA 120.

THEA 110 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.

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.

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

THEA 120H Honors Appreciation of Drama (2). Honors section of THEA 120. Enrollment limited to students in University Honors Program.

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; 120.

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 431 Shakespeare (3). Study of principal plays of Shakespeare, with focus on the comedies. (Same as English 431)

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 Computer Science

James F. Holloway, Ed. D., Acting Head
005 McCord Hall
Telephone 615-963-5800
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Faculty: E. Eyoh, A. Gamshadzahi, P. Ollapally, A. Sarayloo, W. Smith, S. Suthaharan, A. Thomas, M. Williams.

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 computer science, or who desire to pursue the interdisciplinary degree program with a concentration in this discipline; (2) to provide courses designed to satisfy the computer science requirement for the several colleges and schools of the University; and (3) to provide appropriate services to the University and the wider community.

The Department offers the degree of Bachelor of Science in Computer Science. The Department aims to (1) provide training for industry, government, business, and educational and scientific organizations; (2) develop skills in applying the algorithmic method of 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 computers in the workplace, homes, and schools.

The Computer Science program has several areas of specialization. The first is computer hardware-communications, which is intended for students interested in such courses as telecommunications, microcomputing, and details of computer architecture and assembly language programming. The second specialization area is computer software, intended for students interested in details of systems software, such as operating systems, compilers, database management systems, and assembly language programming. A third area of specialization is computer-applied mathematics, which is intended for students interested in numerical analysis and solution of differential equations, simulation, and operations research. A fourth area of specialization is information systems, which is intended for students in business-oriented computer applications and data processing. For students interested in a broad background in information systems, computer applications, and data processing, there is a general degree, the B.S. in Arts and Sciences with a computer science specialization in information systems, including analysis and design, business programming, and databases. It should be noted that the Interdisciplinary Degree option in computer science requires fewer mathematics and science courses, allowing for a broad general education with an emphasis in information systems.

Departmental Requirements For Bachelor of Science Computer Science — **48 Semester Hours**

The curriculum for a B. S. degree in Computer Science consists of a minimum of 130 semester hours, of which 48 must be at the 300 or 400 level. A minimum of 48 semester hours must be in Computer Science with at least 27 of these being at the 300 or 400 level. The 48 semester hours in Computer Science are divided into a Computer Science core and a Computer Science specialization. No Computer Science course in which a letter grade less than C is earned will be counted towards meeting program requirements.

The Computer Science core consists of courses in computer organization, computer programming, data structures and algorithms, operating systems, and programming languages. The Computer Science specializations consist of courses in the areas of computer hardware-communications, computer software, computer-applied mathematics, teaching, or information systems. Six additional semester hours are required as technical electives, which may be selected from the areas of Computer Science, Physics, Mathematics, Business, or Engineering.

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	American History I, II	6
SOCIAL SCIENCE	3 Semester Hours	3
MATH 163	Calculus and Analytic Geometry	4
MATH 164	Calculus II	4
PHY 221, 221L, 222, 222L	General Physics I, II and Labs	8
PHIL 250	Logic and Critical Thinking	3
HUMANITIES	One course (in addition to PHIL 250); must not be a PHIL class	2-3
SPCH 220 OR 230	Public Speaking or Business and Professional Speech Communication	3
CS 211	Computer Programming I (minimum grade of C required)	3
PE, AERO, OR MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100A	Orientation for Science Majors	1

Upper-level Admission

For admission into the upper-level program of the Computer 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. Students must also have earned at least a C in CS 212 and 240.

Computer Science Core

CS 212	Computer Programming II	3
CS 240	Computer Organization I	3
CS 304	Data Structure and Algorithms	3
CS 320	Discrete Mathematical Structures	3
CS 341	Advanced Computer Organization	3
CS 410	Operating Systems	3
CS 450	Senior Project	3

Suggested courses in areas of specialization may be obtained by consulting the major advisor.

Students seeking a double major or a second degree in Computer Science must complete all degree requirements in the Computer Science curriculum.

Bachelor of Science Degree in Computer Science

Suggested Four-Year Program

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
*CS 211	3	CS 212	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
**MATH 163	4	MATH 164	4
PHIL 250	3	HUMANITIES	2
ASOR 100A	1	SPCH 220 OR 230	3
	17		18

*CS 210 must be taken prior to CS 211 by students with no prior college-level computing courses; 210 does not apply toward program requirements in the CS major.

**MATH 161 and/or 162 must be taken prior to MATH 163 if the need is indicated.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CS 240	3	CS 304	3
ENG 211	3	SOCIAL SCIENCE	3
ELECTIVE, ANY LEVEL	3	ENG 212	3
PHY 221, 221L	4	PHY 222, 222L	4
STAT 311	3	ELECTIVE, ANY LEVEL	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	17		17

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CS 320	3	CS ELECTIVE	3
CS 341	3	CS ELECTIVES, 300 OR 400 LEVEL	9
MATH 361	3		
ENG 310E OR OTHER TECHNICAL ELECTIVE	3	OPEN ELECTIVE, 300 OR 400 LEVEL	3
ELECTIVE, 300 OR 400 LEVEL	3		
	15		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CS 410	3	CS 450	3
CS ELECTIVES, 300 OR 400 LEVEL	6	CS ELECTIVES, 300 OR 400 LEVEL	6
TECHNICAL ELECTIVE, 300 OR 400 LEVEL	3	TECHNICAL ELECTIVE, 300 OR 400 LEVEL	3
ELECTIVE CHOSEN FROM AC 211, BL 300, EC 211, EC 335, MG 301, FN 320, FN 321, ENGR 410, OR ENGR 440	3	ELECTIVE CHOSEN FROM AC 211, BL 300, EC 211, EC 335, MG 301, FN 320, FN 321, ENGR 410, OR ENGR 440	3
OPEN ELECTIVE, 300 OR 400 LEVEL	3		
	18		15

Technical electives are from the areas of Computer Science, Mathematics, Physics, Business, or Engineering. Open electives are from any area.

Course Descriptions

CS 121 Introduction to Computing (3). History of computers, computer hardware, computer software (system and application), communications, algorithms, and BASIC programming. Course includes hands-on laboratories using operating systems, productivity applications, e-mail, the Internet, and programming. Prerequisite: high school algebra or permission of

Instructor. Satisfies the University computer science requirement. Not open to students having credit for CS 210 or above. Offered fall, spring, 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 or programming courses. 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 Programming I (3). Introduction to computer units and their functions, control statements, and subprograms (default parameter values, templates, overloading, scope and lifetime of objects). Prerequisite: CS 210 (if one has taken no college-level CS course previously) or permission of instructor. Required of all Physics, Mathematics, and Computer Science majors. Offered fall and spring.

CS 212 Computer Programming 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 or permission of instructor. Required of all Physics, Mathematics, and Computer Science majors. Offered in fall and spring.

CS 215 Computer Programming—BASIC (3). Basic programming, including program structure, testing, debugging, verification, data representation. Program applications are emphasized. Prerequisite: CS 211 or permission of instructor. Offered fall of odd-numbered years.

CS 220 Computer Programming—FORTRAN (3). Fundamentals of structured design, development, peer reviews, testing, and documentation using FORTRAN. Topics also include language syntax, decisions, input/output, and subprograms. Prerequisite: CS 211 or permission of instructor. Offered on demand.

CS 221 Computer Programming—COBOL (3). Fundamentals of structured design, development, peer reviews, testing, and documentation using COBOL. Topics also include language syntax, data file structures, and sorting. Prerequisite: CS 211 or BIS 215 or permission of instructor. Offered fall and spring.

CS 222 Computer Programming—PASCAL (3). Fundamentals of structured design, development, testing, and documentation using PASCAL. Topics include statements, syntax, subprograms, arrays, sets, and files. Prerequisite: CS 211 or permission of instructor. Offered on demand.

CS 240 Computer Organization I (3). Basic computer architecture, historical review, organization, and structure of major computer components, both hardware and software. Prerequisite: CS 211 or permission of instructor. Required of all Computer Science majors. Offered fall and spring.

CS 255 Introduction to Digital Systems (3). Basic electronics in computer and communication circuits, amplifiers, timers, regulators, rectifiers, and power supplies modulators/demodulators. Prerequisite: MATH 161 or permission of instructor. Corequisite: CS 240. Offered on demand.

CS 260 Assembly Language I (3). Introduction to machine structure and machine language, subroutine linkage control, and basic I/O operations. Prerequisite: MATH 161 or permission of instructor. Corequisite: CS 240. Offered spring of odd-numbered years.

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 or permission of instructor. 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 or permission of instructor. Offered fall and spring.

CS 303 Computer Programming—ADA (3). Data types, declarations, expressions and assignments, arithmetic operators, decisions, and logical operators. Prerequisite: CS 211 or permission of instructor. Offered spring semester.

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 212 or permission of instructor. Required of all Computer Science majors. Offered fall and spring.

CS 305 Programming Languages (3). Analysis and comparison of programming languages, their characteristics and implementation. Prerequisite: CS 304 or permission of instructor. Offered summer.

CS 310 Advanced Programming: FORTRAN, PASCAL, BASIC (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. Programs use object orientation principles and coding. Prerequisite: CS 212 or permission of instructor.

CS 315 Computer Programming: COBOL (3). Application of COBOL to business problems. Topics include file processing, sorting, subroutines. Prerequisite: CS 221 or permission of instructor. Offered spring semester.

CS 318A, 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 hours of credit, but the learning experience must be changed each semester. Prerequisite: permission of Department Head. Offered fall, spring, summer.

CS 320 Discrete Mathematical Structures (3). Sets, relational and functions, Boolean algebra and propositional logic, graph theory and its applications to computer science. Prerequisite: CS 212 or permission of instructor. Required of all Computer Science majors. Offered fall and spring.

CS 323 Information Systems Analysis (3). Information analysis and logical design concepts for information systems and decision making. Prerequisites: CS 301 and a programming language, or permission of instructor. Offered in fall.

CS 330 Telecommunications (3). Communications organization and structure, data transmission and control, networks, software protection, communication media, carriers, and hardware. Prerequisite: CS 341 or permission of instructor. Offered in spring.

CS 335 Advanced Digital Systems (3). Design and analysis of digital systems, including logical circuits, arithmetic circuits, interfacing, and memory devices. Prerequisite: CS 255 or permission of instructor. Offered on demand.

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 or permission of instructor. Required of all Computer Science majors. Offered fall and spring.

CS 345 Analog Computers (3). Analog computing: problem set-up and scaling, multipliers, function generators, operational amplifiers, stabilization, and accuracy. Prerequisite: CS 240 or permission of instructor. Offered on demand.

CS 350 Logic Design (3). Switching algebra, logic design of combinational circuits, minimization methods, and sequential circuit analysis and synthesis. Prerequisite: CS 341 or permission of instructor. Offered in spring.

CS 360 Assembly Languages II (3). Assembly language programming, indexing macro writing and libraries, file I/O procedures, program segmentation and linkage, assembler construction, advanced architecture, and interpretive routines. Prerequisite: CS 260 or permission of instructor. Offered in summer.

CS 365 Microcomputers (3). Design and use of microcomputers, including architecture, programming, applications, and software support. Prerequisites: CS 240 and a structured programming language, or permission of instructor. Offered in fall.

CS 370 Data Management Systems (3). Introduction to database systems concepts. Topics include data structure, relational hierarchical and network models, data sublanguages, query languages, security, and database administration. Prerequisite: CS 301 or permission of instructor. Offered in fall.

CS 375 Voice Technology (3). Organization and design of voice communication systems, networks, telephone instruments and systems, private branch exchange (PBX) systems, analog and digital transmission. Prerequisite: CS 240 or permission of instructor. Offered on demand.

CS 380 Introduction to Operations Research (3). Introduction to various methods of system optimization. Topics include simplex methods, linear and nonlinear programming, and applications from management science, engineering, economics, and physical science. Prerequisites: CS 212 and MATH 361, or permission of instructor. Offered on demand.

CS 385 System Simulation (3). Discrete simulation models, queuing theory, stochastic processes, comparison of simulation languages, and simulation methods including Monte Carlo techniques. Prerequisites: CS 341 and MATH 311, or permission of instructor. Offered on demand.

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 395 Numerical Solution of Differential Equations (3). Ordinary differential equations, Taylor series method, Runge Kutta method, systems of ordinary differential equations, boundary value problems for ordinary differential equations. Prerequisites: CS 390 and MATH 163, or permission of instructor. Offered in spring 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 301 and 341, or permission of instructor. 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 or permission of instructor. Offered in spring.

CS 415 Systems Design and Implementation (3). Principles and techniques of design, including types and levels of design, documentation techniques, hardware and software evaluation, software design concepts, database concepts, implementation and testing procedures, and long-run BIS planning. Prerequisite: CS 323 or permission of instructor. 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 or permission of instructor. Offered in fall.

CS 425 Computer Automation (3). Classical and modern control systems design and analysis, transfer and response of systems, sensitivity, stability, feedback, nonlinear control, control theory, and robotics. Prerequisite: CS 341 or permission of instructor. Offered on demand.

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 or permission of instructor. Offered in fall.

CS 435 Teleprocessing (3). Fundamentals of teleprocessing system design, programming requirements, transmission capabilities and control, and interactive computing. Prerequisite: CS 330 or permission of instructor. Offered in fall of odd-numbered years.

CS 440 Artificial Intelligence (3). Topics in machine intelligence. Prerequisite: CS 304 or permission of instructor. Offered in fall.

CS 450 Senior Project (3). Prerequisite: senior status. Required of all Computer Science majors. Offered in fall and spring.

CS 460 Microprocessors (3). Programming and microprocessor concepts, architecture, hardware, memory addressing, instructions, and peripheral interfacing. Prerequisites: CS 341 and a structured programming language, or permission of instructor. Offered in fall.

CS 465 Advanced Database Systems (3). Design and implementation of database systems. Prerequisite: CS 370 or permission of instructor. Offered in spring of odd-numbered years.

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, or permission of instructor. 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 or permission of instructor. Offered in spring.

CS 490, 491 Special Topics I, II (3, 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 495 Advanced Topics in Computer Science (3). Studies of major advances in computers, such as the foundation and analysis of algorithms. Prerequisites: junior or senior status and at least 18 hours of CS courses previously completed. Offered in spring.

CS 497 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 or permission of instructor.

Department of Criminal Justice

C. Bruce Mallard, Ph.D., Head
308 Hubert Crouch Hall (Graduate Building)
Telephone 615-963-5571

Faculty: L. Gaiters, C. Nwokoji, 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

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	American History I, II	6
MATH 111, 112	College Algebra I, II	6
BIO 101, 101L, 102, 102L	Introduction to Biophysical Science I, II and labs	6
HUMANITIES	Courses from 2 humanities disciplines	4-6
PSY 201	General Psychology	3
SOC 211	Introduction to Sociology	3
SPCH 220	Public Speaking	3
CS 121	Introduction to Computing	3
ASOR 100B	Orientation for Social Science Majors	1
PE 11-94, AERO or MUS 306A	Physical Education Activity (2 semesters required)	2

Upper-level Admission

For admission into the upper-level 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. 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: PSY 201, 310, 311, 321, 462, and either 341 or 351.

Bachelor of Science Degree in Criminal Justice

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CJ 200	3	PSY 201	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	MATH 112	3
BIO 101, 101L	3	BIO 102, 102L	3
ASOR 100B	1	HUMANITIES	2
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	17		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CJ 201	3	CJ 202	3
SOC 211	3	CJ 203	3
ENG 211	3	ENG 212	3
SPCH 220	3	ENG 310C	3
PSY 310	3	HUMANITIES	2 OR 3
		CS 121	3
	15		17 OR 18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
CJ 300	3	CJ ELECTIVE 300-400	3
PSY 311	3	SOC ELECTIVE 300-400	3
PSY 321	3	LEVEL	
PSY 341 OR 351	3	SOC 330	3
SOC ELECTIVES 300-400	6	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 111 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. (Elective)

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

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General Statement: The Department of History, Geography, and Political Science provides the University with general education courses in the three disciplines of the Department, in addition to majors in History and Political Science and a minor in Geography. Since all of these programs have distinct degree requirements, they are discussed under separate headings.

The History major is a Bachelor of Arts degree, which means that a student who majors in History must complete 12 hours of a single foreign language; this number of hours may be reduced through advanced placement in the language, but the student must take a minimum of six hours in the language and complete it at least through the intermediate (201, 202) level. A teacher licensure program in History for middle and secondary education is also available to students majoring in History. The Political Science major is a Bachelor of Science degree. A teacher licensure program in Government for middle and secondary education is also available to students who major in Political Science. The minor in Geography is composed of 18 hours of physical, systematic, and regional geography courses.

A minimum grade of C is required in all courses used to satisfy requirements in either major in the Department.

Students desiring to enter either teacher licensure curriculum must apply in writing to the College of Education, usually during their sophomore year. At the time of application, they must possess a 2.5 cumulative grade point average 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. Formal admission to the Teacher Education Program is a prerequisite to upper-level certification courses. For a complete list of requirements for admission to and retention in the Teacher Program, see pages 129-130.

Departmental Requirements For Bachelor of Arts History — **34 Semester Hours**

The curriculum in History is designed to provide students with a broad vision of past and present civilization. Emphasis is on social, economic, and political trends in the development of civilization, but institutional, cultural, diplomatic, military, and religious aspects of human experience are also included.

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	American History I, II (minimum grade of C in each)	6
MATH 111	College Algebra I	3
BIO 101, 101L, 102, 102L	Introduction to Biophysical Sciences I, II and labs	6
GEOG 171, 172	World Regional Geography I, II	6
SPCH 220	Public Speaking	3
Humanities	2 courses from 2 different humanities disciplines	4-6
Foreign Language	French, German, or Spanish through intermediate level (201, 202)	6
CS 121	Introduction to Computing	3
PE 11-94, AERO, or MUS 306A	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 201 and 202.

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

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
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 labs	6
PISI 221	American National Government (minimum grade of C)	3
SPCH 220	Public Speaking	3
Humanities	2 courses from 2 different humanities disciplines	4-6
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 (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 and 220.

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 (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: PISI 221, 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 PISI 221.

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, as well as the multi-ethnic, multi-religious American society.

History licensure majors complete a minimum of 149-151 hours, involving 73-75 hours of general education (depending on the humanities courses chosen), 40 hours in the major, and 36 in professional education, of which 12 hours are devoted to enhanced student teaching.

Enhanced student teaching requires eight-week placement at the secondary level and seven weeks at the middle school level.

Government (Political Science) licensure majors must complete a minimum of 148-150 hours, including 67-69 of general education courses (depending on the humanities courses chosen), 45 in the major itself, and 36 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.

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 171 and 172). 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 171	World Regional Geography I	3
GEOG 172	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 121	Earth Science I	3
GEOG 122	Earth Science II	3
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 201	3	HIST 202	3
ENG 101	3	ENG 102	3
BIO 101, 101L	3	BIO 102, 102L	3
*FOREIGN LANG (2ND YEAR)	3	FOREIGN LANG (2ND YEAR)	3
MATH 111	3	HUMANITIES	2 OR 3
ASOR 100B	1	PE, AERO, OR MUS 306A	1
PE, AERO, OR MUS 306A	1		
	17		15 OR 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
ENG 211	3	ENG 212	3
GEOG 171	3	GEOG 172	3
CS 121	3	HUMANITIES	2 OR 3
ELECTIVE, ANY LEVEL	3	SPCH 220	3
		ELECTIVE, ANY LEVEL	3
	15		17 OR 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 201	3	HIST 202	3
ENG 101	3	ENG 102	3
BIO 101, 101L	3	BIO 102, 102L	3
*FOREIGN LANG (2ND YEAR)	3	FOREIGN LANG (2ND YEAR)	3
MATH 111	3	CS 121	3
EDCI 101	1	HUMANITIES	2 OR 3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	17		18 or 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
ENG 211	3	ENG 212	3
PISI 221	3	PISI 222	3
GEOG 171	3	GEOG 172	3
ANTH 230	3	EDCI 201	3
HUMANITIES	2 OR 3	HEA 151	3
PSY 242	3	PSY 312	3
	20 OR 21		21

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
HIST 301 OR 302	3	HIST 492	3
HIST 341	3	SPCH 220	3
PISI 301	3	PISI 431	3
SOC 211	3	SOC 330	3
EDAD 301 (FORMERLY EDCI 301)	3	EDAD 400 (FORMERLY EDCI 400)	2
EC 211	3	EC 212	3
	18		17

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 111	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
HUMANITIES	2 OR 3	HUMANITIES	2 OR 3
ELECTIVE	3	ELECTIVES	6
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100B	1		
	16 OR 17		18 OR 19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 221	3	PISI 220	3
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	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 111	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
BIO 101, 101L	3	BIO 102, 102L	3
HUMANITIES	2 OR 3	HEA 151	3
EDCI 101	1	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	16 OR 17		19

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 221	3	PISI 220	3
ENG 211	3	PISI 222	3
GEOG 171	3	ENG 212	3
SPCH 220	3	GEOG 172	3
HUMANITIES	2 OR 3	SOC 211	3
PSY 242	3	PSY 312	3
EDCI 201	3		
	20 OR 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 341	3	HIST 362 OR 492	3
EDAD 301 (FORMERLY EDCI 301)	3	EDAD 400 (FORMERLY EDCI 400)	2
EC 211	3	EC 212	3
	18		17

Students must also take GEOG 444 and 470 or SOC 310 and 360.

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PISI 371	3	HIST 472S	12
PISI 450	3	EDCI 470A	3
ANTH 230	3		
EDCI 387	3		
EDCI 419	1		
EDRD 491	3		
EDSE 333	3		
	19		15

Course Descriptions

Geography (GEOG)

GEOG 121 Earth Science I (3). A general introduction to the geosciences, with an emphasis on the earth's internal structure, rock types, the processes that shape the surface, including earthquakes and continental drift, and the oceans that cover nearly three-quarters of the planet. Two lectures and one laboratory (2 hours) per week. Course does not satisfy University requirement in science.

GEOG 122 Earth Science II (3). Continuation of GEOG 121. Course studies the atmosphere, with an emphasis on winds and storms, weather prediction, and cold periods when ice covered significant portions of the earth. Also examined is the earth's relationship to the moon, planets, sun, and other stars. Two lectures and one laboratory (2 hours) per week. Course does not satisfy University requirement in science.

GEOG 171, 172 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 171 and 172, 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 201, 202 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 201 covers the period from pre-Columbian times to 1877. HIST 202 covers the period from 1877 to the present. Required of all University graduates.

HIST 201H, 202H Honors American History I, II (3, 3). An intensive and extensive study of American history, pre-Columbian times to the present. Limited to students in University Honors Program.

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, 302 Foundations of Modern Europe I, II (3, 3). The major political, social, economic, and intellectual developments of Europe. The first course covers 1648 to 1789. The second course traces Europe from 1789 to 1871.

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 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 intensive 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 341 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 201 or 202 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 401, 402 Foundations of Contemporary World History I, II (3, 3). A survey of major world events, trends, and issues to the present time. The courses include such topics as the rise and decline of colonial empires, emerging nationalism, attempts at international organizations, and the impact of democracy, fascism, and communism. The first semester covers the period to World War I; the second semester covers 1914 to the present.

HIST 411, 412 European Social and Cultural History I, II (3, 3). Developments in European society and culture from ancient times to the present. HIST 411 focuses on such topics as Greco-Roman art and culture, Christian thought, and medieval social and cultural values. HIST 412 begins at the Renaissance and continues to the present. It focuses on such topics as humanism, religious reform, enlightenment, industrialism, romanticism, and totalitarianism.

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 432A studies the history of law, 432B women's history, and 432C designated topics.

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 441, 442 Directed Readings in History (3, 3). Designed for the individual student who requests supplementary study in an area not ordinarily covered intensively in regular course offerings. Topics are arranged with approval of instructor.

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 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)

PISI 221 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 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. Required of all Political Science majors.

PISI 221 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. PISI 221 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 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, 221, 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-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 to be 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. Prerequisite: PISI 221.

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 Constitution, 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 441 Public Personnel Management and Management of Human Resources (3). The different aspects of employee-employer relations, organization, communication, coordination, and development of human resources as they relate to all levels of government. The aim is to develop the necessary skills for analyzing management and human resource problems. Prerequisite: PISI 440.

PISI 442 Selected Topics in Organizational Theory (3). Critical survey of existing models, schools, and approaches to organizational planning, budgeting, and control. Emphasis is on recent developments in the theory and its relevance to current problems in the public sector. Prerequisite: PISI 440.

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 in Public Administration (3-12). Designed to intensify the preservice public administration student's knowledge of the institutions involved in the government process. The internship enables a student to learn in an actual setting while providing a service to the agency in which he or she is placed. The needs and opportunities vary by agency, and so every placement experience is different. Students may receive up to 12 hours of credit for the internship; however, only 3 hours may be counted toward the requirements for a major in Political Science . Prerequisites: 21 hours in 300- and 400-level PISI courses, including PISI 440.

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 (1-6). An individual study course which affords students the opportunity to engage in a program of study of greatest interest to them. The students have latitude in deciding the nature of project to be done. However, faculty approval and supervision are required. Course may be repeated with advice of faculty, not to exceed six credits. Prerequisites: senior standing and at least 24 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

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Faculty: W. Billings, D. Daniels, M. Darby, D. Gendron, J. Grimes, J. Head, H. Houston, J. Irby, P. Jordan, L. Lewis, M. Mazzone, J. McMullen, A. McQueen, D. Menchise, J. Montmarquet, C. Moran, N. Nwankwo, L. Powers, T. Quain, J. H. Railsback, M. Reaves, C. Reeve, A. Rueda-Garcia, A. Springfield, L. Watkins.

General Statement: The Department of Languages, Literature, and Philosophy contains the University's degree programs in English, Foreign Languages, and Philosophy and Religious Studies. Since all of these disciplines have distinct degree 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, French, and Spanish are accredited by the National Council on the Accreditation of Teacher Education (NCATE) and the Tennessee Department of Education.

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 used to complete the English major. English majors are also expected to take ENG 211D and 212D, Survey of English Literature, 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. 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 above, 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 the first semester of 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 2.5, 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 129-130.

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

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211D, 212D	Survey of English Literature I, II (minimum grade of C in each)	6
FOREIGN LANGUAGE	12 hours of a single language	12
HIST 201, 202	American History I, II	6
MATH 111 or 161	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	4-6
CS 121	Introduction to Computing	3
PE 11-94, AERO, or MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100C	Orientation for Humanities Majors (Teacher certification students should take EDCI 101.)	1

Upper-level Admission

For admission into the upper-level 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 300	Expository Writing	3
ENG 361, 362	American Literature I, II	6
ENG 400	Senior Seminar	3
ENG 410	History of the English Language	3
ENG 412	Modern English Grammar	3
ENG 431 or 432	Shakespeare Comedies or Shakespeare Tragedies	3
British Literature	Upper-level elective, excluding Shakespeare	3

Requirements for Minor: A minimum of 18 upper-level semester hours including ENG 300, 361 or 362, 410, 412, 431 or 432.

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.

The curricula encompass courses leading to the Bachelor of Arts degree in Foreign Languages, with options 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 2.5 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 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 129-130. 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 Modern Foreign Languages (French or Spanish) — **32 Semester Hours**

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	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)	12
HIST 201, 202	American History I, II	6
MATH 111 or 161	College Algebra I or Pre-Calculus Mathematics I	3
SCIENCE	Biology, Chemistry, or Physics, including laboratories	6-8
GEOG 171 or 172	World Regional Geography I or II	3
SPCH 220	Public Speaking	3
ART 133	Art Appreciation	2
MUS 131	Music Appreciation	2
CS 121	Introduction to Computing	3
PE 11-94, AERO, or MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100C	Orientation for Humanities Majors (Teacher certification students should take EDCI 101.)	1

Upper-level Admission

For admission into the upper-level 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	Pronunciation and Diction	2
FR 301, 302	Advanced Oral and Written Composition I, II	6
FR 311, 312	Survey of French Literature I, II	6
FR 400	French Civilization	3
FR 401, 402	French Conversation I, II	6
FR 410	Black French Writers	3
FR 425	French Literature of the Twentieth Century I	3
MFL 450	Senior Project	3

Major Core: Spanish Concentration

SPN 300	Spanish Phonetics and Phonology	3
SPN 301, 302	Advanced Spanish I, II	6
SPN 311, 312	Survey of Spanish Literature I, II	6
SPN 400	Hispanic Civilization	3
SPN 401, 402	Spanish Conversation I, II	6
SPN 410	Readings in Spanish-American Literature	3
SPN 425	Spanish Literature of the Twentieth Century I	3
MFL 450	Senior Project	3

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
ENG 101	3	ENG 102	3
FR, GER, OR SPN	3	FR, GER, OR SPN	3
HIST 201	3	HIST 202	3
HUMANITIES	2 OR 3	HUMANITIES	2 OR 3
MATH 111 OR 161	3	CS 121	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100C	1		
	16 OR 17		15 OR 16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 211D	3	ENG 212D	3
ENG 300	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 361	3	ENG 362	3
ENG 410	3	ENG 412	3
ENG LIT, 300 OR 400 LEVEL (EXCLUDING SHAKESPEARE)	3	ELECTIVES, ANY LEVEL	12
ELECTIVES, ANY LEVEL	9		
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 400	3	ELECTIVES, 300 OR 400 LEVEL	15
ENG 431 OR 432	3		
ELECTIVES, 300 OR 400 LEVEL	12		
	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
ENG 101	3	ENG 102	3
FR, GER, OR SPN	3	FR, GER, OR SPN	3
HIST 201	3	HIST 202	3
MATH 111 OR 161	3	CS 121	3
MUS 131	2	ART 133	2
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
EDCI 101	1	HEA 151	3
	16		18

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 211D	3	ENG 212D	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 300	3	ENG 371	3
ENG 361	3	ENG 362	3
ENG 410	3	ENG 412	3
ENG LIT, 300 OR 400 LEVEL (EXCLUDING SHAKESPEARE)	3	PSY 312	3
		EDCI 387	3
ENG 372	3	EDAD 400 (FORMERLY EDCI 400)	2
EDAD 301 (FORMERLY EDCI 301)	3		
	18		17

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 400	3	ENG 472S	12
ENG 431 OR 432	3	EDCI 470A	3
ELECTIVE, ANY LEVEL	3		
EDCI 419	1		
EDRD 490	1		
EDRD 491	3		
EDSE 333	3		
	17		15

Bachelor of Arts Degree in Foreign Languages Concentration in French

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 201	3	FR 202	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111 OR 161	3	CS 121	3
HUMANITIES	2 OR 3	HUMANITIES	2 OR 3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100C	1		
	16 OR 17		15 OR 16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 300	2	FR 302	3
FR 301	3	GEOG 171 OR 172	3
ENG 211	3	ENG 212	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 311	3	FR 312	3
FR 400	3	ELECTIVES, 300 OR 400 LEVEL	12
ELECTIVES, ANY LEVEL	12		
	18		15

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 401	3	FR 402	3
FR 410	3	FR 425	3
MFL 450	3	ELECTIVES, 300 OR 400 LEVEL	9
ELECTIVES, 300 OR 400 LEVEL	9		
	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
FR 201	3	FR 202	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111 OR 161	3	CS 121	3
MUS 131	2	ART 133	2
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
EDCI 101	1		
	16		15

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 300	2	FR 302	3
FR 301	3	GEOG 171 OR 172	3
ENG 211	3	ENG 212	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 311	3	FR 312	3
FR 400	3	FR 402	3
FR 401	3	PSY 312	3
MFL 371	3	EDCI 387	3
EDAD 301 (FORMERLY EDCI 301)	3	EDCI 419	1
ELECTIVE, ANY LEVEL	3	ELECTIVE, ANY LEVEL	3
	18		16

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
FR 410	3	MFL 472S	12
FR 425	3	EDCI 470A	3
MFL 450	3		
EDAD 400 (FORMERLY EDCI 400)	2		
EDRD 490	1		
EDRD 491	3		
EDSE 333	3		
	18		15

Bachelor of Arts Degree in Foreign Languages Concentration in Spanish

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 201	3	SPN 202	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111 OR 161	3	CS 121	3
HUMANITIES	2 OR 3	HUMANITIES	2 OR 3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100C	1		
	16 OR 17		15 OR 16

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 300	3	SPN 302	3
SPN 301	3	GEOG 171 OR 172	3
ENG 211	3	ENG 212	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 311	3	SPN 312	3
SPN 400	3	ELECTIVES, ANY LEVEL	15
ELECTIVES, ANY LEVEL	9		
	15		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 401	3	SPN 402	3
SPN 410	3	SPN 425	3
MFL 450	3	ELECTIVES, 300 OR 400 LEVEL	9
ELECTIVES, 300 OR 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
SPN 201	3	SPN 202	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111 OR 161	3	CS 121	3
MUS 131	2	ART 133	2
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
EDCI 101	1		
	16		15

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 300	3	SPN 302	3
SPN 301	3	GEOG 171 OR 172	3
ENG 211	3	ENG 212	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 311	3	SPN 312	3
SPN 400	3	SPN 402	3
SPN 401	3	PSY 312	3
MFL 371	3	EDCI 387	3
EDAD 301 (FORMERLY EDCI 301)	3	EDCI 419	1
ELECTIVE, ANY LEVEL	3	ELECTIVE, ANY LEVEL	3
	18		16

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SPN 410	3	MFL 472S	12
SPN 425	3	EDCI 470A	3
MFL 450	3		
EDAD 400 (FORMERLY EDCI 400)	2		
EDRD 490	1		
EDRD 491	3		
EDSE 333	3		
	18		15

Course Descriptions

English (ENG)

English 101 and 102 are prerequisites to all upper-level English classes.

ENG 101 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 101 is a prerequisite for English 102. All degree-seeking students must earn at least a C in this course.

ENG 102 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 101. All degree-seeking students must earn at least a C in this course.

ENG 101H, 102H 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.

ENG 211, 212 Sophomore Literature (3, 3). A study of literary works with a variety of foci and perspectives. All of the following 211-212 courses satisfy the sophomore literature requirement of the General Education Core.

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

ENG 211A, 212A 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.

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

ENG 211C, 212C Black Arts and Literature (3, 3). A study of the contributions of black artists and writers to world culture, especially American culture. The first semester treats oral traditions and music; the second semester takes up literature.

ENG 211D, 212D 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.

ENG 211H, 212H 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 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 current century. Emphasis is placed on themes, techniques, and social criticism. Representative British, Irish, and Commonwealth writers are included.

ENG 353 Modern British Poetry (3). Selections from 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. Required of all English majors.

ENG 411 Current English (3). New trends in teaching English and their relationship to significant trends in the past. Students 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. Required of all English majors.

ENG 413 Advanced English Grammar (3). Traditional approaches to grammar.

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 101, 102.

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)

FR 201 is a prerequisite to all upper-level French courses; FR 202 is a prerequisite to all upper-level French courses except FR 300.

FR 101, 102 Elementary French I, II (3, 3). The development of the ability to understand, speak, write, and read French. Laboratory work is an integral part of the course. Successful completion of FR 101, or the equivalent, is prerequisite to FR 102. These courses may be used to remove a high school deficiency in foreign languages, in which case they do not yield credit toward the undergraduate degree.

FR 201, 202 Intermediate French I, II (3, 3). Grammar review and further development of the ability to understand, speak, write, and read French. Laboratory work included. Successful completion of FR 101-102, or equivalents, is prerequisite to FR 201; successful completion of FR 201 is prerequisite to FR 202.

FR 300 Pronunciation and Diction (2). The development of good articulatory habits through perception and imitation of French sounds, with secondary emphasis on theoretical knowledge of the phonetic symbols. Prerequisite: FR 201. Required of all students with a concentration in French.

FR 301, 302 Advanced Oral and Written Composition I, II (3, 3). Vocabulary-building and intensive analysis of French grammar with practical application in oral and written composition. Prerequisite: FR 202. Both courses required of all students with a concentration in French.

FR 311 Survey of French Literature I (3). Literary philosophies, types, major authors, and their contributions, middle ages through the eighteenth century. Prerequisite: FR 202. Required of all students with a concentration in French.

FR 312 Survey of French Literature II (3). Literary philosophies, types, major authors, and their contributions of the nineteenth and twentieth centuries. Prerequisite: FR 202. Required of all students with a concentration in French.

FR 400 French Civilization (3). The development of Francophone civilizations from their origins to the present: geographical, historical, political, social, economic, and cultural life. Prerequisite: FR 202. Required of all students with a concentration in French.

FR 401, 402 French Conversation I, II (3, 3). Intensive conversational and composition practice, with group discussion and laboratory drills on selected topics. Analysis and correction of individual problems. Prerequisite: FR 202. Required of all students with a concentration in French.

FR 410 Black French Writers (3). An introduction to the works of various black authors of French expression, with emphasis on Alexandre Dumas, Rene Maran, Leon Damas, Aimee Cesaire, Leopold Senghor, and Frantz Fanon. Prerequisite: FR 202. Required of all students with a concentration in French.

FR 420 Introduction to Explication des Textes (3). Designed to acquaint the student with the French approach to analyzing poetry and prose. Prerequisite: FR 202.

FR 425, 426 French Literature of the Twentieth Century I, II (3, 3). Prose, poetry, theater, criticism, their theories and trends, from the Symbolist movement to contemporary period. Prerequisite: FR 400. FR 425 is required of all students with a concentration in French.

FR 480 Commercial French (3). Designed to train students to write effective business letters in correct styles and language. Prerequisite: FR 302.

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 201 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 202 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 210 Introduction to Film (3). Aesthetic and philosophical issues in film theory and criticism; principles of film criticism; film and other art forms; and the relation 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 211 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 320 History of Political Philosophy (3). Selected political philosophers from classical Greece to 1900, including Plato, Aristotle, Machiavelli, Locke, Rousseau.

PHIL 321 Contemporary Political Philosophy (3). Recent works on the central issues in political philosophy: economic justice, rights, political authority.

PHIL 322 Marx and Socialism (3). Traditional and contemporary communist political philosophers, including Marx, Lenin, and Mao; historical materialism; exploitation; socialism and democracy.

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 341 Existentialism (3). Contemporary and traditional Existentialist thinkers, including Sartre, Camus, and Kierkegaard.

PHIL 342 Aesthetics (3). Problems in the philosophy of art and art criticism; aesthetic experience; truth and art; aesthetic value.

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 400 Philosophy of Mind (3). Consideration of various topics related to the existence and nature of mind: mind-body identity, dualism, behaviorism, action theory, free will, and determinism.

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 430 Philosophy of Science (3). Problems in the nature of science and its relation to other human concerns, e.g., religion, politics, and ethics; the character of scientific theories and explanations in both natural and social science; scientific progress in discovering truth.

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)

RS 200 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.

RS 201 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, RS 311, or permission of instructor.

Spanish (SPN)

SPN 201 and 202 are prerequisite to all upper-level Spanish courses.

SPN 101, 102 Elementary Spanish I, II (3, 3). The development of the ability to understand, speak, write, and read Spanish. Successful completion of SPN 101, or the equivalent, is prerequisite to SPN 102. Laboratory work included. These courses may be used to remove a high school deficiency in foreign languages, in which case they do not yield credit toward the undergraduate degree.

SPN 201, 202 Intermediate Spanish I, II (3, 3). Grammar review and further development of the ability to understand, speak, write, and read Spanish. Successful completion of SPN 101-102, or equivalents, is prerequisite to SPN 201; successful completion of SPN 201 is prerequisite to SPN 202.

SPN 300 Spanish Phonetics and Phonology (3). The study of the 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. Comparisons and contrasts with English phonology are drawn to minimize anglicizing pronunciation. Prerequisite: SPN 202. Required of all students with a concentration in Spanish.

SPN 301, 302 Advanced Spanish I, II (3, 3). Vocabulary-building and intensive analysis of Spanish with practical application in oral and written composition. Laboratory work is required. Prerequisite: SPN 202. Both courses required of all students with a concentration or minor in Spanish; recommended for all students beyond SPN 202 who need two more semesters of Spanish.

SPN 311, 312 Survey of Spanish Literature I, II (3, 3). Literary philosophies, types, major authors, and their contributions from the earliest extant works through the contemporary period. Prerequisite: SPN 202. Both courses required of all students with a concentration in Spanish.

SPN 400 Hispanic Civilization (3). The history and development of the civilization, culture, and institutions of Spain and the Spanish-American countries. Prerequisite: SPN 202. Required of all students with a concentration in Spanish.

SPN 401, 402 Spanish Conversation I, II (3, 3). Intensive conversational and composition practice with group discussions and drills on selected topics. Analysis and correction of individual problems. Prerequisite: SPN 202. Both courses are required of all students with a concentration in Spanish.

SPN 410 Readings in Spanish-American Literature (3). Selected readings to give the student a panoramic view of representative authors, works, and movements from the colonial period to the present. Prerequisite: SPN 202. Required of all students with a concentration in Spanish.

SPN 420 Applied Stylistics (2). An intensive course in composition to aid the student in developing an individual style of writing in the Spanish language. Prerequisite: SPN 302.

SPN 421, 422 Spanish Literature of the Nineteenth Century I, II (3, 3). Principal literary movements and cultural highlights studied by analysis of the most representative authors of the period. Prerequisite: SPN 400.

SPN 425, 426 Spanish Literature of the Twentieth Century I, II (3, 3). Reading and analysis of the works of the "Generacion del '98" and of the post-war generation. Comprehensive study of all literary genres, especially of the novel and lyric poetry. Prerequisite: SPN 400. SPN 425 required of all students with a concentration in Spanish.

SPN 480 Commercial Spanish (3). Designed to train students to write effective business letters in correct styles and language. Prerequisite: SPN 302.

SPN 490 On-Site(s) Hispanic Culture (6). A short-term course in which students travel to study at various sites of Spanish-speaking regions in the Americas or Spain. Students are exposed to Hispanic arts, traditions, food, music, language, people, and mores. Prerequisites: SPN 202 and approval of instructor. Strongly recommended for all students seeking teacher certification in Spanish.

Department of Music

Ralph R. Simpson, Ph.D., Head
123 Marie Brooks Strange Music Building
Telephone 615-963-5341
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Faculty: B. Bielawa, K. Davenport, T. Davis, C. Gafford, E. Graves, D. Nettles, D. Poe, 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 semesters hours required for this degree is 164 for instrumental students and 166 for students in vocal music, including audited courses. 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 National Council on the Accreditation of Teacher Education (NCATE) and the Tennessee Department of Education.

Departmental Requirements For Bachelor of Science Music — **75 Semester Hours**

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
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 labs	6
ART 133	Art Appreciation	2
MUS 131	Music Appreciation (minimum grade of C)	2
SOC 340 or 360	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
PE 11-94, AERO, or MUS 306A	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, 237, 238, 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.

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 2.5 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 129-130.

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)	3
EDAD 400	Professional Rights and Responsibilities (formerly EDCI 400)	2
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
HEA 151	Health and Wellness	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
MUS 306A	1	MUS 004B	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
MUS 131	2	CS 121	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
EDCI 101	1		
	17		17

*Students must pass the theory entrance examination or pass MUS 101 before enrolling in these classes.

SUMMER SCHOOL

HEA 151	3
MATH 111	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
MUS 306A	1	MUS 004B	1
MUS 313	1	MUS 312	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	3
EDCI 201	3	PSY 242	3
ART 133	2		
	19		17

SUMMER SCHOOL

MUS 310 or 311	1
SOC 340 OR 360	3
EDAD 301 (FORMERLY EDCI 301)	3

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 302	1	MUS 302	1
MUS 305	3	MUS 306	2
MUS 306A	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 (FORMERLY EDCI 400)	2
		EDCI 419	1
	19		19

SUMMER SCHOOL

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
MUS 306A	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
MUS 131	2	CS 121	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
EDCI 101	1		
	17		17

*Students must pass the theory entrance examination or pass MUS 101 before enrolling in these classes.

SUMMER SCHOOL

HEA 151	3
MATH 111	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
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	3
EDCI 201	3	PSY 242	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ART 133	2		
	20		18

SUMMER SCHOOL

MUS 311	1
SOC 340 OR 360	3
EDAD 301 (FORMERLY EDCI 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 (FORMERLY EDCI 400)	2
		EDCI 419	1
	19		19

SUMMER SCHOOL

MUS 44B	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
MAJOR ENSEMBLE	1	MAJOR ENSEMBLE	1
MAJOR APPLIED	1	MAJOR APPLIED	1
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	SPCH 220	3
ASOR 100C	1	PE, AERO, OR MUS 306A	1
	17		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
MAJOR ENSEMBLE	1	MAJOR ENSEMBLE	1
MAJOR APPLIED	1	MAJOR APPLIED	1
ART 133	2	*TECHNIQUE CLASS	1
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	3
SOC 340 OR 360	3	MUS 131	2
PE, AERO, OR MUS 306A	1	ELECTIVE	1
	18		16

*Technique class must be outside applied major.

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 305	3	MUS 306	2
MUS 337	3	MUS 338	3
MUS 420	3	MUS 422	3
MAJOR ENSEMBLE	1	MAJOR ENSEMBLE	1
MAJOR APPLIED	2	MAJOR APPLIED	2
MUS 433	3	*TECHNIQUE CLASS	1
FOREIGN LANGUAGE	3	FOREIGN LANGUAGE	3
		CS 121	3
	18		18

*Technique class must be outside applied major.

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 430	3	ELECTIVE	3
MAJOR ENSEMBLE	1	MAJOR ENSEMBLE	1
MAJOR APPLIED	2	MAJOR APPLIED	2
SENIOR RECITAL	2	ELECTIVES, LIBERAL ARTS	6
ELECTIVES, LIBERAL ARTS	6		
	14		12

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 306A	1	MAJOR ENSEMBLE	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	SPCH 220	3
ASOR 100C	1		
	17		16

*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 306A	1	MAJOR ENSEMBLE	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
ART 133	2	VOCAL TECHNIQUE	1
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	3
SOC 340 OR 360	3	MUS 131	2
		ELECTIVE	3
	17		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 305	3	MUS 306	2
MUS 337	3	MUS 338	3
MUS 420	3	MUS 422	3
MUS 306A	1	MAJOR ENSEMBLE	1
MAJOR INSTRUMENT	2	MAJOR INSTRUMENT	2
MUS 433	3	VOCAL TECHNIQUE	1
FOREIGN LANGUAGE	3	FOREIGN LANGUAGE	3
		CS 121	3
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 306A	1	MAJOR ENSEMBLE	1
MUS 430	3	ELECTIVE	3
MAJOR INSTRUMENT	2	MAJOR INSTRUMENT	2
SENIOR RECITAL	2	ELECTIVES, LIBERAL ARTS	6
ELECTIVES, LIBERAL ARTS	6		
	14		12

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 307	1
MAJOR APPLIED	1	MAJOR APPLIED	1
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MUS 131	2	ART 133	2
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100C	1		
	17		16

*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 303	1
MAJOR APPLIED	1	MAJOR APPLIED	1
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	3
MATH 111	3	CS 121	3
SPCH 220	3	SOC 340 OR 360	3
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 260	3	MUS 301	1
MUS 303	1	MUS 303	1
MUS 304	2	MUS 319	2
MUS 337	3	MUS 338	3
MUS 370	2	MUS 433	3
MAJOR APPLIED	2	MAJOR APPLIED	2
ELECTIVE(S)	3	ELECTIVES	5
	16		17

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 303	1	MUS 303	1
MUS 400	5	MUS 400	5
MUS 430	3	ELECTIVE	3
MUS ELECTIVE	3	MUS ELECTIVE	3
MAJOR APPLIED	2	MAJOR APPLIED	2
	14		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
MUS 306A	1	MUS 306A	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
MUS 131	2	ART 133	2
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
ASOR 100C	1		
	16		15

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 21A	1	MUS 21B	1
MUS 220	3	MUS 221	3
MUS 303	1	MUS 303	1
MAJOR INSTRUMENT	1	MAJOR INSTRUMENT	1
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	3
MATH 111	3	CS 121	3
SPCH 220	3	SOC SCIENCE, 300 LEVEL	3
	18		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 260	3	MUS 301	1
MUS 303	1	MUS 303	1
MUS 304	2	MUS 319	2
MUS 337	3	MUS 338	3
MUS 370	2	MUS 433	3
MAJOR INSTRUMENT	2	MAJOR INSTRUMENT	2
ELECTIVE(S)	4	ELECTIVES	6
	17		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MUS 303	1	MUS 303	1
MUS 400	5	MUS 400	5
MUS 430	3	ELECTIVE	3
MUS ELECTIVE	3	MUS ELECTIVE	3
MAJOR INSTRUMENT	2	MAJOR INSTRUMENT	2
	14		14

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 142 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 one performance 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)

MUS 306A 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 Form and Analysis I (3). A study of compositions in the smaller and larger forms. Prerequisite: MUS 221. Three lectures. Course 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). 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 4 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. 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

MUS 131 Music Appreciation (2). 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.

MUS 131H Honors Music Appreciation (2). 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 World Music (3). A study of music from a global perspective, with emphasis on non-western music. Course involves performances by students enrolled in the course, and may require them to attend off-campus events. Required of all Music majors. Prerequisite: 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 6 hours of credit. Prerequisite: permission of Department Head.

Department of Physics and Mathematics

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Faculty: C. Calmelet-Eluhu, K. Daniels, A. Dean, K. Ganesan, P. Hull, J. Jackson, W. Myint, G. Nagarajan, J. Propes, M. Rajagopalan, R. Ramey, R. Richardson, V. Rosenhaus, M. Sarkar, S. Sathananthan, K. Semenya, C. Williams.

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 concentrations 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 National Council on the Accreditation of Teacher Education (NCATE) and the Tennessee Department of Education.

Mathematics

General Statement: The objectives of the Mathematics Program are (1) to provide the training to enable graduates to be employed by any of a number of private industries, government agencies, foundations, and institutions requiring high-level quantitative skills and a highly developed ability to think critically and logically; (2) to provide the training to enable graduates to enter graduate school in mathematics or related areas; (3) to provide the training to enable graduates to assume careers as teachers of mathematics in secondary schools; (4) to develop proficiency in basic mathematical operations and develop skills in the use of formulas for the solution of problems; (6) to provide for 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 complete a minimum of 12 semester hours selected from Mathematics and Statistics courses at the 300 or 400 level, exclusive of MATH 371, 472S, and 475. Also, CS 390 and 395 may be included in the Mathematics major or minor program.

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 STAT 311 and MATH 381, as well as MATH 441-442, 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 2.5 cumulative quality 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-level 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 129-130.

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	American History I, II	6
SOCIAL SCIENCE	3 Semester Hours	3
MATH 163A	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	4-6
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
PE, AERO, or MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100A	Orientation for Science Majors (Teacher certification students should take EDCI 101.)	1

Upper-level Admission

For admission into the upper-level 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 164A and 263A.

Major Core

MATH 164A, 263A OR	Calculus II, III, Alternate or	7 or 10
MATH 164, 263, 264	Calculus II, III, IV	
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)	8
MATH 441, 442 OR	Advanced Calculus I, II or	6
MATH 464, 465 OR	Modern Algebra I, II or	
STAT 421, 422	Statistical Methods I, II (MATH 441, 442 required of teacher certification candidates)	
MATH 450	Senior Project	3
STAT 311	Probability and Statistics I (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 the 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

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
HIST 201, 202	American History I, II	6
SOCIAL SCIENCE	3 Semester Hours	3
MATH 163A, 164A, 263A	Calculus I, II, III, Alternate	11
CHEM 121,121L, 122, 122L	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
PE, AERO, OR MUS 306A	Physical Education Activity (2 semesters required)	2
ASOR 100A	Orientation for Science Majors	1

Upper-level Admission

For admission into the upper-level 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 163A	4	MATH 164A	4
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
CS 210	3	CS 211	3
HUMANITIES	2 OR 3	HUMANITIES	2 OR 3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
ASOR 100A	1		
	17 OR 18		16 OR 17

*MATH 161 and/or 162 must be taken prior to MATH 163A if need is indicated.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 263A	3	MATH 351	3
ENG 211	3	ENG 212	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 EC 211, 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 OR 400 LEVEL	3
MATH ELECTIVE, 300 OR 400 LEVEL	3	ELECTIVES, 300 OR 400 LEVEL	11
ELECTIVES, 300 OR 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 163A	4	MATH 164A	4
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
CS 210	3	CS 211	3
HUMANITIES	2 OR 3	SPCH 220 OR 230	3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
EDCI 101	1	MATH 192	1
	17 OR 18		18

*MATH 161 and/or 162 are to be taken prior to MATH 163A if need is indicated.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 263A	3	MATH 351	3
MATH 361	3	MATH 362	3
ENG 211	3	ENG 212	3
CS 212	3	SOCIAL SCIENCE	3
HUMANITIES	2 OR 3	EDCI 201	3
PSY 242	3	HEA 151	3
	17 OR 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 ELECTIVE	3
EDAD 301 (FORMERLY EDCI 301)	3	EDSE 333	3
		PSY 312	3
EDCI 387	3		
	19		19

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
MATH 371	3	MATH 472S	12
MATH 381	3	EDCI 470A	3
MATH 450	3		
EDAD 400 (FORMERLY EDCI 400)	2		
EDCI 419	1		
EDRD 491	3		
	15		15

Bachelor of Science Degree in Physics

Suggested Four-Year Plan

FRESHMAN YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
CHEM 121, 121L	4	CHEM 122, 122L	4
*MATH 163A	4	MATH 164A	4
ASOR 100A	1	HUMANITIES	2 OR 3
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	16		17 OR 18

*MATH 161 and/or 162 must be taken prior to MATH 163A if the need is indicated.

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
PHY 221, 221L	4	PHY 222, 222L	4
ENG 211	3	ENG 212	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 OR 400	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 111 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 111H Honors College Algebra I (3). The Honors version of MATH 111. Enrollment is limited to members of the University Honors Program. Offered in fall.

MATH 112 College Algebra II (3). Rational functions, conic sections, systems of equations and inequalities, matrices and determinants, and an introduction to discrete mathematics. Prerequisite: MATH 111 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 112H Honors College Algebra II (3). The Honors version of MATH 112. Enrollment is limited to members of the University Honors Program. Offered on demand.

MATH 113 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: MATH 111 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 on demand.

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 161 Precalculus Mathematics I (3). A course which with MATH 162 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 161A 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.

MATH 162 Precalculus Mathematics II (3). A continuation of MATH 161. Topics include right triangle trigonometry, trigonometric functions, analytic geometry, conic sections, sequences, and notation. Prerequisite: MATH 161 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 163 Calculus and Analytical Geometry (4). Part of the sequence MATH 163, 164, 263, 264, which emphasizes application to the physical sciences. Topics include functions, graphs, limits, derivatives, the definite integral, and rational functions including applications. Prerequisite: MATH 161A or 162 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 163A Calculus I, Alternate (4). Part of the sequence MATH 163A, 164A, 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: MATH 162 or 161A or permission of the Department Head. Offered in fall.

MATH 164 Calculus II (4). Further applications of definite integral, derivatives and integrals of transcendental functions, techniques of integration, and polar coordinates. Prerequisite: MATH 163 or 163A or permission of the Department Head. Offered in fall, spring, and summer.

MATH 164A 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 163A, 164A, 263A, recommended for all Mathematics, Computer Science, Chemistry, and Biology majors. Prerequisite: MATH 163A 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 spring.

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 fall.

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: MATH 111 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: CS 121 and MATH 111, 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: MATH 164 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 163A, 164A, and 263A, recommended for all Mathematics, Computer Science, Biology, and Chemistry majors. Prerequisite: MATH 164A 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: 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: MATH 263A, 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: MATH 264 or 263A, 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: MATH 263A, MATH 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 theorem, the Chinese remainder theorem, and other elementary properties of number. Prerequisite: MATH 164A 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: MATH 164A 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: MATH 164A 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: MATH 164A 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: 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: MATH 164A 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 spring.

MATH 381 Geometry (3). A brief review of Euclidean geometry with further topics, including the non-Euclidean and projective geometries. Prerequisite: MATH 164A or permission of the Department Head. Required of all teacher certification candidates in Mathematics. Offered in summer of even-numbered years.

MATH 390 Introduction to Numerical Analysis (3). Errors, interpolation, approximations, numerical quadrature, solution of ordinary differential equations. Prerequisite: MATH 164A 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: 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: 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: 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: 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: 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: MATH 303 and MATH 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: 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: 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: 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: MATH 263A or permission of the Department Head. Offered in 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: MATH 161 or 162. 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. Prerequisite: MATH 164. 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 164 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 164A. (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 164A. 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 164A 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 164A. 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 164. 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 164. 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 164 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 164A 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 164A 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; bivariate 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

Oscar Miller, Jr., Ph.D., Acting Head
212 Jane E. Elliott Hall (Women's Building)
Telephone 615-963-5511
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Faculty: A. Blasi, D. Butler, R. Castor, W. Deberry, L. Dwyer, B. Husaini, L. Jones, M. Mahmoud, E. Rhodes.

General Statement: The Department of Social Work and Sociology offers two curricula leading to 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
Delores C. Butler, M.S.W., Acting Director
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FAX 615-963-7669

General Statement: The primary mission of the baccalaureate Social Work program is to prepare graduates with entry level professional social work practice for providing and developing needed services for mostly urban and some rural and international populations. The program also prepares professional generalist practitioners for licensure eligibility, graduate and continuing education, good citizenship, and leadership. Further, the Social Work program motivates and encourages affiliation in social work organizations via active membership and engagement in research for presentation and publication.

This mission is consistent with the University's mission of instruction, research, and community service.

Within this mission, the primary objective is to use knowledge, professional values in social work, and agency-based experience as the means of preparation for professional entry level and generalist praactitioners to serve individuals, families, groups, communities, and organizations.

In addition to the primary objective, the secondary objectives are (1) to provide knowledge of psychological, biological, and social aspects of human behavior and social environments for developing an understanding of culturally sensitive practice with individuals, groups, organizations, and communities; (2) to provide a generalist framework of problem-solving knowledge, values, skills, and ethical commitment utilizing the NASW and other codes of ethics (e.g., NABSW and NFCSW)in social work methods of intervention with individuals, families, groups, organizations, and communities; (3) to provide historical and analytical knowledge of social welfare programs, services, policies, values, and issues in order to promote understanding of policy formulation, legislative processes, and social justice; (4) to provide an urban, and some rural and international, agency-based, supervised field instruction for the application of values and ethics, themes, liability issues, confidentiality, self-determination, objectivity, informed consent, competence boundaries, and dual relationships as related to emerging roles in the practice arenas; (5) to provide knowledge, skills, and values for practice-related qualitative and quantitative research using the components of ethical research: informed consent, use of tests and instruments, and a value base for competency in practice-related research; and (6) to provide knowledge and understanding of problems and issues related to culturally-based values, social orientation, diversity, and disability in order to enhance skills in using advocacy, prevention, and other activities related to the generalist practice of social work.

The baccalaureate Social Work Program is the only program at the University and 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 Security, 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, and as resident managers and probation and parole officers.

Accreditation: The Social Work Program is accredited by the Council on Social Work Education (CSWE), the national accrediting agency in the field. 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 pretest, 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 student 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 quality 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.

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 — **43 Semester Hours**

A student must complete a minimum of 130 semester hours to receive a degree. At least 48 of the semester hours must be in courses on the 300 and 400 level. A minimum of 43 semester hours is required in Social Work professional courses and SOC 300.

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	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	Art Appreciation	2
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

Upper-level Admission

For admission into the upper-level 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.

Major Core

A minimum of 43 semester hours in Social Work and Sociology. Students majoring in Social Work must earn at least a C in all of the following required courses.

SW 301	How to Work with People	2
SW 320	Introduction to Social Services	3
SW 330	Human Behavior and Social Environment	4
SW 340	Social Policy	3
SW 345	Social 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 Experience	10
SW 420	Field Experience Seminar	3
SW 490	Senior Seminar	1
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 field practice.

A student must spend a minimum of 450 clock hours (1 semester) in field instruction in selected social agencies. This experience provides the student with an opportunity to apply theory to actual practice under supervision and guidance of a qualified practitioner. He or she is evaluated on the basis of his or her growth and development in relation to the program's formal education outcomes. A student must have a cumulative quality point average of at least 2.00 and must have earned the grade of "C" in SW 301, 320, 330, 340, 345, 350, 360, and 380 before being admitted to field instruction. Courses in the major field in which the student receives the grades of D or F must be repeated until at least a C is earned.

Sociology Program

General Statement: The Sociology major prepares one for a wide variety of professional employments as well as advanced professional study and graduate study in Sociology or other social sciences. The discipline of sociology seeks to describe and explain collective human behavior by studying the institutions that obtain between individuals and thus sustain this behavior. Perhaps the central discipline in the social sciences, sociology seeks to model its investigations on those of the physical sciences. Since the main emphasis of contemporary sociology is on the study of social structures and institutions and on the causes and effects of social change, the discipline has a special relevance to contemporary economic, social, and political issues.

In recent years, the skills that are imparted, especially in research-oriented Sociology courses, have been in high demand by business, industry, and government alike. When majoring in Sociology, students should choose electives, both within Sociology and without, with the value of research skills in mind.

Departmental Requirements For Bachelor of Science Sociology — **30 Semester Hours**

General Education Core

ENG 101, 102	Freshman English I, II (minimum grade of C in each)	6
ENG 211, 212	Sophomore Literature I, II	6
ENG 310	Technical Report Writing	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
PISI 221	American National Government	3
PISI 222	State and Local Government	3
EC 211	Principles of Economics I	3
PSY 201	General Psychology I	3
PSY 310	Psychology of Adjustment	3
SPCH 220 or 230	Public Speaking or Business and Professional Speech Communication	3
Humanities	2 courses from ART 133 Art Appreciation, MUS 131 Music Appreciation, and THEA 120 Appreciation of Drama	4
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

Upper-level Admission

For admission into the upper-level program of the Sociology major, students must complete all of the requirements listed above under the General Education Core, except for ENG 310 and PSY 310; they must have earned at least a C in SOC 211. 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 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	3
SOC 330	Social Problems	3
SOC 360	The Family	3
SOC 451	Introduction to Social Research	3
SOC 452	Senior Project	3
SOC 490	Sociological Thought	3
SOC	Upper-Level Electives	9

Minor Requirements: SOC 211 and 15 hours of upper-level 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, 101L	3
MATH 111	3	ART 133	2
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 301	2	SW 320	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 330	3	SOC 360	3
	17		18

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SW 340	3	SW 330	3
SW ELECTIVE	2 OR 3	SW 345	4
SOC 300	3	SW 350	3
PSY 351	3	PSY 321	3
PISI 420	3	ENG 310	3
ELECTIVE, ANY LEVEL	2		
	16 OR 17		16

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SW 360	3	SW 385	2
SW 380	3	SW 410	10
SW ELECTIVE	3	SW 420	3
ELECTIVES, ANY LEVEL	6	SW 490	1
	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	3	HIST 202	3
MATH 111	3	ART 133, MUS 131, OR	
ASOR 100B	1	THEA 120 (ANY 2)	4
PE, AERO, OR MUS 306A	1	PE, AERO, OR MUS 306A	1
	14		14

SOPHOMORE YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
ENG 211	3	ENG 212	3
BIO 101, 101L	3	BIO 102, 102L	3
PISI 221	3	PISI 222	3
PSY 201	3	SPCH 220 OR 230	3
EC 211	3	ELECTIVE, ANY LEVEL	3
	15		15

JUNIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SOC 300	3	SOC 360	3
SOC 330	3	SOC 451	3
SOC 490	3	SOC, 300 OR 400 LEVEL	3
SOC, 300 OR 400 LEVEL	6	PSY 310	3
ENG 310	3	ELECTIVES, 300-400 LEVEL	6
	18		18

SENIOR YEAR

FALL SEMESTER	HR	SPRING SEMESTER	HR
SOC 452	3	ELECTIVES, ANY LEVEL	18
ELECTIVES, 300 OR 400 LEVEL	9		
ELECTIVES, ANY LEVEL	6		
	18		18

Course Descriptions

Social Work (SW)

Courses marked with an asterisk (*) are required for Social Work majors.

***SW 301 How to Work With People (2).** An overview of interviewing skills and an introduction to the general method of social work practice. Students participate in a social service agency experience with an individual, family, group, community, or organization. Emphasis is on communicating for cultural competence.

***SW 320 Introduction to Social Services (3).** Examination of societal conditions leading to the development and implementation of social service programs, policies, and practices in America prior to 1952.

***SW 330 Human Behavior and Social Environment (4).** A descriptive and analytical examination of individuals, families, groups, communities, and organizations as they affect and are affected by the social environment. Prerequisite: SW 320.

***SW 340 Social Policy (3).** Examination of the development and evolution of social welfare practices, policies, and programs from 1601 to the present. Prerequisite: SW 320

***SW 345 Social Policy Analysis (3).** A critical analysis of contemporary social policies and programs for social 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.

***SW 350 Social Work Practice I (3).** A comprehensive understanding 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, PSY 351.

***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.

***SW 380 Social Work Research I (3).** The rationale, principles, ethics, goals, methods, and techniques of the scientific research process in social work. A practice-related quantitative or qualitative research with a ready implementation is required to complete the course. Prerequisites: SW 330, 350.

***SW 385 Social Work Research II (2).** Implementation of a practice-related research design. Emphasis is on data collection, data analysis, and reporting of research results. Prerequisites: SW 380, SOC 300.

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.

SW 401 Disability and Rehabilitation: Social Work Intervention (3). A course designed to acquaint students with the organization, legislative provisions, and rehabilitation procedures for physically and mentally handicapped adults. Consideration is given to the causes and nature of various handicaps: diagnosis, treatment, education, training, placement, and follow-up.

***SW 410 Field Experience (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 beginning professional social work practice. Supervision in the field is provided by a qualified practitioner committed to undergraduate social work education. Social Work majors are required to spend a maximum of 450 clock hours in an educationally oriented field practicum. Juniors and seniors are admitted upon recommendation of their major advisor. Prerequisite: SW 360.

***SW 420 Field Experience 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. Taken concurrently with SW 410.

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.

SW 444 Family Dynamics (3). A course designed to focus on the family as a dynamic, interacting system interrelated with other systems. An overview of different cultural family systems is explored. Selected theories are applied to a variety of family types to demonstrate the implementation of these theories in practice.

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.

SW 460 Ethnic and Minority Concerns in Social Work (2). The general method of social work practice with ethnic minorities. Focus is on the African-American community and the issues of multiculturalism.

SW 470 Social Gerontology (3). A course designed to examine the aging process and its impact upon the individual, the family, and society. Emphasis is placed on the physical, psychological, and sociological aspects of aging. An interdisciplinary approach is used in dealing with these aspects to enhance and enrich the understanding of the life process.

SW 472 Psychosocial Care of the Aged (3). An analysis of the psychosocial needs of older adults and approaches to meeting these needs.

***SW 490 Senior Seminar (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.

SW 495 Readings and Research (3). Independent study and research under faculty guidance for students who desire to do special projects. May be repeated once for credit.

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 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 330 Social Problems (3). A course which teaches students to critically assess 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. Required of all Sociology majors.

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 340 Courtship and Marriage (3). A critical approach to problems of courtship, marriage, and the family, with emphasis on mate selection, marital roles and adjustment, economic problems, women and the family, and parent-child relationships.

SOC 345 Cultural and Social Aspects of Health (3). 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.

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.

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.

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.

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.

SOC 440 Rural Sociology (3). A cross-cultural examination of rural life in the past and the present, focusing on change and its processes.

SOC 445 Sociology of Religion (3). Interrelationship of society, culture, and religion.

SOC 451 Introduction to Social Research (3). Study of the theory and methods of social research. Topics include 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. 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.

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.

SOC 465 Complex Organizations (3). Structure and function of formal organizations and the interrelationships of organizational variables, such as power, authority, influence, efficiency, hierarchy, and stability.

SOC 470 Social 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.

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.

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.

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.

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.

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. Prerequisite: 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 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 330 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.

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. Prerequisite: 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. Prerequisite: 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. Prerequisite: ANTH 230 or permission of instructor.

THE COLLEGE OF BUSINESS

Tilden Curry, Ph.D., Dean
Avon Williams Campus

GENERAL STATEMENT

The mission of the College of Business is to provide a sound academic program of instruction, research and public service in the business disciplines that meets or exceeds national norms of overall quality. The College is guided by an appreciation of its institutional history and the needs and obligations of a public university located in the heart of a major metropolitan area. This calls for the College to develop as one of the engines of economic development for its region and to place particular emphasis on efforts to:

1. Serve qualified students from a broad spectrum of society (multi-racial, varied economic levels, the old and the young, and working adults) and to provide them with a strong educational foundation in the baccalaureate and graduate programs that is commensurate with successful development into future business leaders, managers, and specialists;

2. Address business problems, opportunities and conditions prevalent in the Greater Nashville area by:
   a. Providing special services to small and minority businesses through training, research and technical assistance programs;
   b. Serving as a general source of business and economic information on the Nashville area economy; and
   c. Acting as a forum for scholarly inquiry and public debate on a broad range of relevant business and economic issues.

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 that have had practical business experience. Instruction is further strengthened by average class sizes of less than thirty students, both traditional and innovative teaching approaches, and the integration of business ethics, international business, and computer applications throughout the curriculum.

Research

In appreciation of the responsibility of each faculty member 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, including over 70% of its faculty having current publications in scholarly refereed journals.

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, TSU and Growth Enterprises Nashville, Inc.

Office of Business and Economic Research - Objectives of the Office have focused upon business technology, R&D, as well as working with local public and private economic development organizations. The Nashville Area Research Network and Project DIANE, an information service network, are two key examples of accomplishments of the Office.

Small Business Development Center - Funded by the Small Business Administration and TSU, the Center provides professional staff counseling for approximately 400 small business clients annually. Workshops and seminars draw an additional 1,000 small business owners.

Women's Institute for Entrepreneurship (WISE) - 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 student 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 Service - 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 AACSB-The International Association of Management Education which is the national accrediting agency for business schools. AACSB accreditation is a distinction held by less than twenty-four percent of business schools in the country. The following degree programs are accredited in the College of Business by the AACSB:

Departments	Majors	Degrees
Accounting & Business Law	Accounting	BBA
Business Administration	Business Administration*	BBA
Bus. Info. Systems	Bus. Info. Systems	BBA
Economics and Finance	Economics/Finance	BBA

*Within the major of Business Administration, a student may concentrate in any one of the four following areas: General Business, Management, Marketing, and Real Estate/Urban Development.

The Master of Business Administration degree is also accredited by the AACSB. Courses are offered in the College of Business leading to the Master of Business Administration degree. 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.

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 advising should contact the department appropriate to their major for the assigned faculty advisor.

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; The Accounting Club; Delta Mu Delta; National Student Business League; 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 Office of Undergraduate Studies, Avon Williams Campus, Suite H-1.

SCHOLARSHIPS

A limited number of scholarships are available for College of Business majors. These are non repayable assistance awards based on academic excellence, civic achievements, course of study or other specific criteria developed by the sponsor. Some are sponsored by business and industry such as the American Institute of Certified Public Accountants scholarship which is awarded annually to a full-time junior business major who has outstanding scholarship and leadership records and the Lewis R. Holland Scholarship awarded to a senior business major who has a minimum GPA of 3.3 and an exceptional record of co-curricular participation.

FACILITIES

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 facilities of the College of Business of particular interest to undergraduate students are:

- Accounting Tutorial Lab
- Office of Business and Economic Research
- Microcomputer Labs
- Small Business Development Center
- Statistical Tutorial Lab
- Nashville Business Incubation Center
- Advisement Centers

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 in the Business Information Systems major offered in the College of Business. 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.

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.

For two of the business minors offered, 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, EC 211, and MG 301 should be included in all business minors. Other suggested courses for one of the business minors are listed below:

BIS 323	3
MK 301	3
MG 403 or BISE 430	3
BISE 315	3

Students who anticipate pursuing the MBA as a part of their professional preparation, may wish to take the following courses, which are prerequisites for the MBA:

Accounting Principles	6	AC 211,212
Economic Principles	6	EC 211,212
Quantitative Methods	3	QM 201
Information Systems	6	BIS 215, BIS 323
Marketing Principles	3	MK 301
Business Finance	3	FN 330
Legal Environment	3	BL 300
Mgt. & Org. Behavior	3	MG 301

The third business minor is 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 anc 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, Chose 3	
Non-business Majors, Choose 4)	
MG 412 International Business Management	3
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 EC 211-212 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.
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 its Undergraduate Studies Office and be admitted to the Upper Division 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, in the judgment of the Dean of the College of Business, 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 heads 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

Business majors who have completed all except six hours of the required lower division 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 College. The lower division core is made up of the following courses: EC 101, QM 201, EC 211, 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. 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, all lower division requirements must be completed along with the required GPA averages.

Re-Instatement to the College

Business majors who are placed on academic suspension must be readmitted to the College through the Office of Undergraduate Studies.

Credit Hours Required for Graduation

Credit hours required for the Bachelor of Business Administration degree total a minimum of 130 semester hours for all College of Business majors and concentrations except for the BISE-Teaching concentration which requires a minimum of 132 semester hours.

Degree Credit for Business Internships, Independent Study, and Office Management Skill-based Courses

A maximum of six semester hours credit earned in business internships and independent study (combined) may be applied to degree requirements. Approval of the appropriate department heads is required to enroll in internship and independent study courses. These courses are MG 480, MG 481, MG 499, EC 498, 499, BIS 480, 499, RE 449.

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 2.000 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 twelve 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. The College accepts graduation applications only from students who have completed all freshman and sophomore requirements. Satisfactory completion of these requirements includes full admission to the upper division of the College of Business and an earned grade of C or better in both English 101 and 102.

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 secure a current and complete transcript, if necessary and schedule an appointment for this senior transcript review.

7. Business majors must complete 24 of their final 30 hours in residence at TSU.

8. Majors 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 Undergraduate Studies of 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 the Office of Undergraduate Studies of the College of Business. Approval is not automatic. MG 450 (Business Strategy) must be taken at TSU.
4. Reenrollment 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 reenroll 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 reenrollment. 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
ENG 101-102	Freshman English	6
ENG 211-212	Literature	6
HIST 201-202	American History	6
MATH 111,113	College Algebra, Basic Calculus	6
NAT. SCIENCE	Natural Science	6
NAT. SCI. LAB	Natural Science Lab	0
HUMANITIES	Humanities-Elect From Two Fields	4
PE/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, and Economic/Finance. Business Information Systems majors satisfy the same general education requirements during their freshman and sophomore years. (A four-year curriculum pattern for BIS majors appears under the Department of Business Information Systems).

EC 101	Business Principles	3
AC 211-212	Principles of Accounting	6
EC 211-212	Principles of Economics	6
QM 201	Intro. to Statistical Analysis	3
BIS 215	Microcomputer Applications	3
BISE 315	Business Communication	3
BL 300	Legal Environment of Business	3
FN 330	Business Finance	3
MG 301	Mgt. Organization Theory and Behavior	3
BIS 323	Management Information Systems	3
MK 301	Basic Marketing	3
MG 450*	Business Strategy	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 Info. Systems, Business Administration, and Economics/Finance Majors)

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
MG 100	1		
ENG 101	3	ENG 102	3
MATH 111	3	MATH 113	3
NAT. SCI. W/LAB	3	NAT. SCI. WITH LAB	3
HIST 201	3	HIST 202	3
PE/AERO/BAND	1	PE/AERO/BAND	1
EC 101	3	NON-BUSINESS ELEC. (LD)	3
	17		16

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
AC 211	3	AC 212	3
BIS 215	3	EC 212	3
EC 211	3	ENG 212	3
ENG 211	3	HUMANITIES	2
HUMANITIES	2	NON-BUSINESS ELEC. (LD)	3
QM 201	3	NON-BUSINESS ELEC. (LD)	3
	17		17

Department of Accounting and Business Law

G. R. Cluskey, Jr., DBA, CPA, Head
K-18, Avon Williams Campus

Faculty: R. Barnham, R. Hayes, L. Laska, K. Lea, L. Mullen, R. Reynolds.

Mission: The mission of the Department of Accounting and Business Law is teaching—to provide students with a high quality undergraduate and graduate education which exceeds standards for certification and accreditation. Graduates should be productive, act ethically, and be responsible citizens in the community. Their education should prepare them to meet the challenges of public, private, and not-for-profit accounting.

Faculty scholarship and professional experience complement and enhance our mission. Service activities are also a valued part of academic life. We believe that professional interaction among faculty and students further 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.

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.

Admission, Retention, and Graduation: See College of Business section on Admission, Retention, and Graduation.

Major in Accounting

Major in Accounting, 130 semester hours for the BBA degree.

Major: (In addition to courses listed below, see 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 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 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.

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 Director of Public Service as early as possible.

TSU DEPARTMENT OF ACCOUNTING & BUSINESS LAW UNDERGRADUATE CURRICULUM

ALL COURSE NUMBER, COURSE TITLE, COURSE DESCRIPTION, AND CURRICULUM REQUIREMENT CHANGES ARE PENDING UNIVERSITY APPROVAL.

ACCOUNTING MAJOR CORE		**24**
AC 311	Intermediate I	3
AC 312	Intermediate II	3
AC 313	Intermediate III	3
AC 314	Cost Accounting	3
AC 317	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.)

ACCOUNTING TRACKS			**9**
I.	Public Accounting Track (Students need 150 college semester hours to take the CPA Exam in Tennessee.)		
	AC 401	Advanced Accounting	3
	AC 403	Governmental/NFP	3
	BL 324	Business Law II	3
II.	Industry Track		
	AC 415	Advanced Cost	3
	AC 416	Internal Auditing	3
	Accounting or Business Elective (UD)		3
III.	General Accounting Track		
	AC 401	Advanced Accounting	3
	AC 417	Federal Income Tax II	3
	Accounting or Business Elective (UD)		3
	Total		**33**

Accounting Electives		
AC 401	Advanced Accounting	3
AC 403	Governmental/NFP	3
AC 405	Financial Information for Entrepreneurial Ventures	3
AC 415	Advanced Cost	3
AC 416	Internal Auditing	3
AC 417	Federal Income Tax II	3
AC 422	Accounting Theory	3
AC 424	Advanced Auditing	3
AC 425	International Accounting	3
AC 499	Independent Study in Accounting	3

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-Business Elec. (UD)	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 317	3	MG 450	3
AC 313	3	AC Track Course*	3
Non-Bus. Elec. (UD)	3	Non-Business Elec. (UD)	3
	15		15

*Students should consult with an Accounting Faculty Advisor before selecting their major track.

Department of Business Administration

Festus O. Olorunniwo, Ph.D., Head
K-6, Avon Williams Campus

Faculty: L. Carr, T. Curry, M. Lownes-Jackson, A. Miller, L. Miller, B. Pennington, S. Thach, and B. Tucker.

General Statement: The curriculum in business administration is designed to provide 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.

The Department of Business Administration offers the BBA in Business Administration as well as concentrations in general business, 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, 130 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 - Production/Operations Management	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. (Distribution is not restricted).	21

Guided Electives

Management	3
Accounting	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		SPRING SEMESTER	
Courses	**HR**	**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
AC ELECTIVE	3		
NON-BUSINESS ELEC. (UD)	3		
	18		15

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**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, 130 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	Production/Operations Management	3
MG 404 or MG 405	Organization Theory or Leadership and Organization Behavior	3
MG Electives	Electives	15

Guided Electives

Accounting	3
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		SPRING SEMESTER	
Courses	**HR**	**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		
AC ELECTIVE	3		
	18		15

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**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, 130 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, retailing and wholesaling 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.

Concentration

MG 302	Production/Operations Management	3
MK 455	Marketing Strategies	3
MK Electives	Electives	15

Guided Electives

Accounting	3
Business	6
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		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
BISE 315	3	MG 302	3
MG 301	3	BUSINESS ELECTIVE	3
BL 300	3	MARKETING ELECTIVES	6
MK 301	3	ACCOUNTING ELECTIVE	3
BIS 323	3		
FN 330	3		
	18		15

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
EC or FN ELECTIVE	3	MK 455	3
MARKETING ELECTIVE	3	MARKETING ELECTIVES	6
BUSINESS ELECTIVE	3	NON-BUS. ELECTIVE	3
NON-BUS. ELECTIVES (UD)	6	MG 450	3
	15		15

Major in Business Administration with Concentration in Real Estate and Urban Development

Concentration in Real Estate and Urban Development, 130 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	Production/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		SPRING SEMESTER	
Courses	**HR**	**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		SPRING SEMESTER	
Courses	**HR**	**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. ELECTIVE (UD)	3	MG 450	3
	15		15

Business Information Systems

James A. Ellzy, Ed.D., Interim Head
H-4, Avon Williams Campus

Faculty: A. Bankhead, G. Marquis, W. Perry, G. Udo

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 should provide the foundation essential for progress in an information systems career path in business, industry, non-profit organizations or an educational setting. While 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 coursework.

Information on requirements for individual or group endorsements in business teacher education and admission to the teacher education program are 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. 130 hours required for the **Business Information Systems-Industry Concentration** and 132 hours required for the **Business Information Systems-Teaching Concentration.**

BIS-Industry Concentration

BISE 335	Business Report Writing	3
BIS 316	Business Application Development	3
BIS 326	Object-Oriented Programming	3
BIS 415	DataBase Systems	3
BIS 424	End User Computer Management	3
BIS 423	Analysis, Design, and Implementation	3

Guided Electives

BIS/BISE	Upper Division Electives	6
Business Electives	Upper Division General Business Electives	9

(BIS or BISE electives require prior approval by BIS faculty. No credit is given for Special Topics courses taken outside the College of Business.)

General Electives (Non-Business)

100/200	Freshman/Sophomore years	9
300/400	Junior/Senior years	9

In selecting 100/200 non-business electives, the department 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 students' programming background but also allow more options, if you desire to enroll in additional upper division computer science offerings.

Business Information Systems Education (BISE) Concentration

BIS 326	Object-Oriented Programming	3
BIS 424	End User Computer Development	3
BIS 436	PC Network Systems	3
BIS 426	Training Strategies	3
BISE 371	BIS Instructional Strategies & Methods	3
BISE 472S	Student Teaching in BIS	12

Guided Electives

No guided electives in BIS/BISE or in other business courses are available for the BIS-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

*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.

Four-year curriculum framework for the Business Information Systems Education (Teaching Concentration)

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
MG 100	1	ENG 102	3
Nat. Sci. with Lab	3	Math 113	3
ENG 101	3	HIST 202	3
HIST 201	3	Nat. Sci. with Lab	3
MATH 111	3	Humanities	2
PE/AERO/BAND	1	PE/AERO/BAND	1
Humanities	2	EC 101	3
	16		18

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
ENG 211	3	ENG 212	3
AC 211	3	AC 212	3
EC 211	3	EC 212	3
EDCI 201	3	QM 201	3
BIS 215	3	PSY 242, 312	6
	15		18

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
BISE 315	3	BL 300	3
MG 301	3	FN 330	3
BIS 326	3	EDCI 387	3
MK 301	3	BIS 424	3
EDCI 301	3	BIS 323	3
		EDSE 333	3
	15		18

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
BIS 426	3	EDCI 470A	3
BIS 436	3	BISE 472S	12
MG 450	3		
BISE 371	3		
EDCI 400	2		
EDRD 491	3		
	17		15

Four-Year curriculum framework for the Business Information Systems (Industry Concentration)

FRESHMEN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
MG 100	1	Nat. Sci. with Lab	3
Nat. Sci. with Lab	3	ENG 102	3
EC 101	3	HIST 202	3
ENG 101	3	MATH 113	3
HIST 201	3	PE/AERO/BAND	1
MATH 111	3	Non Business Elective (LD)	3
PE/AERO/BAND	1		
	17		16

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
AC 211	3	AC 212	3
EC 211	3	EC 212	3
ENG 211	3	ENG 212	3
BIS 215	3	QM 201	3
Humanities	2	Humanities	2
Non Business Elective (LD)	3	Non Business Elec.(LD)	3
	17		17

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
BIS 316	3	BIS 326	3
BIS 323	3	BIS 424	3
BISE 315	3	BISE 335	3
BL 300	3	FN 330	3
MG 301	3	Non Business Elective (UD)	3
MK 301	3		
	18		15

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
BIS 415	3	BIS 423	3
BIS/BISE Elective	3	BIS/BISE Elective	3
Business Elective	3	Business Elective	3
Business Elective	3	MG 450	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 425	Decision Support Systems
BIS 426	Training Strategies for BIS Professionals
BIS 430	Business Telecommunication
BIS 436	PC Network Systems
BIS 480	Internships
BIS 481/482	Seminar in Information Systems
BIS 490	Practicum
BIS 499	Independent Study
BISE 340	Desktop Presentation Tools
BISE 400	Information and Media Management
BISE 430	Administrative Office Management

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*. 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 choosing 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
EC 211	3
BISE 121	3
TOTAL HOURS	18

Upon receipt of formal application and payment of 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, J. Masten, G. Riggs, 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, 130 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 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		SPRING SEMESTER	
Courses	**HR**	**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		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
EC or FN ELECTIVE	3	BUSINESS ELECTIVE	3
FN 360	3	EC or FN ELECTIVE	3
QM 300	3	NON-BUSINESS ELECTIVES	6
EC or FN ELECTIVE	3	MG 450	3
NON-BUS. ELECTIVE	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 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 111.

AC 212 Principles of 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 analy-

sis, 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 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 prevent 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 is 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 317 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 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 (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 212.

AC 405 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. Prerequisites: MG 301, MK 301, FN 330 or consent of instructor.

AC 415 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, inventive systems, and yield/mix models of profit maximization. Prerequisite: AC 314.

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 312 and AC 320.

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 317.

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 312 and AC 320.

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: AC 212.

AC 499 Independent Study in Accounting (3). Update and expansion of core knowledge of accounting theory, practice, taxation, and auditing using professional problems. Prerequisites: AC 423 and consent of Dept. Head.

Business Information Systems (BIS)

BIS 215 Microcomputer Applications (3). [Formerly MIS 215] 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). [Formerly MIS 315] Covers the development of programs and system of program utilizing sequential, indexed 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). [Formerly MIS 323] 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 a socio-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 415 Data Base Systems (3). [Formerly MIS 415] Study of data concepts, planning, data base management, database design, current trends and commercial products. Students will develop a single-user database system. Prerequisite: BIS 316; BIS 323 (or Consent of the Instructor).

BIS 423 Analysis, Design and Implementation (3). [Formerly MIS 423] Use of information systems techniques to solve managerial and organizational problems of limited complexity. Includes solving formal analytic

problems, the role of CASE tools in implementing solutions using IS techniques. Prerequisite: BIS 415 and BIS 323.

BIS 424 End-User Computing Development (3). [Formerly MIS 424]. 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 323

BIS 425 Decision Support Systems (3). [Formerly MIS 425] The key technical and managerial issues in the development and use of decision support systems in organizations are addressed. The 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: Business Majors: BIS 424; Non-business majors: Consent of Instructor

BIS 426 Training Strategies for BIS Professionals (3). [Formerly MIS 426] 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). [Formerly MIS 430] 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). [Formerly MIS 436] Principles and specific implementation of a local area network system including predominant networking product methodologies. Includes extensive network administration exercises. Prerequisites: BIS 424

BIS 480 Internship (3). [Formerly MIS 480] 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). [Formerly MIS 481/NA] Provides an in-depth study of current BIS Topics. Extensive readings/research on current information system developments are reviewed and discussed. Prerequisites: Consent of Department Head.

BIS 490 Practicum (3). [Formerly MIS 490] Provides the senior BIS student an opportunity to assist with planning and implementation of an approved computer related project. Students will meet periodically with the instructor to discuss problems and issues relevant to the approved project. Prerequisite: Consent of Department Head.

BIS 499 Independent Study in BIS (3). [Formerly MIS 499] Provides the outstanding student the opportunity to investigate in-depth, approved information systems topics. A senior faculty member of the department will coordinate the work of each individual student. Prerequisite: Permission of the Department Head.

Business Information Systems Education (BISE)

BISE 121 Microcomputer Keyboarding (3). [Formerly OM 121] 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). [Formerly OM 222] 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). [Formerly BE 315] 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). [Formerly BE 235] 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). [Formerly OM 340] 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 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, microrecords, 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). [Formerly OM 430] Designed to help students develop an understanding of the complexities associated with systems, methods, and procedures for efficient office management. Prerequisite: BIS 215.

BISE 371 Instructional Strategies and Methods (3). [Formerly BE 371] 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 472 Student Teaching in Business (12). [Formerly BE 472] Actual classroom experience in secondary schools (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 businesspersons. 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 businesspersons, 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 businesspersons, 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.)

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

EC 212 Principles of Economics II (3). Economic growth, and microeconomic, some domestic and international applications, economics and comparative economic systems. Prerequisite: EC 211.

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 440 Consumer Economics (3). Designed to acquaint the student with the character and significance of factors which determine and govern consumption, particularly as they are related to the prosperity and stability of the economic system. 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 economics 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 Production and Operations Management I (3). A course which deals with the concepts, analytical tools, and the techniques used in controlling the production of both goods and services. It includes the efficient use of resources. These are essential concepts and techniques for all managers to master. Prerequisite: Junior Standing; Math 113; 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 Management Science I (3). Fundamentals of management science. Theory and application of mathematical, statistical, and operations research techniques to problems in industry, business, and government. Prerequisite: Math 113, 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 402 Production and Operation Management II (3). Continuation of MG 302. In-depth study of operations and production problems and application of selected decision making tools and techniques used in the production of goods and services. Prerequisites: MG 301, 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 Leadership and Organization Behavior (3). A course which translates Organization Behavior theories into the leadership skills required for managers in contemporary, global, organizations. Application of techniques and research in order to increase human productivity and individual and group effectiveness is the primary focus. 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 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 class 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). The profitable satisfaction of customer needs through product, distribution, promotion, and price within the contexts of the organization, competition, the economy, regulation, culture/society, and technology. Prerequisite: Junior standing and EC 212.

MK 320 Sales Management (3). The nature of the selling function and its relationship to the marketing strategy. Also, the management of sales including organization, selection, training, evaluation and supervision. Prerequisite: MK 301.

MK 330 Applied Marketing Research (3). Modern research methodology applied to marketing problems/opportunities with the goal of supplying relevant information for better marketing decisions. The entire research process is studied with an application emphasis. Prerequisite: MK 301.

MK 340 Environmental Issues in Marketing (3). Ethical, legal, and human relations dimensions of the business and non-profit environment. Prerequisite: MK 301

MK 405 Consumer Behavior (3). The social, psychological, and decisional processes influencing purchasing by final consumers. The emphasis is upon marketing management applications. 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 Advertising Fundamentals (3). The role of advertising in the economy and its use in the firm's marketing mix. The need to research, plan, create, and execute as well as media, and agency decisions are a few of the major topics covered. Prerequisite: MK 301.

MK 425 Retailing Management (3). The structure, environment, and management of retailing in its functional context. Target marketing, merchandising, finance, location, store operation, promotion, pricing, and accounting are studied. 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 Marketing in Nonbusiness Organizations (3). The special requirements and demands on nonprofit organizations and the role and contribution of marketing in achieving organizational objectives. Health care agencies, community service organizations, and the arts are the focus of attention. Prerequisite: MK 301.

MK 455 Marketing Strategy (3). Capstone course in Marketing (to be taken near graduation). Emphasizes strategic planning and operations. A major project as well as readings and case studies is required. Prerequisite: 9 hours of Marketing, including MK 301 and permission of Departmental 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 111.

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 analysis, 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: EC 211 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 which involve direct observation and participation in teaching under supervision.
7. To develop instructional skills and strategies through a wide range of laboratory, clinical and student teaching 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

Teacher preparation programs 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, and the Tennessee Association of Colleges for Teacher Education.

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, and (4) 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 Office of Pre-Service Education of the Metropolitan Nashville Public School System.

Curriculum Laboratory

The Curriculum Laboratory is a center for instructional materials in teacher education. It is designed for students and teachers in the professional core courses in education, the specialized professional courses, student teaching and the required activities related to student teaching. The laboratory is located in 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 Health, Physical Education and Recreation, 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 Health, Physical Education, Recreation, and Dance, 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 approves all students who apply for candidacy to the Teacher Education Program and secures a record of each applicant showing that the applicant has met standards for candidacy to Teacher Education. 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.
2. Each student will submit documentation that s/he has:
   a. completed at least 50 semester hours of course work, including: 1) ENG 101, 102, 2) PSY 242, 3) EDCI 201 and 4) an appropriate sequence of freshman mathematics and freshman science;
   b. earned a grade of "C" or better in each of the following courses: ENG 101, 102, PSY 242, EDCI 201;
   c. maintained a "C" average in all freshman level mathematics and sciences courses;
   d. earned a 2.50 GPA on a 4 point scale in all previous college work.
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;
   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 without special permission from the Director of Student Services and Teacher Education: 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 2.50 or above;
2. continue to exhibit personal, social and emotional 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. 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;
3. maintain a cumulative GPA of 2.50 or better;
4. exhibit personal, social and emotional characteristics essential to becoming an effective educator;
5. complete the prescribed prerequisite professional education courses and all courses in one's major area of specialization with a grade of "C" or better;
6. supply documentation that a physician certifies that one is free from communicable diseases;
7. supply documentation of liability insurance.

All students are limited to a maximum of fifteen (15) semester hours, twelve (12) in student teaching and three (3) in educational seminar during the semester in which they do student teaching. Dual placement will be apart 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 2.50 or above;
5. present acceptable score(s) on each test required in Tennessee, currently the Praxis II: Principles of Learning and Teaching (PLT), as well as appropriate NTE Specialty Exam(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

J. L. Cornelius, Acting Head
103 Education Building (Clay Hall)

Faculty: R.L. Boone, B. Crowell, D. Dunbar, W. Evans, P. Harquail, F.B. Jones, P.H. Madden, B. Nye, K.L. Stevens, A.A. Thompson.

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, 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 Bulletin for more information. The department offers two undergraduate courses.

COURSE DESCRIPTIONS

Educational Administration

EDAD 301 School Organization, Management and Community Relations. (3) 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. (2) 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.

Department of Health, Physical Education and Recreation

Deborah Kim Freeland, Ph.D., Head
332 Gentry Complex
Telephone (615) 963-5581

Faculty: J. Bass, H. Beamon, H. Foreman, K. Freeland, J. Gentry, J. James, R. Miller, E. Overall, F. Sawyer, C. Starks, G. Steimling.

General Statement: An important purpose of the Health, Physical Education, Recreation, and Dance 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 culture 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 and appreciation 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 HEA 306, PE 301, 302, 310, 312, 313, 314, 315, 331, 334, 335, 420-426, HPER 304, 402, 403, 450, REC 303. Professional Education: EDCI 201, 301, 387, 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 HEA 300, 303, 305, 306, 307, 409, HPER 304, 402, 403, 450, PE 312, 313, 314, 331. Professional Education: EDCI 201, 301, 387, 419, EDRD 491, EDSE 333, HEA 371/H, 470, 472.

Major Core: (Physical Education, Without Certification Option) A minimum of 40 semester hours including PE 202, 312, 313, 314, 331, 332, 334, 420-426, HEA 303, 305, 306, HPER 304, 402, 450, REC 303.

Major Core: (Recreation option) A minimum of 53 semester hours including PE 203-214, 308, 310, 312, 313, 314, 315, 332, 434, HEA 306, HPER 402, 403, 450, REC 302, 303, 353, 473, 481.

Departmental Requirements for minor

Minor Requirements: (Physical Education) A minimum of 20 hours including: HPER 101, HEA 306, PE 222A or 222B or 227 or 326, 201,214, 331, 334, 403.

Minor Requirements: (Health Instruction) A minimum of 22 hours including: HPER 101, HEA 300, 303, 305, 306, 307, 409, PE 312.

Minor Requirements: (Recreation): A minimum of 19 hours including: HEA 306, HPER 101, PE 201-227, 310, or HPER 403, 434, REC 303, 353, ART 300-400.

Minor Requirements: (Dance) A minimum of 20 hours including: HEA 306, 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		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
ENG 101	3	ENG 102	3
HIST 201 or 341	3	HIST 202 or 341	3
MATH 111 or above	3	HUMANITIES ELECTIVE	3
EDCI 101	1	HUMANITIES ELECTIVE	3
PE 11-94	1	PE 11-94	1
2nd FIELD	1-3	2nd FIELD	1-3
2nd FIELD	2-3	CS 121	3
	14-17		16-19

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
NATURAL SCI	3	NATURAL SCI	3
ENG 211 or 212	3	2nd FIELD	3
EDCI 201	3	PSY 242	3
HEA 306	3	2ND FIELD	3
PE 302	2	PE 301	2
PE 315	2	PE 335	2
		REC 303	2
	16		18

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
PE 310	2	PE 313	3
PE 312	3	PE 331	3
HPER 304	2	HPER 403	3
HPER 402	3	PE 334	3
EDAD 301	3	PE 420-426	2
EDCI 419	3	EDCI 387	3
	16		17

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
PE 314	3	PE 470	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		SPRING SEMESTER	
Courses	HR	Courses	HR
ENG 101	3	ENG 102	3
HIST 201 or 341	3	HIST 202 or 341	3
MATH 111 or above	3	HUMANITY ELECTIVE	3
EDCI 101	1	HUMANITY ELECTIVE	2-3
HUMANITY ELECTIVE	2-3	PE 11-94	1
PE 11-94	1	CS 121	3
2nd FIELD	3		
	16-17		15-16

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	HR	Courses	HR
NATURAL SCI	3	NATURAL SCI	3
ENG 211 or 212	3	HEA 306	3
EDCI 201	3	PSY 242	3
2ND FIELD	3	2ND FIELD	3
HPER 304	3	HEA 305	2
		PE 312	3
	15		17

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	HR	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	3	EDSE 333	3
	18		18

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	HR	Courses	HR
HPER 402	3	HEA 472E&S	12
HPER 450	3	HEA 470	3
HEA 371H	3		
EDRD 491	3		
EDCI 419	3		
2ND FIELD	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		SPRING SEMESTER	
Courses	HR	Courses	HR
ENG 101	3	ENG 102	3
HIST 201 or 341	3	HIST 202 or 341	3
MATH 111 or above	3	SOC SCI ELECTIVE	3
EDCI 101	1	HUMANITY ELECTIVE	2-3
HUMANITY ELECTIVE	2-3	PE 11-94	1
PE 11-94	1	CS 121	3
HUMANITY ELECTIVE	3		
	16-17		15-16

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	HR	Courses	HR
ENG 211 or 212	3	2nd FIELD	3
NATURAL SCI	3	NATURAL SCI	3
HEA 305	3	HUMANITY ELECTIVE	2-3
HPER 304	3	HUMANITY ELECTIVE	3
2nd FIELD	3	2nd FIELD	3
		PE 202	1
	15		15-16

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	HR	Courses	HR
PE 312	3	PE 313	3
HEA 303	3	PE 332	2
HEA 306	3	PE 334	3
PE 420-426	3	2nd FIELD	3
ELECTIVE	1-3	2nd FIELD	3
2nd FIELD	3	ELECTIVE	3
	16-18		17

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	HR	Courses	HR
PE 314	3	PE 331	3
HPER 402	3	REC 303	3
HPER 450	3	ELECTIVE	3
ELECTIVE	3	ELECTIVE	3
ELECTIVE	3	ELECTIVE	3
ELECTIVE	3	ELECTIVE	3
	18		18

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		SPRING SEMESTER	
Course	HR	Courses	HR
ENG 101	3	ENG 102	3
HIST 201 or 341	3	HIST 202 or 341	3
EDCI 101	1	HUMANITY ELECTIVE	2-3
NATURAL SCI	3	NATURAL SCI	3
HUMANITY ELECTIVE	2-3	PE 11-94	1
PE 11-94	1	CS 121	3
ELECTIVE	3		
	16-17		15-16

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	HR	Courses	HR
ENG 211 or 212	3	ELECTIVE	3
MATH 111 or above	3	ELECTIVE	3
SOC SCI ELECTIVE	3	HEA 306	3
HUMANITY ELECTIVE	2-3	PE 203-214	1
PE 203-214	1	HUMANITY ELECTIVE	2-3
PE 203-214	1	PE 332	2
ELECTIVE	3		
	16-17		14-15

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
2ND FIELD	2-3	HEA 306	3
PE 310	2	PE 313	3
PE 312	3	2ND FIELD	3
PE 314	3	REC 302	2
2ND FIELD	3	REC 303	3
2ND FIELD	3	REC 353	2
	16-17		16

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
HPER 402	3	REC 473	9
HPER 450	3	REC 481	2
PE 308	3	PE 434	2
PE 315	3	HPER 403	3
2ND FIELD	3	2ND FIELD	3
2ND FIELD	3		
	18		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 306 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 with 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.

PE 11 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.

PE 12 Elementary Swimming (1). A course designed to make individuals reasonably safe, while in, on, or around water-a fitness component.

PE 15 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.

PE 16 Badminton (1). An elective course designed to teach the basic skills and strategies of badminton.

PE 17 Volleyball (1). An elective course designed to teach the basic skills, rules and regulations and strategies regarding power volleyball.

PE 18 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.

PE 20 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.

PE 21 Bowling (1). A course to acquaint the student with the history, rules, courtesies and fundamental skills to play and appreciate bowling.

PE 24 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.

PE 25 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.

PE 26 Softball (1). A course designed to teach the rules, strategies, fundamentals and other aspects of the game of softball.

PE 27 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.

PE 28 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.

PE 29 Touch Football (1). An elective course presenting the modified form of football. Emphasis is on fundamental skills necessary for participation.

PE 30 Weight Training (1). A course designed to teach the rudiments of movement using weights. Emphasis is on muscular endurance, muscular tonicity, and muscular strength.

PE 31 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.

PE 32 Beginning Yoga (1). *A course designed for instruction in the basic knowledge and skills with emphasis on yoga postures.*

PE 33 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.

PE 34 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.

PE 36 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.

PE 43 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.

PE 44 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.

PE 46 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.

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

PE 53 Intermediate Yoga (2). A course designed for students with a foundation in basic yoga body work. Instructor's approval is required.

PE 91, 92, 93, 94 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 312 Anatomy and Physiology (3). A basic course in gross anatomy and physiology designed to provide instruction in the study of the structure and function of the human body, and all that it implies. Laboratory experiences will also be provided to augment concepts to be covered.

PE 313 Kinesiology (3). A 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 "IC" 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

Rosemary Jeffries, Ph.D., Acting Head
300 Clay Hall

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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 201, Intermediate General Psychology 202, and 38 additional hours in psychology at the 300/400 level. The 38 hours must include the required courses: Psy 311, 315, 330, 411, 411 A or B, 450 and 481. At least six of the remaining hours of 300-400 level electives must be selected from Group 1 psychology courses (PSY 321, 341, 351, 420, 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 major 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. The prerequisites for Psy 436, Field Placement, are PSY 321, Abnormal Psychology; and either PSY 336, Introduction to the Delivery of Mental Health Services **OR** PSY 339, Working with People plus six additional hours of Upper Division Psychology and the permission of the instructor.

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 (27 hours) PSY 101, 201, 202, 311, 315, 330, 411, 411 A or B, 450 and 481.

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, 420, 425, and 462.
Group 2 courses include PSY 310, 323, 331, 336, 339, 352, 353, 414, 424, 433, 436, 437, 440, and 451.

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.

REQUIREMENTS TO TEACH PSYCHOLOGY IN SECONDARY SCHOOL

Students seeking endorsement to teach Psychology at the high school level must:

1. Be licensed in the specialty area of Social Studies Education;
2. Major in History or Political Science;
3. Minor in Psychology (PSY 201 and 202 plus 18 Upper Division Hours in PSY);
4. Have the enhanced student teaching experience in the secondary school and middle school;
5. Successfully pass the Specialty Area Test for Psychology (380) on the National Teacher's Examination.

MINOR REQUIREMENTS

The general psychology courses 201 and 202 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		SPRING SEMESTER	
Courses	**Hr**	**Courses**	**Hr**
ENG 101	3	ENG 102	3
MATH 111	3	HIST 202	3
HIST 201	3	HUM	2
PE	1	PE	1
PSY 101	1	PSY 201	3
HUM	2	SOC SCI	3
CS 121	3		
	16		15

Sophomore Year

FALL SEMESTER		SPRING SEMESTER	
Courses	**Hr**	**Courses**	**Hr**
ENG 211	3	PSY 311	3
NAT SCI 1	4	NAT SCI 2	4
HUM	3	ELEC	9
PSY 202	3		
ELEC	3		
	16		16

Junior Year

FALL SEMESTER		SPRING SEMESTER	
Courses	**Hr**	**Courses**	**Hr**
PSY 315	3	PSY 411	3
PSY 330	4	PSY 411 A or B	1
PSY ELEC*	9	PSY ELEC	9
		UPPER DIV ELEC	3
	16		16

Senior Year

FALL SEMESTER		FALL SEMESTER	
Courses	**Hr**	**Courses**	**Hr**
PSY450	3	ELEC	17
PSY 481	3		
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 201 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.

PSY 201 General Psychology (3). The basic course in introductory psychology for majors and non-majors. The course introduces students to the fundamental concepts of psychological methodology, basic psychological processes, learning memory, motivation, and emotions. The course is a prerequisite for all psychology courses.

PSY 202 Intermediate General Psychology (3). An intensive integrative coverage of specific content areas in psychology offered in modular sequence. Topics include methods of experimental design, growth and development, sensation and perception, learning and memory, higher mental processes, motivation and emotion, personality and psychotherapy and social psychology. Required of all majors, prerequisite: PSY 201.

PSY 242 Human Development and Learning (3). 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 310 The Psychology of Adjustment (3). A study of personality development and structure, with major emphasis on personal adjustment and the functional aspects of the psychology of daily living. Topics covered include development of adjustment patterns, individual adjustment to life situations, societal definitions, treatment of the maladjusted, personal appraisal systems, and modification of behavior.

PSY 311 Elementary Statistics (3). An introduction to statistics for the general student, with emphasis on organizing and describing numerical data, probability, sampling distributions, correlation, regression, point estimation, interval estimation, testing hypotheses and distribution-free methods.

PSY 312 Measurement Evaluation for the Classroom (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.)

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.

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 339 Working with People: Methods and Techniques (3). An introduction to some methods utilized in the delivery of mental health services. The course will emphasize understanding the helping relationship from the viewpoint of both the client and the professional. Students will be introduced to methods of interviewing, observing, gathering information and analyzing data. Some field experience will be a built-in dimension of this course.

PSY 341 Social Psychology (3). A study of interpersonal behavior including such topics as perceiving 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 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 311.

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 420 Perception (4).** A study of processes by which individuals acquire information about their environment. Topics include perceptual learning, sensory mechanisms and impairments, illusions, cultural and personality influences, subliminal perception and ESP. Emphasis on demonstration of sensory phenomena with subsequent discussion, lecture and lab.

PSY 424 Behavior Modification (3). 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.

PSY 433 Community Psychology: Individual and Group Intervention (3). A course which focuses on community based individual and group intervention strategies. Major issues in intervention will be examined, and beginning skills applicable to the mental health fields will be emphasized. Suggested prerequisites: PSY 339.

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 339, plus 6 additional hours of Upper Division Psy and permission of instructor.

PSY 437 Fundamentals of Counseling (3). A course designed to provide the student with an orientation to issues, problems and values related to the counseling process. Emphasis will be placed on the understanding of basic counseling skills.

PSY 440 Drugs and Behavior (3). A study of the biomedical, psycho-social 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).** Individual study and research under faculty guidance. Prerequisite 12 hrs. of upper division psychology courses and permission of instructor.

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: PSY 311.

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.

*Student should check with Department for frequency of course offerings.

Department of Teaching and Learning

Ruby W. Martin, Ed.D., Head 203 Clay Hall

Faculty: S. Aldrich, M. Alvarez, F. Cathey, E. Cullum, C. Dickens, L. Drummond, M. Dunn, R. Emans, D. Mathis, D. McCargar, N. Mays, B. O'Conner, J. Presley, R. Renfro, D. Roberts, L. Simpson, W. Smith, C. Stice, E. White.

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 which 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 which 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, Administration, Management and Community Relations
EDCI 387	Curriculum Development
EDAD 400	Professional Rights and Responsibilities
EDSE 333	Introduction to Special Education
PSY 242	Human Development and Learning
PSY 312	Educational Measurement

Specialized Professional Education Requirements

The specialized professional education requirements vary according to the area of 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 teacher 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

The purpose of the Special Education program is to prepare teachers, supervisors, principals, and supportive personnel who will be responsible for implementing Tennessee Public Law, Chapter 839 of the Public Acts of 1972, and the federal mandates, Public Law 94-142, while maintaining quality education and 99-457, for all children. The program prepares teachers to develop and implement adequate learning experiences to accommodate exceptional children in the least restrictive environment.

The philosophy of the Special Education program is consonant with the basic philosophical tenets of Section 504 of the Rehabilitation Act (PL 93-112), Americans With Disabilities Act. (PL 101-336), Perkins Act (PL 101-392), Gifted and Talented Children's Act (PL 95-561) and Education of All Handicapped Children Act (PL 94-142), and its subsequent amendments, Early Intervention and Transition of Secondary Students Act (PL 99-457) and Individuals with Disabilities Education Act (PL 101-476) and other related mandates. These tenets emphasize that all individuals with disabilities, regardless of the severity of their disability, are entitled to care, treatment, education, and opportunities which will enhance their ability to make a contribution to society.

The Special Education competency-based curriculum is constructed to reflect the aforementioned philosophy, by providing special education students with courses and experiences designed to enable them to serve in various capacities (i.e. consulting teachers, diagnostic prescriptive teachers, inclusion teachers, liaison teachers, teacher counselors, clinical teachers and others).

The general objective of the undergraduate program is to provide a competency-based teacher preparation program which will provide the student with the requirements which have been established by the State Department of Education for a direct free-standing certification in Special Education.

Program Requirements

1. 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 grade-point average of 2.5.
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 Speciality Test of the National Teachers Exam.
5. Students must meet all criteria listed under the heading "Education Admission and Retention Requirement" in the introductory materials of this section.

General Studies Requirements (60 semester hours)

Freshman English (6)
ENG 101, 102
Physical Education (2)
PE 11-90 (2)
Humanities (6)
ENG 211, 212 (or appropriate substitute with advisors approval)
Humanities Electives (4) two areas are recommended.
ART 133 (2) Art Appreciation
MUS 131 (2) Music Appreciation
Natural Science (6)
Recommended: Bio 101, 102, 101L, 102L (6)
(Any courses from Biology, Chemistry, Physics, or other sciences will suffice.)
Mathematics (3)
MATH 111 or appropriate substitute.
Computer Science (3)
EDSE 480 Tech in SE or
CS 121
Social Studies (9)
HIST 201, 202 American History
PSY 242 or 351 Human Growth and Learning

Restricted Electives (21)

With advisor's approval, select electives from the following disciplines: English, literature, religion, foreign language, speech, philosophy, drama, theater, health and PE, art, music, any natural sciences, mathematics, computer science, history, geography, economics, sociology, political science, anthropology, and psychology.

Professional Education Requirements (29 semester hours)

EDCI 101	Orientation	1
EDCI 201	History and Foundations of Education	3
EDCI 301	School Organization, management, and Community Relations	3
EDCI 387	Curriculum Development	3
*EDRD 424	Teaching of Reading in Elementary School OR	3
*EDRD 482	Teaching Reading - Language Arts to Exceptional Learners AND/OR	3
*EDRD 490	Directed Individualized Study/Teaching Reading AND/OR	1
*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

*A total of 3 hours of reading methods is required.

Special Education major Requirements (36 semester hours)

EDSE 333	Introduction to Special Education
EDSE 336	Characteristics and Needs of Mildly Disabled
EDCI 390A	Method of Elementary Teaching: Humanities and Social Studies
EDCI 390B	Method of Elementary Teaching: Sciences
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*

(Choose 6 semester hours from the list below)

EDSE 305	Parenting Exceptional Children
EDSE 406	Characteristics and Needs of Emotionally Disturbed Children
EDSE 407	Teaching Emotionally Disturbed
EDSE 410	Nature of Learning Disabled Child
EDSE 411	Characteristics and Needs of Mentally Retarded Children
EDSE 412	Teaching the Mentally Retarded
EDSE 413	Education of the Learning Disabled Children
EDSE 435, 436, 437	Problems in the Education of Exceptional Children
EDSE 455	Characteristics of Young Exceptional Children
EDSE 463	Teaching Early Childhood Special Education
EDSE 472	Medical Aspects of Exceptionality
EDSE 473	Practicum in Special Education
EDSE 481	Seminar in Emotional Disturbance
EDSE 483	Seminar in Mental Retardation
EDSE 485	Seminar in Learning Disabilities

*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	Courses	SPRING SEMESTER HR	HR
Eng 101	3	Eng 102	3
Math 111	3	PE	1
PE	1	Humanities electives	2
Humanities electives	2	Hist 202	3
Hist 201	3	Bio 102 or Sci electives	3
Bio 101 or Sci electives	3	Health 151	3
EDCI 101	1		
	16		15

Sophomore Year

Eng 211	3	Eng 212	3
CS 121	3	EDAD 301	3
EDCI 201	3	PE or AERO	1
PE or AERO	1	SCI elective	3
PSY 242	3	Electives	6
Social Studies electives	3		
	16		16

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 482 and 491*	4	EDSE 495	12
EDSE 469	3	EDCI 470 A or B	3
EDSE 468	3		
Electives (300-400)	6		
	16		15

*Four hours of reading methods required.

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 Development 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.

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. Prerequisite: Admission to Teacher Education. Field experience 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.

EDCI 390B Methods of Elementary Teaching: Sciences (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.

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.

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, EDCI 301, EDCI 387, the Department's specific methods course. Prerequisite:Admission to Teacher Education.

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.

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 Introduction to Special Education (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. Field Experience 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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 complete all required course work for the major in Special Education.

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.

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.

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.

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.

COLLEGE OF ENGINEERING AND TECHNOLOGY

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 and Technology offers Bachelor of Science degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, and Aeronautical and Industrial Technology with concentrations in Airway Science Electronics, Industrial Technology and Computer Integrated Manufacturing. The college offers concentrations in Computer Engineering and Environmental 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 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 of Engineering and Technology is to prepare students to think critically, interpret knowledge, 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 and Technology include the following:

1. To familiarize the student with the systematic scientific approach to problem-solving including the use of modern engineering tools.
2. To provide the student with a strong foundation in engineering/technology 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 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 division 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. Departmental 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 report is required to communicate the design.

Admissions/Retention Requirements: All engineering students who wish to take upper division engineering courses, 300 and 400 level courses, must have a minimum cumulative grade-point-average (GPA) of 2.5 and must take and pass the Engineering Entrance Examination with a minimum score of 75% on each part (chemistry, mathematics, and physics) of the examination.

All engineering students must also take and successfully complete all components of Rising Junior Examination of which the Engineering Entrance Examination is a component before they can complete the junior year.

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 163, 164; 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.

NOTE: A student must earn a grade of **B** or better in several of the following courses: CHEM 151, chem 151L, MATH 163, MATH 164, PHY 221, PHY 221L, PHY 222, to meet the minimum 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 163, 164; PHY 221, 222 before the examination can be taken a third and final time.

Only those students having a GPA of at least 2.5, in addition to having passed the Engineering Entrance Examination, will be allowed to take 300 and 400 level engineering courses.

Admission of Transfer Students: Transfer students from other institutions of higher education who wish to enter the College of Engineering and Technology must meet University admission criteria and 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 engineering, mathematics and/or science courses without having successfully completed the proper prerequisites for those courses with a grade of "C" or better.
2. An engineering student earning a grade of "D" in mathematics, science or engineering course(s) must repeat that course(s) the very next time the course(s) is offered.
3. 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 ten (10) continuous weeks in length. The Dean's office will assist students in locating a practicum.

General Engineering Core Requirements: All engineering students are required to take the following engineering core courses: mathematics (20 semester hours): MATH 163, 164, 263, 264, 303 ENGR 340; Science (15 semester hours): CHEM 151, 151L; PHY 221, 221L, 222, 222L, 223; Engineering Science (18 semester hours): ENGR 200, 200L, 201*, 211**,212, 330; Humanities (9 semester hours): ENG 211, 212 Humanities Elective*** (3 semester hours); Social Science (9 semester hours): HIST 201, 202, Social Science Elective***(3 semester hours); Other (23 semester hours): ENG 101, 102; ENGR 100L, 101L, 113L, 221, 320, 420L****, SPCH 230; PE/AFROTC/BAND (2 semester hours); Total Engineering Core 94 semester hours.

*Electrical Engineering majors and Architectural Engineering majors will take ENGR 225.

**Electrical Engineer majors will take 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).

Aeronautics and Industrial Technology Core Requirements: Mathematics and Physical Science (18 semester hours): MATH 161, 162; CHEM 121, 121L, PHY 211, 211L, 212, 212L; Communication (9 semester hours): ENG 101, 102; SPCH 230; Humanities and Social Science (12 semester hours): HIST 201, 202; ENG 211, 222; Management Core (6 semester hours): MG 301, 405; Technical Core (22 semester hours): AIT 100L, 113L; CS 121, 211, AIT 200, 200L, 220, 220L, 449, 450, 491; Other (3 semester hours) PSY 201; PE/AFROTC/BAND (2 semester hours); Total Technology Core - 72 semester hours.

Graduation Requirements: In addition to the University requirements for graduation, the following specific College graduation requirements must be met by all technology students:

Technology 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 technology 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".

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 and Technology, its academic support services, admission and retention standards, introduction to the engineering profession including 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 laboratories with experiments from each. Completion of minor engineering design problem is required.

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.

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, EC, and RLC circuits average and effective values of periodic wave form; polyphase circuits. Prerequisites: MATH 264, PHY 222. Co-requisite: Math 303, ENGR 221L or ENGR 222L or ENGR 223L.

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 ENGR 222L or ENGR 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 164, 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 221L or ENGR 222L or ENGR 223L.

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 164, PHY 221, 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 163, 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 163, 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 163, 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 221.

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 ENGR 222L or ENGR 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 164, 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 ENGR 222L or ENGR 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: Senior standing.

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.

Department of Aeronautical and Industrial Technology

U. Ray Williams, M.S. EE, Interim Head
203 Industrial Arts Building

Faculty: Ray Williams, Ahad Nasab, and Mohammed Qasem.

General Statement: A Bachelor of Science Degree (B.S.) in Aeronautical and Industrial Technology is offered in the following Concentrations: Industrial Technology, Airway Science Electronics, and Computer Integrated Manufacturing (CIM). The Industrial Technology Concentration has an emphasis in Industrial Electronics and Computer Integrated Manufacturing (CIM). The Airway Science Concentration is in Electronics.

The curriculum(s) are designed to prepare students for positions in industry that require a broad technical and management background.

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.

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: AIT 100, 250, 200, 200L, 220, 220L, 331, 331L, 395, 312, 332, 332L, 335, 335L, 417, 441, 449, 340, 390, 348, 440, 442, 450, 480, 491.

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 Airway Electronics Systems (AWS)

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
MATH 161	3	MATH 162	3
ENG 101	3	CS 121	3
ENGR 115L	2	ENG 102	3
AIT 100L	1	MUS 131	2
ART 133	2	PE / ROTC / BAND	1
PE / ROTC / BAND	1	CHEM 121	3
PSY 201	3	CHEM 121L	1
		AIT 101L	1
	15		17

SOPHOMORE YEAR

CS 211	3	MATH 163	4
PHY 211	3	PHY 212	3
PHY 211L	1	PHY 212L	1
ENG 211	3	HIST 202	3
HIST 201	3	AIT 220	3
AIT 200	3	AIT 220L	1
AIT 200L	1		
	17		15

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 164	4
SPCH 230	3		
	17		17

SENIOR YEAR

MATH 351	3	AIT 417	3
AIT 441	3	AIT 442	3
AIT 450	1	AIT 451	1
AIT 340	3	AIT 480	3
AIT 440	3	MG 405	3
MG 301	3	MG 403	3
AIT 491	1		
	17		16

TOTAL HOURS 131

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: AIT 100, 200, 200L, 220, 220L, 311, 331, 331L 335, 335L, 348, 332, 332L, 404, 311, 417, 491, 480, 450, 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 Emphasis

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
MATH 161	3	MATH 162	3
ENG 101	3	CS 121	3
ENGR 115L	2	ENG 102	3
AIT 100L	1	MUS 131	2
ART 133	2	PE / ROTC / BAND	1
PE / ROTC / BAND	1	CHEM 121	3
PSY 201	3	CHEM 121L	1
		AIT 101L	1
	15		17

SOPHOMORE YEAR

CS 211	3	MATH 163	4
PHY 211	3	PHY 212	3
PHY 211L	1	PHY 212L	1
ENG 211	3	HIST 202	3
HIST 201	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
ENG 212	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
AIT 491	1	AIT 451	1
Tech Elec (300-400)	6	AIT 417	3
AIT 450	1	MG 407	3
MG 405	3	Tech. Elect (300-400)	3
	17		16

TOTAL HOURS 130

Departmental Requirements for Bachelor of Science in Aeronautical and Industrial Technology Computer Integrated Manufacturing Emphasis **53 Semester hours**

Major Core: A minimum of 49 semester hours including: AIT 100, 200, 200L, 220, 220L, 320, 311, 325, 301, 348, 309, 338, 327, 404, 335, 335L, 449, 491, 450, 328, 480.

Core Requirements reflect the standards of the National Association of Industrial Technology (NAIT).

Four Year Plan: Computer Integrated Manufacturing

Bachelor of Science Degree in Aeronautical and Industrial Technology Computer Integrated Manufacturing Emphasis

CIM is the total integration of various individual CAD/CAM concepts of CAD, CNC, Robotics and Computer Aided process planning, Computer Aided quality control and materials handling.

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses	**HR**	**Courses**	**HR**
MATH 161	3	MATH 162	3
ENG 101	3	CS 121	3
ENGR 115L	2	ENG 102	3
AIT 100L	1	MUS 131	2
ART 133	2	PE / ROTC / BAND	1
PE / ROTC / BAND	1	CHEM 121	3
PSY 201	3	CHEM 121L	1
		AIT 101L	1
	15		17

SOPHOMORE YEAR

CS 211	3	MATH 163	4
PHY 211	3	PHY 212	3
PHY 211L	1	PHY 212L	1
ENG 211	3	HIST 202	3
HIST 201	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
ENG 212	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
AIT 491	1	AIT 328	3
Non Tech Elect	3	Tech Elec (300-400)	3
Tech Elec (300-400)	3	AIT 451	1
AIT 450	1		
	15		16

TOTAL HOURS 131

COURSE DESCRIPTIONS

Aeronautical and Industrial Technology (AIT)

AIT 100L/101L Orientation (2). Courses required of all entering freshman and new students. It is designed to aid in the adjustment of freshman and new students to the college community. It will also act as an aid in exposing the student to the world of engineering, aerospace industry, technology and manufacturing.

AIT 200, 200L Circuit 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 162.

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 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 301 Static and Strength 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 162.

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 121, 121L.

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: PSY 201.

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 162, 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 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 162.

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 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 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 Structural Factors (3). A detailed examination of aircraft development with emphasis on Manufacturing to include design, 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.

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 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 450 Capstone Project I (1). A research or experimental project in technology. Prerequisite: Senior standing.

AIT 451 Capstone Project II (1). A continuation of AIT 450. A final paper will be presented. Prerequisite: AIT 450.

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.

AIT 491 Senior Seminar I (1). Discussion of engineering and technology case studies, professionalism, ethics, professional development activities in industry, and interdisciplinary design. Prerequisite: Senior standing.

Department of Architectural 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 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 study of architectural design, facility planning design and management and structural design of all building types. The program emphasizes the combined fundamentals of engineering principles with architectural design theories that provide the student with an understanding of the design process from planning through construction.

The educational objectives for the Department of Architectural 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 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 architectural engineering,

3. To provide the student with architectural experiences through the systematic application of engineering fundamentals to the design of facilities that focus on structural, environmental, construction, and/or site development,

4. To develop professional attitudes, ethical character and an understanding of the engineers responsibility to society,

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. An option in Facilities Planning, Design and Management include; energy conservation, heating/ventilation/air-conditioning, illumination, acoustics, 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 Engineering is Accredited by the Engineering Accreditation Commission of the Accreditation Board for 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 Engineering curriculum integrates these technical resources with social and cultural needs.

The Engineering Design Experience provides the Architectural 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 AE Department has in place a series of required engineering design courses which are integrated throughout its curriculum.

The AE 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 442-Environmental Engineering Systems I 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 441-Wood Engineering Design, AE 443-Environmental Engineering Systems II, CE 342-Reinforced Concrete Design, CE 344-Steel Design, CE 444-Foundation Engineering or ME 420-Heating and Air Conditioning, AE 444-Advanced Mechanical Systems for Design in Buildings.

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 AE 450 and AE 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 Engineering **46 Semester Hours**

MAJOR CORE: A minimum of **forty (40)** semester hours including: AE 111L, 301L, 302L, 312L, 350L, 430, 431, 440, 442, 450, 451, 491; CE 310, 312, 312L, 313, 313L, 341; Guided Electives.

GUIDED ELECTIVES: A minimum of **six (6)** semester hours including CE 342, 344, 444; AE 343, 344, 413L, 441, 443, 444 ; ME 420.

Four Year Plan:

Bachelor of Science Degree in Architectural 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	AE 111L	1
PE/AERO/BAND	1	HIST 201	3
		PE/AERO/BAND	1
	16		17

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	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 (300-400) level courses.

JUNIOR YEAR

AE 301L	3	AE 350L	2
ENGR 320	3	AE 430	3
ENGR 340	3	AE 312L	3
CE 310	3	CE 313	2
CE 312	3	CE 313L	1
CE 312L	1	CE 341	3
		ENGR 330	3
	16		17

SENIOR YEAR

AE 302L	3	AE 431	3
AE 442	3	AE 440	3
AE 450	1	**AE Option Elective	3
**AE Option Elective	3	AE 451	1
ENG 212	3	AE 491	1
HIST 202	3	**Social Science Elective	3
*ENGR 420L	1	**Humanities Elective	3
	17		17

The completion of at least six (6) semester hours from either the structural or facilities planning, planning design and management emphasis is required.

AE OPTION COURSES

Structural Emphasis: CE 444; AE 343, AE 344, AE 441.

Facilities Planning, Design & Management Emphasis: AE 413L, AE 443, AE 444

* 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.

** This elective must be chosen from an approved list of upper (300-400) level courses with advisor's approval.

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 111L.

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. Prerequisite: AE 301L. Co-requisite: 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.

AE 440 Facilities Planning, Design and Management (3). This is a three module course with major emphasis in Facilities Planning, Facilities Management and Facilities Engineering. Facilities planning will focus on defining facility requirements, site location, workflow and work station analysis, personnel, legal and environmental issues. Facilities management will embrace robust management strategies such as TQM, just-in-time and the implementation of ISO 9000. Facilities engineering will focus on the understanding of the interrelationship of the various areas in engineering system product realization. All three modules may not be offered at the same time. Prerequisite: ENGR. 320

AE 441 Wood Engineering Design (2). Properties of wood; allowable stresses; proportioning of flexural, tension, and compression members, sown timber and laminated wood; mechanical fasteners, timber connector design, special problems in the design of wood trusses and frames and plywood composites. Prerequisites: ENGR. 320, ENGR 340, CE 341, and AE 344.

AE 442 Environmental Engineering Systems (3). Basic thermal analysis, comfort, climate, solar design; electricity and power; water supply and drainage systems; and fire safety for architecture. Prerequisite: ENGR 201 and CE 310.

AE 443 Environmental Engineering Systems II (3). Principles and practices 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 characteristics, 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. Prerequisite(s): AE 442 or ME 420.

AE 450 Capstone Design Project I (1). An Engineering Capstone Design project or experimental project in one of the design areas of architectural engineering. Prerequisite: Senior Standing.

AE 451 Capstone Design Project II (1). A continuation of Capstone Design Project I leading to completion of the project. A written report and oral defense of the project are required. Prerequisite: AE 450.

AE 491 Senior Seminar I (1). Discussion of engineering case studies, professionalism in engineering, professional ethics, professional registration, professional development activities of engineering in industry, interdisciplinary design in engineering. Prerequisite: Senior Standing.

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-Engineering Mechanics I.

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 342 Reinforced Concrete Design, CE 425: Water and Waste Water Engineering, CE 444: Foundation Engineering, CE 450 and 451: Capstone Design I and II, and CE 452: Civil Engineering Design, and a design elective course the civil engineering track and two design elective courses for the environmental engineering track.

The B.S. degree program in civil engineering is accredited by the Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC of ABET).

Design Electives:

CE 335	Hydrology (Civil Engineering Track)
CE 342	Reinforced Concrete Design (Environmental Engineering Track)
CE 344	Steel Design (both Tracks)
CE 411	Design of Hydraulic Structures (both Tracks)
CE 428	Solid Waste Management (both Tracks)
CE 444	Foundation Engineering (Environmental Engineering Track)

Departmental Requirements for Bachelor of Science - Civil and Environmental Engineering 35 Semester Hours

Four Year Plan: (Total hours = 131)

Bachelor of Science Degree in Civil Engineering (Environmental Engineering Track is Available)

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	PE/AERO/BAND	1
PE/AERO/BAND	1	HIST 201	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 or 223L	1	ENGR 201	4
ENG 211	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 310	3	CE 300	2
CE 312	3	CE 313	2
CE 312L	1	CE 313L	1
ENGR 320	3	CE 320	3
ENGR 330	3	CE 341	3
ENG 212	3	ENGR 340	3
	16		14

SENIOR YEAR

CE 325	3	CE 425	3
CE 444[1]	3	CE 342[1]	3
CE 450	1	CE 451	1
ENGR 420L FE Review*	1	CE 452	2
HIST 202	3	CE 491	1
Design Technical Elective	3	Social Sci. Elective	3
HUMANITIES ELECTIVES**	3	Technical Elective[2]	3
	17		16

*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.

[1]Students with environmental engineering track will take CE 335 and CE 436 instead of CE 444 and CE 342, respectively.

[2]Environmental Engineering Track requires a second design technical elective.

COURSE DESCRIPTIONS

Civil Engineering

CE 300 Introduction to Environmental Engineering (2). 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 332 Highway Engineering (3). Concepts of design and the mechanics of motion applicable to the construction, operation, and maintenance of highway systems and facilities using AASHTO guidelines; field exercises in horizontal and vertical curve layout introduced. Prerequisite: CE 320.

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. Prerequisites: CE 341, ENGR 320.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 405 Transportation Modeling (3). Analytical evaluation of trip generation, gravity model, probabilistic models used in trip distribution and assignment; shortest path algorithms, modal split calibration and testing of existing models. Prerequisite: CE 320.

CE 409 Traffic Engineering (3). a study of traffic congestion, capacity, signs and signalization, accident analysis and pedestrian controls using MUTCD guidelines. Prerequisite: CE 320.

CE 410 Pavement Design (3). Analysis and design of sub-base and roadway surface; the mechanics of layered pavements (flexible and rigid), stresses and design criteria involved. Prerequisite: CE 313, CE 313L and CE 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: CE 325.

CE 413 Airport Planning and Design (3). An introduction to the airport design process, including airport master planning, air site considerations, runway configuration, capacity, lighting, landside considerations, terminal layout, ground access and parking. Prerequisite: CE 320.

CE 414 Urban Mass Transit Planning (3). The mass transportation problem, demand analysis, and statistical projection methodologies used in the mass movement of people and goods. Prerequisite: CE 320.

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: 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 436 Environmental Engineering Laboratory (3). Basics of wet chemical analysis of water samples; titrametric and spectrometric analysis; evaluation of processes such as coagulations, thickening, adsorption and gas transfer, etc. Two hours of lecture and 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 450 Capstone Design Project I (1). An engineering capstone design project or experimental project in one of the major areas of civil engineering. Prerequisites: ENGR 320 and consent of Project Advisor.

CE 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: CE 450.

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.

CE 454 Computer Utilization (3). Computer usage, the economic justification, and the extent of its usage by the industry, the utilization of computers for the solution of civil engineering problems. Prerequisite: ENGR 340 and Senior Standing.

CE 491 Senior Seminar (1). Discussion of engineering case study, professionalism in engineering, professional ethics, professional registration, professional development activities of engineers in industry, interdisciplinary design in engineering. Prerequisite: Senior Standing.

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, R. Consigny, S. S. Devgan, J. R. Johnson, M. J. Malkani, D. R. Marpaka, 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:

To provide the student with the knowledge of mathematics, natural and engineering sciences so that the student has the capability to delineate and solve electrical and related engineering problems.

To familiarize the student with the systematic scientific approach to the identification and solution of practical problems in electrical and/or computer engineering.

To provide the student with electrical and/or computer engineering experiences through the systematic application of engineering fundamentals to the design of electrical components and systems.

To develop an awareness of social issues, communication skills, and ethical conduct that the profession expects, and an understanding of the engineer's responsibility to society.

To provide the student with intellectual challenges of the global society designed to arouse curiosity and desire for lifelong learning.

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 ENGR101L 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 EE 450, EE 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 EE 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, 450, 451, 491; 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, 450, 451, 480, 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		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/AERO/BAND	1	PE/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
ENG 211	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 202	3	ENG 212	3
EE 306L	1		
	17		16

SENIOR YEAR

EE 341	3	EE 342	3
EE 350	3	EE 451	1
EE 400	3	EE 491	1
EE 400L	1	**Technical	
EE 410L	1	Elective	3
EE 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		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/AERO/BAND	1	PE/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
ENG 211	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	ENG 212	3
CS 320	3		
	17		16

SENIOR YEAR

EE 400	3	EE 430	3
EE 350	3	EE 451	1
EE 431	2	EE 491	1
EE 450	1	EE 480	3
EE 410L	1	** Technical	
HIST 202	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 221L or 223L.

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, ENGR 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 341, ENGR 340. Co-requisite: EE 321.

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, controlability 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 450 Capstone Design Project I (1). An engineering capstone design project I leading to completion of the project in EE 451. A written report and an oral defense of the proposed design project are required. Prerequisites: Graduating Senior, ENGR 320.

EE 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: EE 450.

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, ENGR 320.

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.

EE 491 Senior Seminar I (1). Discussion of engineering case studies, professionalism in engineering, professional ethics, professional development activities of engineers in industry; interdisciplinary design in engineering. Prerequisite: Graduating Senior.

Department of Mechanical Engineering

Head (Vacant)
See Dr. Decatur B. Rogers, Dean
ET 138 A. P. Torrence Hall
(615) 963-5391

Faculty: D. Chaudhuri, Y. Clark, L. Onyebueke, D. Rogers, A. Shirkhodaie, Y. Tao.

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 sciences, machine design, or manufacturing engineering.

The educational objectives for the department of Mechanical 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 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 To provide the student with intellectual challenges designed to arouse curiosity and a desire for lifelong learning,
5. To provide students with experiences which will prepare them to function effectively in multicultural and multidiscipline groups.

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 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, and 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 sequence also begins in the junior year with ME 321 Mechanism Design followed by ME 322 Design of Machine Elements and continues in the sensior year with ME 423 Machine Design 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 meaningful capstone design course 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 level 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, 450, 451, 491; 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	ME 451	1
ME 450	1	**Design Elective	3
ME 491	1	**Social Science Elective	3
ME 423	3	**Humanities Elective	3
*ENGR 420L	1		
**Technical 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. 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 221Lsx or ENGR 222L or ENGR 223L. 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 450 Capstone Design Project I (1). An engineering capstone Design project or experimental project in one of the design Areas of Mechanical Engineering Prerequisites: ENGR 320, ME 322, CE 310.

ME 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 the project are required. Prerequisite: ME 450.

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.

ME 491 Senior Seminar I (1). Discussion of engineering studies; professionalism in engineering; professional ethics; professional registration; professional development activities; engineers in industry; seminars by engineers from industry. Prerequisites: senior standing.

ME 492 Senior Seminar II (1). Discussion of engineering case studies; professionalism in engineering; professional ethics; Professional registration; professional development activities; Engineers in industry; seminars by engineers from industry. Prerequisite: ME 491.

THE SCHOOL OF AGRICULTURE AND HOME ECONOMICS

Troy Wakefield, Jr., Ph.D., Dean
108 Lawson Hall

General Statement: The School of Agriculture and Home Economics 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., Acting Head
211B CARP Building

Faculty: S. Corner, D. Duseja, W. Hayslett, S. Singh, K. Vo.

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.

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: 46 semester hours including, ENG 101 & 102, 211 & 212; HIST 201 & 202; Humanities, AGSC 204; PE 2 hrs; CHEM 121 & 122; MATH 111, 112 or 113; SPCH 220; SOC 211.

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 2.50 GPA and passing scores on the Pre-Professional Skills Test (PPST)or Praxis I: 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," see pages 123-124. 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	
ENG 101	3	ENG 102	3
MATH 111	3	MATH 112 or 113	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

ENG 211	3	ENG 212	3
CHEM 121, 121L or BIO 101, 101L	4	CHEM 122, 122L or BIO 102, 102L	4
HIST 201	3	HIST 202	3
EC 211	3	SPCH 220	3
AC 211	3	AGSC 220	3
PE/AERO/MUS 306A	1	PE/AERO/MUS 306A	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
AGSC 471	3	EC 212	3
ELECTIVE	3	ELECTIVE	3
	16		18

SENIOR YEAR

AGSC 401	3	AGSC 402	3
AGSC 450	3	AGSC 404	3
SOC	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	
ENG 101	3	ENG 102	3
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 202	3
AGSC 204	3	AGSC 241	3
SAHE 100	1	MATH 112 or 113	3
MATH 111	3	HUMANITIES	3
	16		18

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
CHEM 121, 121L	4	CHEM 122, 122L	4
HIST 201	3	PSY 242	3
SPCH 220	3	AGSC 220	3
EDCI 201	3	HIST 202	3
PE/AERO/MUS 306A	1	PE/AERO/MUS 306A	1
	17		17

JUNIOR YEAR

AGSC 305	3	AGSC 306	3
AGSC 307	3	AGSC 310	3
AGSC 309	3	EDAD 301	3
AGSC 311	3	AGSC 472	1
SOC 330	3	ELECTIVES	6
	15		16

SENIOR YEAR

AGSC 308	3	AGSC 405	12
EDRD 491	4	EDCI 470A	3
AGSC 450	3		
AGSC 471	1		
EDSE 333	3		
PSY 312	3		
	17		15

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Agricultural Statistics

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENG 101	3	ENG 102	3
MATH 111	3	MATH 113	3
SAHE 100	1	PE/AERO/MUS 306A	1
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 202	3
AGSC 204	3	AGSC 241	3
	16		16

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
CHEM 121, 121L or BIO 101, 101L	4	CHEM 122, 122L or BIO 102, 102L	4
SPCH 220	3	SOC 211	3
HIST 201	3	HIST 202	3
PE/AERO/MUS 306A	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	ECON 211	3
ELECTIVE	3	ELECTIVES	6
ECON 211	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	
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	MATH 113	3
AGSC 141	3	SOC 211	3
AGSC 204	3	AGSC 120	3
SAHE 100	1	HUMANITIES	3
PE/AERO/MUS 306A	1		
	17		18

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
CHEM 121, 121L	4	CHEM 122, 122L	4
AGSC 204	3	AGSC 201	3
AGSC 241	3	AGSC 220	3
SPCH 220	3	AGSC 322	3
PE/AERO/MUS 306A	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	AGSC 421	3
	15		15

SENIOR YEAR

CHEM 311, 311L	4	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		
	17		16

Suggested Four Year Plan

Bachelor of Science Degree in Agricultural Sciences Concentration in Animal Science

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	MATH 112 or 113	3
HUMANITIES	3	AGSC 120	3
AGSC 141	3	AGSC 204	3
SAHE 100	1	PE/AERO/MUS 306A	1
PE/AERO/MUS 306A	1		
	17		16

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
CHEM 121, 121L	4	CHEM 122, 122L	4
AGSC 204	3	SOC 211	3
AGSC 241	3	AGSC 201	3
SPCH 220	3	AGSC 203	3
	16		16

JUNIOR YEAR

CHEM 311, 311L	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	
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	MATH 112 or 113	3
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 220	3
SAHE 100	1	HUMANITIES	3
PE/AERO/MUS 306A	1		
	17		18

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
CHEM 121,121L	4	CHEM 122, 122L	4
AGSC 204	3	SOC 211	3
AGSC 241	3	BIO 111, 111L	4
SPCH 220	3	ELECTIVE	3
PE/AERO/MUS 306A	1		
	17		17

JUNIOR YEAR

CHEM 311, 311L	4	CHEM 312, 312L	4
AGSC 350	3	AGSC 351	3
AGSC 354	3	AGSC 352	3
NTR 411	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
FDS 352	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	
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	MATH 112 or 113	3
AGSC 141	3	AGSC 120	3
AGSC 204	3	AGSC 201	3
PE/AERO/MUS 306A	1	HUMANITIES	3
SAHE 100	1		
	17		18

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
CHEM 121, 121L	4	CHEM 122, 122L	4
AGSC 202	3	SOC 211	3
AGSC 241	3	AGSC 220	3
SPCH 202	3	ELECTIVE, 300/400	3
PE/AERO/MUS 306A	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 311, 311L	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 101	3	ENG 102	3
MATH 111	3	HIST 202	3
AGSC 141	3	MATH 111	3
HIST 201	3	AGSC 120	3
BIO 111, 111L	4	BIO 112, 112L	4
SAHE 100	1	PE/AERO/MUS 306A	1
PE/AERO/MUS 306A	1		
	18		17

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
ENG 211	3	ENG 212	3
CHEM 121, 121L	4	CHEM 122, 122L	4
SPCH 220	3	AGSC 204	3
AGSC 201	3	AGSC 241	3
SOC 211	3	PHY 211, 211L	4
	16		17

JUNIOR YEAR

BIO 211, 211L	4	CHEM 312, 312L	4
PHY 212, 212L	4	AGSC 341	3
CHEM 311, 311L	4	AGSC 342	3
AGSC 340	3	AGSC 343	3
HUMANITIES	3	AGSC 344	3
	18		16

SENIOR YEAR

AGSC 345	3	CHEM 342, 342L	4
CHEM 341, 341L	4	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

Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences Concentration in Resource Economics

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
ENG 101	3	ENG 102	3
MATH 111	3	MATH 111 or 112	3
AGSC 141	3	AGSC 120	3
AGSC 201	3	AGSC 202	3
AGSC 204	3	AGSC 241	3
SAHE 100	1	PE/AERO/MUS 306A	1
PE/AERO/MUS 306A	1		
	17		16

SOPHOMORE YEAR

HIST 201	3	HIST 202	3
ENG 211	3	ENG 211	3
BIO 101	3	BIO 102	3
HUMANITIES	3	AGSC 220	3
EC 211	3	EC 212	3
ELECTIVE	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
SPCH 220	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 121 & 122.

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 121 & 122.

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 111 & 112.

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 121 & 122.

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 121 & 122.

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 2.50 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 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 2.5 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: ENG 101, 102; computer literacy, orientation; most of the math and science requirements.
3. Completed all remedial courses.
4. Completed the following major field courses: FCS 101 and at least one of the following core courses; CLT 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, 463, 465; FCS 101, 450.

PROFESSIONAL EDUCATION: 37 hours including EDCI 201,387, 390A, 390B; 470B; EDAD 301; EDRD 424, EDSE 333; ECCD 472K.

GENERAL EDUCATION: 63 hours including BIO 101, 101L, 102, 102L; ART 133; MATH 111, 211; ENG 101, 102, 211, 212, 373; MUS 131; SPCH 220 or communication elective; HIST 201, 202, 341 or 492; GEOG 171 or 172; CS 121; PE activity courses (2 semesters), PE 310; HEA 306; PSY 312; SAHE 100; NTR 333.

Suggested Four Year Plan:

Bachelor of Science Degree in Early Childhood Education (With Teacher Certification Pre K-3)

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses		**Courses**	
ENG 101	3	ENG 102	3
ECCD 101	3	MATH 111	3
CS 121	3	FCS 101	1
BIO 101, 101L	3	BIO 102, 102L	3
PE/AERO/MUS 306A	1	MUS 131	2
SAHE 100	1	PE/AERO/MUS 306A	1
GEOG 171 or 172	3	ART 133	2
		SPCH 220 or Oral Communication Elective	3
	17		18

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
ECCD 201	3	ECCD 332	3
EDCI 201	3	ECCD 352	3
NTR 333	3	MATH 211	3
		ECCD 302	3
	15		16

JUNIOR YEAR

EDCI 387	3	ENG 373	3
EDAD 301	3	HEA 306	3
PSY 312	3	ECCD 460	3
ECCD 462	3	ECCD 463	3
HIST 341 or 492	3	EDCI 390A	3
ECCD 361	3	PE 310	2
	18		17

SENIOR YEAR

ECCD 465	3	ECCD 472K	12
EDCI 390B	3	EDCI 470B	3
FCS 450	3		
EDSE 333	3		
EDRD 424	4		
	16		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; CLT 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	
Courses		**Courses**	
SAHE 100	1	ART 133	2
ENG 101	3	ENG 102	3
PE/AERO/MUS 306A	1	PE/AERO/MUS 306A	1
MATH 111	3	FCS 101	1
BIO 101, 101L	3	BIO 102, 102L	3
ECCD 101	3	CS 121	3
FDS 111	3	CLT 112	4
	17		17

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
SPCH 220	2	SOC 211	3
ECCD 351	3	EDCI 201	3
GEOG 171	3	BIO 221, 221L	4
DIGN 201	3	MUS 131	2
HIST 201	3	HIST 202	3
	17		18

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 or 312	3	ELECTIVES (300 or 400 level)	3
		ECCD 463	3
	15		18

SENIOR YEAR

ECCD 465	3	ECCD 466	9
SW 470	3	FCS 450	3
ELECTIVES (300-400 level)	9		
	15		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, 301, 310, 323, 350, 400, 411, 412, 420, 421, 432, 435; NTR 201; CLT 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 Courses		SPRING SEMESTER Courses	
SAHE 100	1	MUS 131	2
ENG 101	3	ENG 102	3
CLT 111	3	MATH 111	3
DIGN 201	3	ART 133	2
FCS 101	1	ART 121 or 122	3
PE/AERO/MUS 306A	1	PE/AERO/MUS 306A	1
FR 101	3	CS 121	3
	15		17

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
HIST 201	3	HIST 202	3
CHEM 121, 121L or BIO 101, 101L , 111, 111L	3-4	CHEM 122, 122L or BIO 102, 102L or 111, 111L	3-4
DIGN 300	3	CLT 211	3
EC 211	3	SPCH 220	3
	15-16		15-16

JUNIOR YEAR

NTR 201	3	DIGN 301	3
DIGN 310	3	ECCD 463	3
CLT 413 or 322 or AE 312	3	DIGN 411	3
DIGN 323	3	FCS 373	3
DIGN 350	2	ELECTIVE (300 or 400 level)	3
CLT 203	3		
	17		18

SENIOR YEAR

DIGN 412	3	DIGN 435	3-5
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		16-18

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 CLT 111, 112, 203, 211, 300, 302, 401, 403, 414, 415; DIGN 201; NTR 201; HMGT 433 or 321; ECCD 463 or 351; FCS 101, 450.

Suggested Four Year Plan:

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Fashion Merchandising

FRESHMAN YEAR

FALL SEMESTER Courses		SPRING SEMESTER Courses	
SAHE 100	1	DIGN 201	3
ENG 101	3	ENG 102	3
CLT 111	3	CLT 112	3
MATH 111	3	FCS 101	1
HIST 201	3	HIST 202	3
PE/AERO/MUS 306A	1	PE/AERO/MUS 306A	1
ART 133	2	FR 101 or 102	3
	16		17

SOPHOMORE YEAR

EC 211	3		
ENG 211	3	ENG 212	3
BIO 101, 101L or 111, 111L, or CHEM 121, 121L	3-4	BIO 102, 102L or 112, 112L or CHEM 122, 122L	3-4
MIS 215	3	SPCH 210, 220 or 230	3
CLT 203	3	CLT 211	3
AC 211	3	AC 212	3
	18-19		15-16

JUNIOR YEAR

ECCD 463	3	CLT 302	3
DIGN 301	3	MK 301	3
CLT 300	3	ECCD 351	3
DIGN 323	3	ELECTIVE (300-400 level)	6
HMGT 321 or 433	3		
NTR 201	3		
	18		15

SENIOR YEAR

MK 425	3	CLT 403	3
MK 303	3	CLT 415	*6
CLT 401	3	DIGN 421	3
FCS 450	3	CLT 414	3
ELECTIVES (300 or 400 level)	5		
	17		15

*Offered summer session

Departmental Requirements For Bachelor of Science - in Family and Consumer Sciences with Concentration in Food Service Management

CONCENTRATION AND MAJOR CORE: A minimum of 44 semester hours including FDS 111, 313, 311, 352, 412, 452; NTR 201, 311; FCS 101, 450, 460; CLT 111 or 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 Courses		SPRING SEMESTER Courses	
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
PE/AERO/MUS 306A	1	PE/AERO/MUS 306A	1
MATH 111	3	CLT 112	3
CHEM 121, 121L	4	CHEM 122, 122L	4
SAHE 100	1	FCS 101	1
	15		15

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
FDS 111	4	MIS 215	3
DIGN 201	3	NTR 201	3
EC 211	3	EC 212	3
HUMANITIES ELECTIVES	4	SPCH 230	3
	17		15

JUNIOR YEAR

NTR 311	3	FDS 311	3
FDS 313	3	MG 301	3
FDS 352	3	FDS 412	3
AC 211	3	AC 212	3
ELECTIVES	4	BIO 240, 240L	4
	16		16

SENIOR YEAR

BL 300	3	ENG 301	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

Departmental Requirements For Bachelor of Science - in Family and Consumer Sciences with Concentration in Foods and Nutrition

CONCENTRATION AND MAJOR CORE: A minimum of 49 semester hours including FDS 111, 311, 313, 412, 452; NTR 201, 311, 333, 411, 470; FCS 101, 450, 460; CLT 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 Courses		SPRING SEMESTER Courses	
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
PE/AERO/MUS 306A	1	PE/AERO/MUS 306A	1
DIGN 201	3	HUMANITIES ELECTIVE	2
SAHE 100	1	MIS 215	3
CHEM 121, 121L	4	FCS 101	1
		CHEM 122, 122L	4
	15		17

SOPHOMORE YEAR

ENG 211	3	ENG 212	3
FDS 111	4	CLT 112	3
BIO 221, 221L	4	EC 211	3
PSY 201	3	NTR 211	3
COMMUNICATIONS		MATH 111	3
ELECTIVE	3	HUMANITIES ELECTIVE	2
	17		17

JUNIOR YEAR

NTR 311	3	FDS 311	3
CHEM 360, 360L	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	2
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		17

*Students wishing to meet requirements for the Dietetics Program must replace electives with the following courses: PSY 311, CHEM 320 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 34 semester hours including CLT 111, 112, 211; FDS 111; NTR 470 or NTR elective; DIGN 323; HMGT 321, 433; ECCD 463, 465; FCS 101; Elective

GENERAL EDUCATION: A minimum of 61 semester hours including ENG 101, 102, 211; 212; HIST 201, 202; MATH 111; CHEM 121, 121L, 122, 122L or BIO 101, 101L or 102, 102L; ART 133 or MUS 131 or PHIL 201 or THEA (4 hrs.); PE Activity Courses (2 semesters); PSY 242, 312; SOC SCI Elective, SPCH 220; CS 121; Ntr 201; SAHE 100; FCS 450; DIGN 201; ECCD 351.

PROFESSIONAL COURSES: A minimum of 36 semester including FCS 371, 387, 443, 472*; EDCI 201, EDAD 301; 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 Courses		SPRING SEMESTER Courses	
SAHE 100	1	MATH 111	3
ENG 101	3	ENG 102	3
CHEM 121, 121L	4	CHEM 122, 122L	4
PE/AERO/MUS 306A	1	PE/AERO/MUS 306A	1
CLT 111	3	CS 121	3
FCS 101	1	CLT 112	3
FDS 111	4		
	17		17

SOPHOMORE YEAR

DIGN 201	3	NTR 201	3
ENG 211	3	ENG 212	3
EDCI 201	3	HUMANITIES ELECTIVE	2
PSY 242	3	CLT 211	3
HIST 201	3	HIST 202	3
HUMANITIES ELECTIVE	2	*SOC SCI ELECTIVE	3
	17		17

JUNIOR YEAR

ECCD 351	3	EDAD 301**	3
FCS 387	3	HMGT 321	3
DIGN 323	3	ECCD 463	3
NTR 470 or NTR ELECTIVE	3	FCS 371	3
EDSE 333**	3	PSY 312**	3
SPCH 220	3	Electives	2
	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
	15		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

Clothing and Textiles/ Fashion Merchandising (CLT)

CLT 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

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

CLT 203 History of Costume (3). The history of costume from ancient times to the present and the influence of social and economic conditions upon costume are covered in this course. Fall Semester

CLT 211 Elementary Clothing Construction (3). Principles of clothing construction as applied to cotton, linen and synthetic fabrics. Also covered are use and care of sewing machines, and wardrobe inventory. One lecture and two laboratory periods. Fall Semester

CLT 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: CLT 211 and DIGN 301. Spring Semester

CLT 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

CLT 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: CLT 211 and DIGN 301. Spring Semester: Even Years

CLT 321 Tailoring (3). Construction of a tailored garment and instruction in advanced construction methods. Emphasis is also placed on selection and care of woolen garments. Prerequisite: examination in construction skills and/or CLT 211. Fall Semester: Odd Years

CLT 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: CLT 211. Spring: Odd Years

CLT 401 Problems in Clothing and Textiles (3). A course which focuses on special problems in the details of clothing construction, selection, and textiles. Fall Semester

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

CLT 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: CLT 211 & DIGN 201. One lecture and two laboratory periods. Fall: Even Years

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

CLT 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

CLT 462 Readings in Apparel Exports and Imports (3). A study of the growth and dispersion of global trade practices in the textile and apparel sectors. Students study manufacturing firms, unions, custom laws, labor and other statutes which govern international textile and apparel economic systems. Prerequisite: Junior standing. Summer: Even Years

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, CLT 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 His Family (3). A contemporary based modularized course of instruction designed to familiarize students with the basics of child-development and to increase their competencies in this area. Outside experiences, guest lectures and multi-media approaches are combined with regular classroom instruction to make a wide range of information available to 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 nursery school along with ECCD 351. A course required of students concentrating in Child Development and Family Relationships. 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: 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 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 HERO 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 472 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.

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 121 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 352 Food Demonstration (3). A course that includes a study of the principles and techniques involved in food demonstration and the use of related equipment as applied to the needs of extension, business, classroom and community teaching. Field experience and laboratory. Prerequisite: FDS 111.

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.

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.

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.

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.

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 121-122.

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 320. 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
Walter S. Davis Home Economics and Nursing 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 is designed to offer all of its upper-division 300 and 400 level courses via distance education and Internet-based technologies across Tennessee and elsewhere. In Tennessee, video-conferencing classes are offered at participating community colleges and technical institutions, including: Columbia State Community College; Dyersburg State Community College; Jackson State Community College; Motlow State Community College; Nashville State Technical Institute; Northeast Technical Community College; Pellissippi State Technical Community College; State Technical Institute at Memphis; Volunteer State Community College; and Walters State Community College.

As the only baccalaureate hospitality and tourism program in the Tennessee Board of Regent's System of 43 institutions, the 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 have 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. Two letters of reference from hospitality industry employers who have employed the applicant.
4. 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.
5. 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.
6. 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.
7. 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.
8. A personal interview with the Hospitality and Tourism Admissions Committee will be scheduled with those applicants who have successfully met the requirements above (1-6).

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 2.2 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 133 Semester Hours

GENERAL EDUCATION AND BUSINESS CORE: A minimum of 58 semester hours including: SAHE 100, 1 credit, ENG 101, 102, 211 and 212; Humanities, 4 credits; MATH 111 or higher; Natural Sciences, 6 credits; Physical Education, 2 credits; History 201 and 202; 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. At least 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	
Courses		**Courses**	
SAHE 100	1	ENG 102	3
ENG 101	3	HTA 230 (or BIS 215)	3
Math 111	3	Natural Science	3
Natural Science	3	HIST 202	3
History 201	3	PE/AERO/Band/Health	1
PE/AERO/Band/health	1	General Elective	3
General Elective	3		
	17		16

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses		**Courses**	
ENG 211	3	ENG 212	3
Humanities	2	Humanities	2
EC 211	3	AC 212	3
ACC 211	3	HTA 211	3
HTA 210	3	HTA 320	3
General Elective	3	General Elective	3
	17		17

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses		**Courses**	
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		17

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Courses		**Courses**	
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

Andrew Bond, Ph.D., 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, Physical Therapy, and Speech Pathology and Audiology. While Meharry Medical College provides inkind support and participates in the administration of all eight 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 eight health related fields. Six of the eight 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	June 30 December 1	Fall Spring	B.S.	CRTT/RRT
Dental Hygiene	Freshman	March 31	Fall	A.A.S. B.S.	NDHBE/NBDHE & Regional/State Clinical Boards
Health Care Adm. & Planning	Sophomore	July 31	Fall	B.S.	N/A
Health Information Management	Sophomore	March 31 December 1	Fall Spring	B.S.	RRA
Medical Technology	Senior	March 31	Fall	B.S.	ASCP
Occupational Therapy	Junior	December 31	Summer	B.S.	NBCOT
Physical Therapy	Junior	December 31	Summer	B.S.	PES
Speech Pathology & Audiology	Freshman	July 31 December 1	Fall Spring	B.S.	Certification at Graduate Level

*Certified Respiratory Therapy Technician Exam/Registered Repiratory Therapist Board Examination
National Board Dental Hygiene Examination (National) & Regional/State Clinical Boards
National Registration Examination for Registered Record Administrators
American Society of Clinical Pathologists MT Examination
National Board Certification for Occupational Therapy
Professional Examination Service

COURSE DESCRIPTIONS

Allied Health Professions (AHP)

AHP 100 Orientation to Allied Health Professions (1). A requirement for all entering freshman 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. Drayton, S. Hickman, 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 third 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 REQUIREMENTS

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. A "C" or better grade in supporting science courses.
5. Two letters of recommendation from instructors who have taught the applicant.
6. 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.

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.

General Education Core Courses: CHEM 121, 121L; BIS 215; ENG 101, 102, 211 or 212; HIST 201, 202; Humanities 6 semester hours; MATH 111; BIO 240, 240L; PE (two 2-digit courses) PSY 311; BIO 101, 101L; PSY 201; BIO 221, 221L, 222, 222L.

Departmental Requirements for Bachelor of Science in Cardio-Respiratory Care Sciences 78 Semester Hours

MAJOR CORE: A minimum of 78 semester hours including CCS 100, 101, 104, 201, 203, 204, 211, 212, 232, 301, 302, 303, 304, 311, 322, 432, 441, 450; 8 hours of CCS electives; 9 semester hours of recommended electives.

Suggested Four Year Plan:

Bachelor of Science Degree in Cardio-Respiratory Care Sciences

FRESHMAN YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AHP 100	1	BIO 222/222L	4
BIO 221/221L	4	CHEM 121, 121L	4
ENG 101	3	ENG 102	3
MATH 111	3	HIST 202	3
HIST 201	3	PE (2 Digit)	1
CCS 100	2		
PE (2 Digit)	1		
	17		15

Summer Sessions I & II

BIO 101, 101L or 102, 102L	3
BIO 240, 240L	4
BIS 215	3
	10

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
Humanities Elective	3	CCS 104	2
ENG 211 or 212	3	CCS 201	4
PSY 201	3	CCS 212	3
CCS 101	3	CCS 232	3
CCS 203	4	PHIL 336	3
		Humanities Elective	3
	18		18

Summer Sessions I & II

CCS 204	4
CCS 211	3
	7

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
CCS 301	4	CCS 304	3
CCS 302	6	CCS 311	2
CCS 303	3	CCS 322	6
		CCS COMP EXAM	0 (P/F)
		CCS 441	3
	13		14

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
CCS 432	3	CCS 450	3
PSY 311	3	+CCS 426	4
+CCS 422	4	*Recommended Electives	6
*Recommended Elective	3		
	13		13

National Board Exam: Students who pass the certificate of completion exam, ("professional barrier exams") given during the spring semester of the third year of the professional program, take the CRT exam in July of that year and others who pass later take the examination in November.

***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.

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. (2,2) **Prerequisites:** BIO 221, 221L, 222, 222L; CHEM 121, 121L; MATH 111.

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. **Prerequisite:** 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. (3,2) **Prerequisites:** CCS 104 and BIO 240, 240L.

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, mitrogen washouts, and the instructional sequence necessary to become certified in ABG analysis, introduction to concepts in pulmonary rehabilitation is also included. **Prerequisites:** BIO 221, 221L, 222, 222L; CHEM 121, 121L; MATH 111.

CCS 204 Cardio-Respiratory Care Sciences Clinical II (4) 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 201.

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**: CCS 201, CCS 203, CCS 212, and 232.

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 121, 121L; 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, 222L, 222, 222L, and CHEM 121, 121L.

CCS 301 Mechanical Ventilation (4) 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. **Prerequisites**: All 200 level CCS courses.

CCS 302 Cardio-Respiratory Care Sciences Clinical III (6) A 24 hour/week supervised clinical application of patient care skills developed in CCS 203, CCS 204, CCS 212, and 232. 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. **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, CCS 204, CCS 211.

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 302, CCS 303, CCS 304, and BIS 215.

CCS 322 Cardio-Respiratory Care Clinical IV (6) A 24 hour/week supervised clinical practicum 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 (4) An advanced clinical course where the student is exposed to continuous and extensive critical care patient management. **Prerequisites**: All 300 level courses.

CCS 426 Advanced Pulmonary Function Testing and Pulmonary Rehabilitation (4) 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. **Prerequisites**: All 300 level CCS courses.

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**: All 300 level CCS courses.

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 301, 302, 303.

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**: All 300-400 level CCS courses and PSY 311.

Department of Dental Hygiene

Marian W. Patton, R.D.H., Ed.D., Head
219 Clement Hall

Faculty: E. Jackson, T. C. Newbern, R. Word. (**Meharry Faculty:** D. Felix, D. Moore, 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 March 31 of the year for which admission is being requested. 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.

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	2/1	DH 103	2
DH 101/101C	3/2	DH 104	2
DH 110	2	DH 114	2
DH 111	2	NTR 211	3
PSY 201	3	SOC 211	3
BIO 221/221L	4	BIO 222/222L	4
	20		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	SPCH 220	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 201	3	ENG 211 or 212	3
MATH 111	3	HIST 202	3
PE (2 digit)	1		
	13		12

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
SW 470	3	DH 412	3
PSY 311	3	Elective	3
PE (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	3	CS 121	3
ENG 101	3	ENG 102	3
HIST 201	3	HIST 202	3
MATH 111	3	NTR 211	3
AHP 100	1	EDRD 310	1
BIO 221/221L	4	BIO 222/222L	4
		PE 11	1
	17		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
PSY 201	3	DH 114	2
SPCH 220	3	SOC 211	3
PE (2 Digit)	1		
	16		13

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	ENG 211 or 212	3
DH 205	2	DH 205C	1
DH 210	3		
	17		12

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
SW 470	3	DH 402	3
DH 301	3	HCA 490	3
PSY 311	3	PHIL 336	3
Humanities Elective	3	DH 412	3
		Humanities Elective	3
	12		15

ACCREDITATION

The Dental Hygiene program has full accreditation from the Commission on Dental Accreditation.

COURSE DESCRIPTIONS

Dental Hygiene (DH)

DH 101 Dental Hygiene Lecture (3). An introduction to basic concepts, methods, materials, and techniques of comprehensive 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 in ethics and jurisprudence. **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, dental office emergencies, 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 seminar and 6 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
1007 21st Avenue, Henry Moses Annex, 2nd Floor, Meharry Medical College

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 at the end of the senior year. 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, 476.

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	ENG 102	3
ENG 101	3	HIST 202	3
HIM 101	1	MATH 112	3
HIST 201	3	SPCH 230	3
MATH 111	3	PE (2 digit)	1
PE (2-digit)	1		
	16		17

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
EC 211	3	EC 212	3
ENG 211 or 212	3	BIS 215	3
HCA 201	3	HCA 210	3
PISI 221	3	HIM 104	3
SOC 211	3	MG 301	3
Humanities Elective	3	Humanities Elective	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 470	3
HCA 330	3	HCA Elective*	3
PHIL 336	3	PISI 420	3
	15		15

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
HCA 420	3	HCA 460	3
HCA 450	3	HCA 480	3
MG 403	3	HCA 490	3
SOC 300	3	MG 404	3
SOC 330	3	MG Elective	3
	15		15

SUMMER SESSION

HCA 400 6 Cr. Hrs.
(Field Placement Practicum)

***HCA 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

ACCREDITATION

The Health Care Administration and Planning Program is approved by the Association of University Programs in Health Administration

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; SOC 211.

HCA 390 Communication and Technical Writing (3). The special requirements and techniques for the professional report will be examined along with an analysis of the general communication skills required of the professional health administrator. Students will receive training in practical communication and grant interpretation. Also, attention will be given to the development of writing skills and the special communication needs of individual students. **Prerequisites**: ENG 101, 102; 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 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; 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**: HCA 201, 390, MG 301; SOC 300.

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, RRA, Head
315 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. The profession addresses the nature, structure, and translation of data into usable forms of information for advancement of health and healthcare of individuals and populations. 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, provision, financing, and evaluation of health care services. Job opportunities for HIM professionals are found in numerous settings such as acute care, general hospitals, managed-care organizations, consulting firms, claims and reimbursement organizations, accounting firms, home healthcare agencies, long-term care facilities, corrections facilities, drug companies, behavioral healthcare organizations, insurance companies, state and federal healthcare agencies, health computing industries, etc.

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 entry-level health information professionals for employment in 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 Accredited Record Technicians (ARTs) who wish to progress to professional level of a Health Information Management. The curriculum includes a combination of theoretical and laboratory instruction integrated with supervised professional practice.

The Bachelor of Science (BS) degree is awarded after satisfactory completion of 130 credit hours. Graduates of this program are required to demonstrate entry-level competencies for Registered Record Administrators and are eligible to take 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 are:

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 practicum. 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 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. Responsible for transportation expenses and other costs relating to clinical experience and field trips.
5. Responsible for a physical examination and Malpractice Insurance prior to professional practice rotations.
6. Acceptance of professional practice rotation in and out-of-state health care facilities.
7. Students are encouraged to complete a minimum of 20 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.

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 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 77 semester hours including AC 211; AHP 100; BISE 315; BIO 221, 221L, 222, 222L; CHEM 121, 121L; SPCH 220 or 230; EDRD 310; ENG 101, 102, 211/212; HCA 420, 450, 490; HIST 201, 202; MATH 111; BIO 240, 240L; MG 301, 403; BIS 215; PE (two 2-digit courses); PHIL 250; PSY 311; Humanities Elective (3 semester hours); Social Science Elective (3 semester hours).

Departmental Requirements For Bachelor of Science
Health Information Management 53 semester hours

Major Core: A minimum of 53 hours including HIM 101, 104, 202, 203, 204, 300, 302, 303, 304, 400, 440, 442 and 450.

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 121	3
ENG 101	3	CHEM 121L	1
MATH 111	3	ENG 102	3
HIM 101	1	HIM 104	3
BIO 221,221L	4	BIO 222, 222L	4
PE (2 digit)	1	PE (2 digit)	1
HIST 201	3	HIST 202	3
	16		18

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
ENG 211/212	3	HIM 202*	5
HIM 300	3	HIM 203*	4
HIM 304	4	HIM 204*	5
BIS 215	3	Social Science Elective	3
EDRD 310	1		
BIO 240, 240L	4		
	18		17

*Technical Block

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
AC 211	3	SPCH 220 or 230	3
MG 301	3	HIM 303	4
PHIL 250	3	BISE 315	3
PSY 311	3	MG 403	3
Humanities Elective	3	HCA 490	3
	15		16

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
HIM 302	3	HIM 442	12
HCA 420	3		
HCA 450	3		
HIM 400	3		
HIM 440	3		
HIM 450	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	BISE 315	3
CHEM 121, 121L	4	ENG 211 or 212	3
EDRD 310	1	PHIL 250	3
ENG 102	3	HCA 490	3
MG 301	3	BIO 240, 240L	4
PSY 311	3		
	17		16

SUMMER SESSION

HIST 202	3
MG 403	3
	6

SENIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
HIM 302	3	HIM 442	12
HCA 420	3	Social Science Elective	3
HIM 400	3		
HIM 440	3		
HIM 450	3		
HCA 450	3		
	18		15

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, ART, Baptist Hospital, Nashville TN; R. Bowen, RRA, Erlanger Medical Ctr., Chattanooga TN; R. Callender, RRA, Grady Memorial Hosp., Atlanta GA; B. Cochran, ART, Metropolitan General Hosp., Nashville TN; O. Coleman, RRA, FHC Nashville Behavioral Systems, Nashville TN; M. Coley, RRA, Columbia/HCA health Systems, Nashville TN; M. Cordell, ART, Southern Hills Hosp., Nashville TN; R. Erwin, RRA, Johnson City Medical Ctr., Johnson City TN; D. Garoppo, RRA, Jennie Stuart Medical Ctr., Hopkinsville KY; F. Hall, RRA, Centennial Medical Ctr., Nashville TN; T. Holbert, RRA, Tennessee Christian Medical Ctr., Madison TN; L. Hughes, ART, Williamson Medical Ctr., Franklin TN; K. House, RRA, Summit Medical Ctr., Hermitage TN; L. Jernigan, ART, Johnson City Medical Ctr., Johnson City TN; K. Kelly, RRA, Maury Regional Hosp., Columbia TN; C. Nixon, RRA, Nashville Memorial Hosp., Madison TN; K. Mair, RRA, Georgia Baptist Hosp., Atlanta GA; C. Ehiemua, RRA, Matthew Walker Comprehensive Health Ctr., Nashville TN; T. Perkins, RRA, Elam Community Mental Health Ctr., Nashville TN; L. Polte, RRA, The University of Tennessee Medical Ctr. at Knoxville, Knoxville TN; K. Porter, RRA, Veterans Affairs Medical Ctr., Nashville TN; R.C. Pulley, RRA, Alvin C. York Veteran Affairs Medical Ctr., Murfreesboro TN; K. Monroe, RRA, St. Thomas Hosp., Nashville TN; R. Scales, ART, Nashville Health Care Ctr., Nashville TN; L. Tate, ART, Middle Tennessee Mental Health Inst., Nashville TN; T. Taylor, RRA, Sumner Regional Medical Ctr., Gallatin TN; B. Totty, RRA, Maury Regional Hosp., Columbia TN; M. Wheeler, RRA, Veterans Affairs Medical Ctr., Memphis TN; Wolaver, RRA, Cheatham County Rest Home, Ashland City TN; T. Woodson, RRA, Methodist Hospital of Memphis, Memphis TN; B. Vanderford, RRA, Jackson Regional Hosp., Jackson TN; W. Zupances, RRA, Humana Hosp., University of Louisville, Louisville KY; L. Howell ART, Bolivar General Hospital, Bolivar TN; M. Clement, RRA, National Institutes of Health, Bethesda MD; K. Healy-Collier, RRA, LeBonheur Children's Medical Hosp., Memphis TN.

COURSE DESCRIPTIONS

Health Information Management (HIM)

HIM 101 - Introduction to Health Records (1). An introduction to the health care industry, governmental and voluntary organizations in health care, the organizational patterns of health care facilities and the health record department. The role of health record professionals, an overview is given on the national, state, regional, and local health information management professional associations.

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 - Basic foundation for Health Information Systems (5). Storage, retrieval and control techniques of health record retention policies and procedures; origin, uses, content, and format of health records; accreditation, certification and licensure standards applicable to health records; quantitative and qualitative analysis of patient records. This course is taken for seven weeks during the sophomore year and requires a laboratory component. **Prerequisites:** Completion of AHP 100, BIO 221-221L, BIO 222-222L, HIM 101, HIM 104, HIM 300 and HIM 304 with a minimum grade of "C". An overall minimum grade point average of C (2.0).

HIM 203 - Directed Practice/Seminar (4). Students are assigned to health information centers for eight continuous weeks for experiences in the technical aspects of health record science that are covered in HIM 202 and HIM 204. A pre and post-directed seminar will also be held. Directed practice experience is received under the direct supervision of either an ART or RRA. **Prerequisites:** Completion of AHP 100, BIO 221-221L, BIO 222-222L, HIM 101, HIM 104, HIM 300 and HIM 304. **Pre- or Co-requisite:** HIM 202, HIM 204. All AHP, BIO and HIM courses completed with a minimum grade of "C". An overall minimum grade point average of C (2.0).

HIM 204 - Management of Health Data (5). The content, format maintenance requirements and control of various indexes and registries, nomenclature, classification systems; data abstracting techniques; medical staff organizations and bylaws; vital statistics; reporting requirements, definitions and formulas for computing hospital and health statistics. Prospective Payment Systems, Diagnostic Related Groups (DRG) and health records; Impacts and Action. This course is taken for seven weeks during the sophomore year and requires a laboratory component. **Prerequisites:** Completion of AHP 100, BIO 221-221L, BIO 222-222L HIM 101, HIM 104, HIM 300 and HIM 304 with a minimum grade of "C". A minimum cumulative GPA of C (2.0).

HIM 300 - Legal Aspects of Health Records (3). Legal terminology and procedures and the court system will be discussed including liability of the healthcare facility, policies and procedures for the control and use of personal health information, health care legislation and regulation including privacy, healthcare planning and financing, and ethical standards for health information practice. **Pre- or Co-requisites:** HIM 101 and HIM 104.

HIM 302 - Current Trends in Health Care (3). A study of the current trends in health care delivery; federal , state and local laws and regulations that pertain to the health care field; and the principles, practice and development of public health including local, state, and federal programs. **Prerequisite:** Junior standing in HIM or any Allied Health Curriculum.

HIM 303 - Utilization and Evaluation of Health Care (4). Components of quality improvement programs in health care facilities including concurrent and retrospective methodologies. Development and application of quality improvement, utilization review and risk management for health information services. **Prerequisites:** Junior standing in HIM curriculum. This course requires a laboratory component.

HIM 304 - Fundamentals of Medical Science (4). A study of the nature, cause, treatment and management of pathologic, microbiologic and clinical disease processes. **Prerequisites:** CHEM 121-121L, BIO 221-221L, BIO 222-222L, HIM 101 and HIM 104. **Co-requisite:** BIO 240-240L.

HIM 400 - Computerized Health Information Systems (3). Development of Managerial skills in Systems Analysis and Computer Applications in Health Information Management. **Prerequisites:** MATH 111, BIS 215, HIM 202, HIM 203 and HIM 204: Senior standing in the HIM curriculum.

HIM 440 - Organization and Management of Health Information Systems Seminar (3). Seminar and special assignments in the area of planning, organizing, budgeting, staffing, directing, decision making and evaluating functions in health information management department. Students will also develop and evaluate policies and procedures, and establish standards for evaluating 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 - Practicum in Health Information Management (12). A Professional Practice experience in health information management, to observe employee relations, and interact with other professional in health care facility. Students are also provided the opportunity to apply skills and knowledge previously gained through classroom, technical directed practice and laboratory experiences in carrying out management and administrative activities in health information center under the direct supervision of qualified Registered Record Administrator. Both pre and post practicum seminars are held to discuss practicum expectations, explore potential methods of identifying and solving specific problems encountered or that may be encountered during management practicum. **Prerequisites:** Completion of all HIM, MG, BIO, AHP and HCA courses with a minimum grade of "C", have an overall minimum grade point average of C (2.0). Senior standing in the HIM curriculum.

HIM 450 - Senior Research Project in Health Information Management (3). Independent study and research related to problems of a theoretical and/or practical nature in the administration of health information centers. **Prerequisites:** HCA 490, PSY 311.

Department of Medical Technology

Theola N. Copeland, M.S., M.T., (ASCP), interim Education Coordinator 206 industrial Arts

Faculty: W. Burrell

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 the examination offered by the Board of Registry of the American Society of Clinical Pathologists and apply for a license from the Tennessee Department of Health and Environment.

Description of Clinical Laboratory Practicum Sites: Clinical laboratories of Nashville Metropolitan General Hospital, Alvin C. York VA Medical Center, Centennial Medical Center, and Williamson Medical Center serve as clinical practicum sites for medical technology students.

Nashville Metropolitan General Hospital serves patients in the departments of surgery, internal medicine, obstetrics and gynecology, and pediatrics. Alvin C. York VA Medical Center is located in Murfreesboro, Tennessee, approximately 40 miles from Nashville. The VA medical center has 570 beds and fully automated laboratories. Williamson Medical Center is a 140 bed comprehensive medical facility serving the community of Franklin, TN and surrounding communities. The laboratory is fully automated performing over 700,000 tests annually. 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 Tennes-

see 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, and College Algebra 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 CAAHEP (Commission on Accreditation of Allied Health Education Programs) 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.

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 BIO 111, 111L, 112, 112L, 212, 212L, 221, 221L, 240, 240L, 441, 441L; CHEM 121, 121L, 122, 122L, 311, 311L, 312, 312L, 341, 341L; PHY 211, 211L (MATH 111 & 112 are prerequisites) 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
BIO 111, 111L	4	BIO 112, 112L	4
CHEM 121, 121L	4	CHEM 122, 122L	4
ENG 101	3	ENG 102	3
MATH 111	3	MATH 112	3
PE (2-Digit)	1	PE (2-Digit)	1
	16		18

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
BIO 221, 221L	4	BIO 212, 212L	4
PHY 211, 211L	4	CHEM 311, 311L	4
ENG 211	3	Humanities Elective	3
	3		
HIST 201	3	HIST 202	3
	14		14

JUNIOR YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
BIO 240, 240L	4	CHEM 341, 341L	4
CHEM 312, 312L	4	BIO 441, 441L	4
Social Science Elective	3	MT 301	3
Humanities Elective	2	Humanities Elective	2
	13		13

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).

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 111, Chemistry 121, 122, 121L, and 122L.

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 Hematology/Coagulation (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. Hyman, D. Kelly Smart

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, health 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 64 semester hours including ENG 101, 102, 211; MATH 161; PSY 201, 311, 321, 351; HIST 201, 202; BIO 111, 111L, 112, 112L; BIS 215; SPCH 220; PHY 211, 211L; CHEM 121, 121L, 122,122L; 2 PE (2 digit) courses; and 6 hours of humanities courses.

Departmental Requirements: For a Bachelor of Science degree in Occupational Therapy: students must complete a minimum of 143 semester hours, (65 prerequisite and 78 professional course hours.)

Professional Core Requirements: A minimum of 78 semester hours including OT 301, 311, 312, 312L, 314, 314L, 316, 316L, 320, 330, 340, 341, 342, 345, 346, 350, 350L, 360, 371, 381, 391, 400, 410, 420, 460, 473, 474, 475 or 476, 480; HCA 490. (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 112/112L	4
BIO 111/111L	4	CHEM 122/122L	4
CHEM 121/121L	4	ENG 102	3
ENG 101	3	MATH 161	3
PSY 201	3	Humanities Elective	3
PE (2-digit)	1	PE (2-digit)	1
	16		18

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
HIST 201	3	ENG 211 or 212	3
BIS 215	3	HIST 202	3
HIM 104	3	PSY 311	3
PSY 211/211L	4	PSY 321	3
PSY 351	3	Humanities Elective	3
	16		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 314/314L	3/1	OT 330	3
OT 320	3	OT 340/340L	3/1
OT 312/312L	3/1	OT 345	3
OT 316/316L	3/1	OT 346	3
OT 371	1	OT360	3
		OT 381	1
	16		17

SENIOR YEAR

Summer Session	Cr. Hrs.
OT 342	3
OT 350	3
OT 350L	1
OT 391	1
OT 480	1
	9

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
OT 400	3	OT 474	6
OT 410	3	OT 475/476	6
OT 420	3	(Fieldwork Experience)	
OT 460	3		
OT 473	1		
HCA 490	3		
	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, (OTR) 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 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 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 Principles 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.

OT 316L Psychosocial Laboratory (2). Laboratory to be taken concurrently with OT 316.

OT320 Medical Conditions (3). The case-based approach to the study of 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 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, Principles and Practice I (3). Study of orthopedic conditions and evaluation and treatment techniques. **Prerequisites:** OT301, 311, 312, 314.

OT 340L Physical Disabilities Laboratory I (2). 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.

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 345 Child and Family in Occupational Therapy (3). Instruction in theory, evaluation and treatment approaches to the family system, and application of occupational therapy approaches to pediatric mental health such as eating disorders, substance abuse, sexual abuse, sexual disorders, depression, schizophrenia, psychosis, autism, behavioral and emotional disorders, through the school age life span, including the transition to adulthood. Course will include characteristics of diagnoses, and medical/pharmacological interventions.

OT 346 Occupational Therapy Practicum in Child and Family (1) Level I fieldwork experience consisting of 30-40 hours per week in a family-centered, community, or school based program in which students will apply concepts and techniques relevant to child and family psychiatric issues.

OT 350 Physical Disabilities Principles and Practice II. 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 H. Laboratory course to be taken concurrently with OT 350.

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 361 Special Case (1). (Problem based learning seminar). By permission of instructor.

OT 371 Clinical Practicum 1 (1). Weekly one hour seminar and intensive Level I fieldwork experience in a treatment setting serving individuals with cognitive, psychosocial, and psychological disabilities. Includes 40 hours of clinical experience. Instruction in performance of professional behavior and documentation in occupational therapy is provided.

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. 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 Principles III (3). Study of various developmental disabilities, their impact on family and social systems, and occupational therapy theory and treatment. **Prerequisites**: OT 341, 342, 371.

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 400.

OT 420 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 460 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 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.

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 (4-6). 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.

OT 480 Senior Seminar (1). Discussion of current topics relevant to occupational therapy practice. **Prerequisite:** Permission of Department Head.

Department of Physical Therapy

Ronald Barredo, MAPT, Assistant Professor and Interim Department Head
366 Clement Hall

Faculty: F. Abdulla, D. Edmondson, H. Speakman

General Statement: Physical therapists are health care professionals who apply knowledge and skills from basic and behavioral sciences to prevent or correct acute and chronic disorders of human movement. Physical therapists design treatment programs to assist patients in achieving their maximum levels of independence. This is achieved through prevention of or adaptation to disability, restoration of function, relief of pain, and promotion of healing. Physical therapists work in a variety of settings with other members of the health care team. These settings include hospitals, outpatient clinics, nursing homes, home health agencies, rehabilitation centers, and private clinics. A graduate from Tennessee State University with a *B.S. in Physical Therapy may take the examination required to obtain a license to practice physical therapy.

ADMISSION REQUIREMENTS

The University requires that entering freshman and transfer students meet certain admission requirements. A student who has not met these requirements or who is not eligible for admission into TSU will not be accepted into the Physical Therapy Program. These requirements appear in this catalog under 'Admission to the University.' Admission into the University does not guarantee admission into the Physical Therapy Program.

UNIVERSITY DEGREE REQUIREMENTS

The University requires a minimum number of semester hours of course work in certain areas for a BS degree. These requirements are fully described in this Catalog under "University Requirements for a Bachelor's Degree".

Transfer students must have courses that are substantially equivalent to University degree requirements. The Office of Admissions and Records establishes course equivalencies at Tennessee State University.

***The Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association has mandated that all baccalaureate physical therapy programs convert to an entry level post-baccalaureate degree program by the year 2002 to be considered for accreditation. Plans are underway to phase out the BS degree at Tennessee State University and to implement a master of physical therapy (MPT) degree. Undergraduate students entering Tennessee State University in the fall 1999 semester and thereafter must prepare for entrance into MPT studies.**

RETENTION POLICY

1. High professional standards are important in the field of Physical Therapy. No credit will be accepted for the Professional Component courses in which the student has earned a grade of lower than "C".

2. Failure to maintain a "C" in any of the professional courses will result in repeating the course the next semester the course is offered.

3. The student will be dismissed from the Professional Component of the program for any of the following reasons:
   a. Failure to maintain a cumulative grade point average of 2.0 or above. A grade of less than "C" in 6 or more semester hours in the Professional Component.
   b. A grade of less than "C" in a course that has been repeated.
   c. Withdrawal from any professional course or failure to register for any semester without prior written approval from the department.
   d. A grade of "F" for any professional course.
   e. Failure to comply with clinical or academic policies established by the department.

4. Students who have been dismissed from the program due to poor academic performance may reapply for admission during the next application cycle.

PRE-PROFESSIONAL COMPONENT

The suggested Pre-professional Component, that appears below, consists of 69 semester credits that can be taken during four semesters. Some students may prefer to take courses during summer sessions to lighten their academic load.

The suggested Pre-professional Component contains the University requirements for a BS degree, and prerequisites for Physical Therapy. University requirements and departmental prerequisites must be included in the Pre-professional Component.

One University requirements is enrollment in two one-credit hour courses in Physical Education, Aerospace Studies, Marching Band or a combination thereof. The Department of Physical Therapy prefers candidates to make their choices from the following Physical Education courses: PE 11 Physical Fitness Activities, PE 12 Elementary Swimming, and PE 30 Weight Training. Exceptions to this requirement are described elsewhere in this catalog.

Prerequisites

There are 69 semester hours of prerequisites included in the suggested Pre-professional Component. All applicants who are selected into the Professional Component must, successfully complete these prerequisites, or courses that are substantially equivalent. Proof, in the form of official transcripts, showing that these courses have been successfully completed, must be received by the University prior to commencement of the Professional Component. A listing of these courses follows.

SUGGESTED PRE-PROFESSIONAL COMPONENT +

Freshman Year

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
*CHEM 121/121L	4	*CHEM 122/122L	4
HIST 201	3	MATH 161A or 162**	3
ENG 101	3	HIST 202	3
*PSY 201	3	ENG 102	3
*(Computer Literacy)	3	*PSY 311	3
PE 2 digit	1	PE 2 digit	1
*AHP 100	1		
	18		17

Sophomore Year

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
*BIO 221/221L	4	*BIO 222/222L	4
PHY 211/211L	4	*PHY 212/ 212L	4
ENG 211 or 212	3	*PSY 351	3
Humanities Elective	3	*PE 313	3
PHIL 201	3	*PE 314	3
	17		17

Total Credits = 69

+ Any of these courses may be taken during Summer Session I and/or II.

* Prerequisites

**MATH 161 is prerequisite to MATH 162

PROFESSIONAL COMPONENT

The Professional Component consists of six consecutive semesters of full- time study, including two summer sessions. It begins in late May, is not designed for part-time students, and there may be evening and weekend classes.

In addition to TSU tuition and fees, students enrolled in the Professional Component are responsible for providing textbooks, prescribed uniforms, professional liability insurance, membership in the American Physical Therapy Association (APTA), personal health status reports, transportation to assigned clinical sites and housing arrangements for clinical assignments at remote locations. Students are required to maintain current certification in Basic Life Support at the health care provider level and to maintain membership in the APTA.

Admission into the Professional Component of the Physical Therapy Program is very competitive. A select group a candidates who meet minimum requirements will be invited for an interview with the Physical Therapy Department Admissions Committee. From this group, successful candidates will be chosen, and an alternate list will be drawn. Unsuccessful candidates are welcome to resubmit their applications for the following year's class, but it will be necessary to compete against the new applicant pool. There is no waiting list for applicants.

Minimum Requirements

In order to be considered for admission into the Professional Component of the Physical Therapy Program applicants must meet the following minimum requirements:

1. Eligibility for admission into Tennessee State University.

2. Submission of a completed Application for Admission to the Department of Physical Therapy by the first working day of January.

3. Completion of the Pre-professional Component with a Cumulative GPA and a Science GPA (Biology, Chemistry, Physics, and Mathematics) of at least 2.75 on a 4.0 scale.

4. A physicians statement indicating that the candidate is in good health.

The Pre-professional Component must include all the University degree requirements and all the Department of Physical Therapy prerequisites.

Applicants who have not completed the Pre-professional Component at the time of application may apply if they meet the following three conditions:

(1) Will have completed at least 45 hours of the Pre-professional Component by the end of the fall semester preceding the commencement of the Professional Component.

(2) Will have completed at least 19 hours of the above four science courses by the end of the fall semester preceding the commencement of the Professional Component.

(3) Will provide evidence of a plan to complete the Pre-professional Component prior to the commencement of the Professional Component.

PROFESSIONAL COMPONENT

Junior Year

Summer Session	Cr. Hrs.
PT 301	4
PT 302	4
	8

Fall Semester		Spring Semester	Cr. Hrs.
PT 303	4	PT 313, 313L	4
PT 304, 304L	3	PT 314, 314L	4
PT 305	3	PT 315, 315L	4
PT 306, 306L	4	PT 316	3
PT 307, 307L	3	PT 317	2
PT 308	1	PT 318	1
	18		18

Senior Year

Summer Session	Cr. Hrs.
PT 401, 401L	2
PT 402	1
PT 403	2
PT 404	2
PT 405	3
	10

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
PT 411, 411L	4	PT 420	2
PT 412, 412L	4	PT 421	2
PT 413	1	PT 422	1
PT 414	2	PT 423	4
PT 415	2	PT 424	4
PT 416	1		
PT 417	2		
	16		13

Total Credits = 83

Further Information

Office of Admissions and Records: Application for Admission (615)963-5101

Financial Aid Office: Application for Financial Aid (615)963-5701

The Application for Admission will be available on October 1, and the deadline for submission is the first working day in January.

Mail should be directed separately to each of the above offices at the following address:

(Name of office or department)
Tennessee State University
3500 John A. Merritt Blvd.
Nashville, Tennessee 37209-1561

Interested persons can visit the Department of Physical Therapy and meet a staff member at a group meeting held at 3:00 p.m. on the first Friday of October, November, and December in Room 252 of Clement Hall.

The Department of Physical Therapy is housed on the third floor of Clement Hall, which is located on the main campus of Tennessee State University. From Memphis take I-40 east to exit 207, turn left onto Jefferson Avenue (under I-40), which in less than a mile becomes John A. Merritt Boulevard. Continue along the John Merritt Boulevard then turn left on to 33rd, then turn right at Alameda. Clement Hall is the second building on the right.

The information contained in this Catalog was prepared as a guide for current and prospective students, and as such, may be changed without notice.

Accreditation

The Department of Physical Therapy in the School of Allied Health Professions at Tennessee State University is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

COURSE DESCRIPTIONS

Physical Therapy (PT)

PT 301 Anatomy (4). Lecture and cadaveric dissection of the human musculoskeletal, neurological and cardiovascular systems. Emphasis is placed on origins, insertions, nerve supply and actions of muscles, through lecture and laboratory experiences. Principle topics covered include origins and insertions of skeletal striated muscles, the relationships between different components of the musculoskeletal system. **Prerequisites: Admission to the professional component of the program.**

PT 302 Physiology (4). In this course the student learns how the various systems in the human body function at both the macroscopic and microscopic levels. All the major systems are covered, however, emphasis is placed upon nerve and muscle, cardiovascular system, the respiratory system, and homeostatic control. Principle topics covered include neurophysiology, cardiovascular physiology. **Prerequisites: Admission to the professional component of the program.**

PT 303 Pathology (4). This course introduces the student to the fundamentals of pathology as well as specific pathological conditions. Topics covered include biophyschosocial concepts, environmental and occupational medicine, problems affecting multiple systems, the immune system, infectious diseases, and oncology. Specific areas include metabolic disorders, genetic and developmental disorders, and laboratory tests and values. **Prerequisites: PT 301, PT 302.**

PT 304 Physical Agents (2). This course covers the use of physical modalities in the treatment of selected pathologies. It looks at the physical principles and biophysical effects of various modalities and covers indications, contradictions and precautions for their use. Modalities covered include ultrasound, diathermy, moist heat, cryotherapy, hyperbaric oxygen therapy, hydrotherapy, massage, ultraviolet and infrared radiation, and paraffin wax. Wound care management in relation to tissue repair, would debridement and dressings, sterile technique, pressure garments, and universal precautions is addressed. **Prerequisites: PT 301, PT 302.**

PT 304L Physical Agents Lab (1). Laboratory to be taken concurrently with PT 304.

PT 305 Movement Science (3). In this course the student studies the biomechanics of movement with special emphasis on arthokinematics and kinesiology. The actions of individual muscles and muscle groups are covered in detail, as are the movements available at the joints. Other topics include composition and resolution of forces, static equilibrium, function dynamics, and strength of materials. **Prerequisites: PT 301, PT 302.**

PT 306 Clinical Neuroscience (3). This course covers the anatomy and physiology of the nervous system. Emphasis is placed on evaluation and how pathology can affect motor performance in conditions commonly seen by physical therapists. **Prerequisites: PT 301, PT 302.**

PT 306L Clinical Neuroscience Lab (1). Laboratory to be taken concurrently with PT 306.

PT 307 Patient Care Principles (2). In this course the student is introduced to the fundamentals of patient care. Topics covered include positioning, draping, vital signs assessment, transfers, wheelchair features and activities, ambulation aids and patterns, infection control, and incidents and emergencies. **Prerequisites: PT 301, PT 302.**

PT 307 Patient Care Principles Lab (1). Laboratory to be taken concurrently with PT 307.

PT 308 Clinical Education 1 (1). This course is the first clinical education experience. The students will be assigned to a clinical facility and where they will have the opportunity to practice clinical skills learned during the first two terms. **Prerequisites: PT 301, PT 302, PT faculty permission.**

PT 313 Orthopedic Physical Therapy 1 (3). This course covers the evaluation and treatment of musculoskeletal condition affecting the shoulder complex, elbow complex, wrist, hand, hip, knee, and foot. The student will learn the treatment of mechanical disorders of lumbar spine. Finally, peripheral joint mobilization is covered in detail. **Prerequisites: PT 303, PT 304, PT 304L, PT 305, PT 306, PT 306L, PT 307, PT 307L.**

PT 313L Orthopedic Physical Therapy Lab (1). Laboratory to be taken concurrently with PT 314.

PT 314 Neurologic Physical Therapy (3). In this course students learn how to treat individuals with disease or injury of the nervous system. Conditions covered include spinal cord injury, cardiovascular accident, traumatic brain injury and Parkinson's Disease. Emphasis is placed on critical analysis of neurological assessment procedures and principles of therapeutic management. **Prerequisites: PT 303, PT 304, PT 304L, PT 305, PT 306, PT 306L, PT 307, PT 307L.**

PT 315 Cardiopulmonary Physical Therapy (3). This course covers the theory and techniques of the evaluation and treatment of patients with cardiopulmonary dysfunction. Topics include pathophysiology, pulmonary function tests, EKG identification, the ICU, airway clearance techniques, exercise testing and training, and patient education. Other topics include COPD, neonatal and pediatric patients. **Prerequisites: PT 303, PT 304, PT 304L, PT 305, PT 306, PT 306L, PT 307, PT 307L.**

PT 315L Cardiopulmonary Physical Therapy Lab (1). Laboratory to be taken concurrently with PT 315.

PT 316 Pharmacology (3). In this course the student is introduced to topics such as classification of drugs, modes of administration, side effects, and excretion. Specific drugs that affect systems commonly encountered in physical therapy are emphasized, such as the nervous system, musculoskeletal system, and cardiorespiratory system. **Prerequisites: PT 303, PT 304, PT 304L, PT 305, PT 306, PT 306L, PT 307, PT 307L.**

PT 316L Pharmacology Lab (1). Laboratory to be taken concurrently with PT 316.

PT 317 Research Methodology (2). This course provides an introduction to the role of critical inquiry, concepts of measurement, research design, and research methods. Students will begin to formulate a research question to be investigated during PT 414 Research Project 1 and PT 426 Research Project 2. **Prerequisites: PT 303, PT 304, PT 304L, PT 305, PT 306, PT 306L, PT 307, PT 307L.**

PT 318 Clinical Education 2 (1). This course is the second clinical education experience. The students will be assigned to a clinical facility where they will have the opportunity to practice clinical skills learned during the first three terms. **Prerequisites: PT 308, PT faculty permission, passing the Junior Comprehensive Examination.**

PT 401 Electrotherapeutic Procedures (1). This course is designed to prepare the student in the application of electrotherapeutic procedures and the interpretation of electrodiagnostic tests to treat patients with disorders of the neuromusculoskeletal system. The course is divided into four areas. The first area highlights the basic concepts of electricity and how these concepts are applied therapeutically. The second area focuses on the physiological effects of electricity as it applies to motor response, pain modulation, and tissue repair. The third area addresses, the specific modalities used in electrotherapy, including fontophoresis, transcutaneous electrical nerve stimulation, interfential current, biofeedback and Russian stimulation. The fourth area highlights basic electrophysiological testing, including chronaxie, strength duration reaction of degeneration, nerve condition velocity, and basic EMG interpretation. **Prerequisites: PT 313, PT 313L, PT 314, PT 314L, PT 315, PT 315L, and PT 316.**

PT 401L Electrotherapeutic Procedures Lab (1). Laboratory to be taken concurrently with PT 401.

PT 402 Educational Principles (1). This course is designed to present educational principles applied to the practice of physical therapy. Students will discuss various theories of learning and variations in teaching and learning styles. Students will develop, present, and evaluate educational presentations, which would be appropriate for patients, care givers, or other health care professionals. **Prerequisites: PT 313, PT 313L, PT 314, PT 314L, PT 315, PT 315L, PT 316.**

PT 403 Therapeutic Exercise (2). This course covers the concepts and techniques of therapeutic exercise. Topics covered included: range of motion, resistance exercise, aerobic exercise, stretching, and the application of therapeutic exercise techniques to regions of the body. In addition, special areas such as exercise for the obstetric patient and the management of vascular disorders of the extremities are covered. **Prerequisites: PT 313, PT 313L, PT 314, PT 314L, PT 315, PT 315L, PT 316.**

PT 404 Research Project 1 (2). In this course the student will begin the Senior Project which is the university requirement for a Bachelors degree that the department has chosen instead of Senior Seminar. Students will normally work in groups of three or four but may elect to work individually. Course includes the development of an idea, review of literature, project design, plan for statistical analysis, and methodology. **Prerequisites: PT 313, PT 313L, PT 314, PT 314L, PT 315, PT 315L, PT 316, PT 317.**

PT 405 Clinical Education 3 (3). This course is the third clinical education experience. The students, will be assigned to a clinical facility where they will have the opportunity to practice clinical skills learned during the first four terms. **Prerequisites: PT 318, PT faculty permission.**

PT 411 Orthopedic Physical Therapy 2 (3). This course continues with the treatment of the spine, covering the evaluation and treatment of mechanical disorders of the cervical and thoraic spine. Other topics observed include gait evaluation and treatment, posture evaluation and treatment, sports therapy, arthritis, body composition, radiology and work hardening. **Prerequisites: PT 401, PT 401L, PT 402, PT 403.**

PT 411L Orthopedic Physical Therapy 2 (1). Laboratory to be taken concurrently with PT 411.

PT 412 Pediatric Physical Therapy (3). The purpose of this course is to prepare the student to treat babies, infants, and children. In this course the students will be introduced to the common conditions affecting the pediatric population, and current treatment methods. Conditions covered include cerebral palsy, spinal bifida, juvenile rheumatoid arthritis, and anthrogryphosis. **Prerequisites: PT 401, PT 401L, PT 402, PT 403.**

PT 412L Pediatric Physical Therapy (1). Laboratory to be taken concurrently with PT 412.

PT 413 Prosthetics and Orthotics (1). This course introduces the students to the various prosthetic and orthotic devices used by patients with various conditions, which necessitate their use. The course is divided into two broad areas, namely: prosthetics assessment and management, and orthotic assessment and management. The prosthetics portion of the course introduces the students to various upper extremity, lower extremity, and spinal orthotic devices in relation to various conditions that warrant their use. Both prosthetic and orthotic management, including prescription, maintenance, and training are covered. **Prerequisites: PT 401, PT 401L, PT 402, PT 403.**

PT 414 Geriatric Physical Therapy (2). The purpose of this course is to prepare the student to treat the older individual. Emphasis will be placed on the physiological changes that occurring the aging process, the types of injuries and diseases that are prevalent among the elderly. Prevention is emphasized as well as wellness activities such as regular exercise, nutrition and social activity. Prerequisites: PT 401, PT 401L, PT 402, PT 403.

PT 415 Sports Physical Therapy (2). This course is designed to prepare the student to treat sports injuries both in the clinic and the field of play. Topics covered include: the sports medicine team, nutrition, physical conditioning, emergency procedures, environmental considerations, performance enhancing drugs and tissue response to injury. Emphasis will be placed on the evaluation and treatment of common sports injury, especially the ankle, knee, and shoulder. **Prerequisites: PT 401, PT 401L, PT 402, PT 403. To be taken concurrently with PT 411 AND PT 411L.**

PT 416 Research Project 2 (1). This is a continuation of PT 414 Research Project 2. At the completions of this course, the student is expected to have completed the Research Project. **Prerequisites: PT 401, T 401L, PT 402, PT 403, PT 404.**

PT 417 Clinical Education 4 (2). This course is the third clinical education experience. The students will be assigned to a clinical facility where the y will have the opportunity to practice clinical skills learned during the first five terms. **Prerequisites: PT 405, PT faculty permission.**

PT 420 Psychosocial Issues (2). In this course students will be introduced to behavioral and psychological concepts and theories related to patients,

family, and care giver reaction to illness, disability, and loss. Other topics covered are patient rights, advanced communication skills, sociological perspectives on illness, multicultural diversity, and sexual aspects of disability. **Prerequisites: PT 411, PT 411L, PT 412, PT 412L, PT 413, PT 414, PT 415.**

PT 421 Administration (2). This course presents management principles as applied to the practice of physical therapy. Students will analyze the impact of organization design, leadership styles, as well as legal, social economic, and ethical issues on administrative decisions. The course emphasizes fiscal, operation, personnel, risk management, strategic planning, quality assessment, and the role of the physical therapy consultant. At the conclusion of the course the student will have a basic understanding of how a typical physical therapy department is managed. Health care systems are also covered. **Prerequisites:** To be take concurrently with PT 434.

PT 422 Professional Issues (1). This course provides a format for discussion of topics related to entry into physical therapy professional practice including licensure, structure and function of professional organization, interview and job search skills, job information services, resume writing, professional development, handling of ethical complaints, the APTA judicial process, and continuing education. **Prerequisites: PT 421, PT 421L, PT 422, PT 422L, PT 425.**

PT 423 Clinical Education 5 (4). This course is the fourth clinical education experience. The students, will be assigned to a clinical facility where they will have the opportunity to practice clinical skills learned during the first five terms. **Prerequisites: PT 417, PT faculty permission, passing the Senior Comprehensive Examination.**

PT 424 Clinical Education 6 (4). This course is the fifth clinical education experience. The students, will be assigned to a clinical facility where they will have the opportunity to practice clinical skills learned throughout the duration of the program. **Prerequisites: PT 423, PT faculty permission.**

Department of Speech Pathology and Audiology

Harold R. Mitchell, Ph.D., Head
Suite A, Avon Williams Campus

Faculty: P. Burch-Sims, J. Cantrell, V. Matlock, M.M. Mosely.

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	ENG 102	3
ENG 101	3	HIST 202	3
HIST 201	3	PE (2-digit)	1
PE (2-digit)	1	MATH 111	3
BIS 215	3	Humanities Elective	3
Humanities Elective	3		
	18		17

SOPHOMORE YEAR

Fall Semester	Cr. Hrs.	Spring Semester	Cr. Hrs.
ENG 211/212	3	Electives* (2)	6
SPTH 250	3	PSY 311 or SOC 300	3
SPTH 310	3	PSY 242	3
SOC 211	3	SPTH 260	3
SPTH 305	3	SW 301	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 or 465	3	SPTH 300B	1
SPTH 374	3	SPTH 476	3
Elective*	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* (300-400 level)	11
SPTH 470	3	SPTH 460	3
Electives* (300-400 level)	6		
	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 (2-3). 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 psychological 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 (2). A seminar study of some selected problems in speech pathology/audiology. *Prerequisite: 21 hours in the major field.+*

SPTH 476 Language Disorders in Children (3). The nature of language disturbances resulting from damage to the central nervous system, auditory impairment, environmental, social, and psychogenic influences. Managerial procedures are discussed while numerous diagnostic tests of language are demonstrated. Prerequisite: SPTH 350.

SPTH 477 Alternatives for the Severely Speech, Hearing and Language Impaired. 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

Marion G. Anema, Ph.D., RN, Dean
110 W. S. Davis 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

Christine P. Sharpe, Ph.D., R.N.,
Assistant Dean & Program Director
216 W. S. Davis Complex

Faculty: H. Allie, S. Bass, V. Briscoe, C. Chapman, M. Dahlhauser, B. Fleming, E. Gilland, 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 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 AAPP 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).

Completing all high school deficiencies, developmental, and remedial courses.

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. Course must have been taken within the last five years.

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. 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 AAPP placement examination scores
   f) Pre-entrance nursing examination score
   g) Interview with the AAS Program Director or faculty

2. The Admissions Committee will consider students who have submitted completed application materials, including pre-nursing examination scores, by February 15th.

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 must apply, 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 on a space available basis and are very limited. 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 (CR). 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 Nursing School.

Additional requirements are:

1. Proof of current Tennessee LPN license

2. Completion of NURS 100C with a minimum grade of C

3. Complete all required general courses before enrolling in any AD 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 201 or 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 or 202 -	9
		NURS 220 -	2
			19
		(Will request 1 hour overload)	

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 Credit for NURS 101 will be noted on the transcript after successful completion of the spring semester.	8

Fall	HR	Spring	HR
NURS 201 or 202 -	9	NURS 201 or 202 -	9
		NURS 220	2
			11

Transfer of RN Nursing Courses

Transfer students from another RN program 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: ENG 101 and 102; BIO 221, 221L, 222, 222L, 240, 240L; PSY 201 and 351; SOC 211; MATH 110; SPCH 220; Humanities Elective, PE (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 222 & 222L	4
ENG 101	3	ENG 102	3
PSY 201	3	PSY 351	3
MATH 110	1		
	18		18

SOPHOMORE YEAR

FALL SEMESTER Courses	HR	SPRING SEMESTER Courses	HR
NURS 201 or 202	9	NURS 202 or 201	9
BIO 240 & BIO 240L	4	NURS 220	2
SOC 211	3	SPCH 220	3
PE	1	Humanities Elective	2-3
		PE	1
	17		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 man, 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, ENG 101, and PSY 201).

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, ENG 102,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, SOC 211 and 1 PE). Co-requisites for the spring semester with NURS 201 or 202: (SPCH 220, Humanities elective and 1 PE).

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
310A W. S. Davis Complex

Faculty: S. Bernet, T. Christenbery, A. Crownover, D. Gerber, S. Hodess, K. Moore, 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 72 hours of lower division required University and general education courses for Summer admission.

5. Completion of the required basic science courses.

6. Minimum scores in the 70th percentile Pre-nursing examination scores with emphasis on the reading and verbal scores.

7. Be in good academic standing in previous schools/colleges and nursing program (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) ACT (Enhanced) or SAT or AAPP placement examination scores
   e) 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.

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)

The School of Nursing has a Career Mobility Program for RN's to earn a BSN degree.

The Career Mobility Program is one calendar year in length (3 semesters).

Summer	HR	Fall	HR
NURS 332	3	NURS 300C	3
NURS 300B	3	NURS 325	3
		NURS 422	3

Upon successful completion of the summer and fall semesters of the nursing program, credit for 30 hours of BSN courses will be noted on the TSU transcript.

Spring	HR
NURS 330	3
NURS 436	6

Transfer of RN Nursing Courses

Transfer students from another four year school 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 teaching 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, 310, 325, 326, 328, 330, 332, 414, 422, 434, 436.

76 Semester Hours

GENERAL EDUCATION CORE: Seventy-six semester hours of University and general education courses are required: Orientation, ENG 101, 102, 211, and 212; HIST 201 and 202; 2 PE; CHEM 121 & 121L; BIO 221, 221L, 222, 222L, 240, 240L, 427A; MATH 111; PHIL 201; Humanities; SOC 211; CS 121; PSY 201, 311, 321, and 351; Electives, 9 semester hours.

Suggested Four Year Plan:

Bachelor of Science Degree in Nursing

FRESHMAN YEAR

Fall		Spring		Summer	
Courses	HR	Courses	HR	Courses	HR
ENG 101	3	ENG 102	3	BIO 240 & 240L	4
HIST 201	3	HIST 202	3	CS 121	3
PE	1	PE	1	Elective	3
MATH 111	3	SOC 211	3		
BIO 221 & 221L	4	BIO 222 & 222L	4		
Humanities	2	PSY 201	3		
NURS 110 Orientation	1				
	17		17		10

SOPHOMORE YEAR

Fall		Spring		Summer	
Courses	HR	Courses	HR	Courses	HR
ENG 211	3	ENG 212	3	Elective	3
PSY 311	3	BIO 427A & 427K	4		
PHIL 201	3	NURS 250	6	or NURS 250	6
PSY 321	3	CHEM 121 & 121L	4		
PSY 351	3				
Elective	3				
	18		17		9

JUNIOR YEAR

Fall		Spring	
Courses	HR	Courses	HR
NURS 310	6	NURS 328	6
NURS 325	3	NURS 330	3
NURS 326	3	NURS 332	3
	12		12

SENIOR YEAR

Fall		Spring	
Courses	HR	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. 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.

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.

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.

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; co-requisites NURS 325 and 326.

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 310 and 321.

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; co-requisites NURS 310 and 325.

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-requisites NURS 250; 310, 325, 326; co-requisites NURS 330 and 332.

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, 310, 325, 326; 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-requisites NURS 250, 310, 325, 326; co-requisites NURS 328 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, 310, 325, 326, 328, 330, 332; 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, 310, 325, 326, 328, 330, 332; 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, 310, 325, 326, 328, 330, 332, 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, 310, 325, 326, 328, 330, 332, 414, 422; co-requisite NURS 434.



AEROSPACE STUDIES (AFROTC)

Samuel Brown, Jr., Colonel, USAF
AFROTC Wing, Floyd-Payne Student Center

GENERAL STATEMENT

The Air Force Reserve Officer Training Corps (ROTC) is the largest and oldest source of commissioned officers for the Air Force. Air Force ROTC's mission simply stated is: Produce leaders for the Air Force and better citizens for America. Air Force ROTC's headquarters is at Maxwell Air Force Base in Montgomery, Ala. The Air Force Senior ROTC Program is designed to recruit, educate and commission officer candidates through college campus programs based on Air Force requirements. As of April 1998, units are located at 143 college and university campuses throughout the United States and Puerto Rico. Students from schools near Air Force ROTC host institutions can attend classes through more than 800 separate cross-town enrollment programs or consortium agreements.

GMC

The first two years of the Air Force ROTC four-year program, the General Military Course, consist of one hour of classroom work and one to two hours of leadership laboratory each week. Two courses in Aerospace Studies will be accepted for two activity courses in Physical Education. Any full-time student can participate in the AFROTC GMC provided they meet minimum age and citizenship requirements. Non-scholarship GMC cadets are under no service obligation whatsoever. Upon completion of General Military Course requirements, cadets who wish to compete for entry into the last two years of the program, the Professional Officer Course, must do so under the requirements of the Professional Officer Course selection system. This system uses qualitative factors, such as grade-point average, unit commander evaluation, and aptitude test scores to determine a student's officer potential. After selection, students must successfully complete a summer four or five-week field training encampment at an assigned Air Force base before entering the Professional Officer Course.

POC

Cadets enrolled in the Professional Officer Course attend class three hours a week and participate in a weekly leadership laboratory lasting from one to two hours. In the Professional Officer Course, cadets apply what they have learned in the General Military Course and at field training encampments. Professional Officer Corps cadets conduct the leadership laboratories and manage the unit's cadet corps. Each unit has a cadet corps based on the Air Force organizational pattern of flight, squadron, group, and wing. Professional Officer Course classes are small. Emphasis is on group discussions and cadet presentations. Classroom topics include leadership, communication skills, and the national defense policy. Once enrolled in the Professional Officer Course, all cadets are enlisted in the Air Force Reserve and assigned to the Obligated Reserve Section. This entitles them to a monthly $150 nontaxable subsistence allowance during the academic year.

FIELD TRAINING

Field Training is, in most cases, a cadet's first exposure to a working Air Force environment. The program is designed to develop military leadership and discipline, and to provide Air Force officer orientation and motivation. At the same time, the Air Force can evaluate each cadet's potential as an officer. Field training includes aircraft and aircrew orientation, Air Force professional development orientation, marksmanship training, junior officer training, physical fitness, and survival training. Uniforms, lodging, and meals are provided at no cost to the cadet, and travel at Air Force expense is authorized by air or privately owned vehicle to and from the individual's home of record or school. Additionally, after applicable deductions, cadets receive pay of about $500 for the four-week encampment and about $625 for the five-week summer camp.

UNIVERSITY CREDITS AND CURRICULUM

Students must work with differing universities and departments to determine whether AFROTC classes will receive core, core elective, or general elective credits. A TSU minor in Aerospace Studies consists of 22 semester hours and is available to those students who successfully complete the General Military Course and the Professional Officer Course.

FRESHMAN (GMC)

AERO 151	1
AERO 152	1
	2

SOPHOMORE (GMC)

AERO 251	1
AERO 252	1
	2

JUNIOR (POC)

AERO 351	3
AERO352	3
ELECTIVE*	3
	9

SENIOR (POC)

AREO 451	3
AERO 452	3
ELECTIVES*	3
	9

*Course may be taken at any time during the junior or senior year and must be selected from 300 to 400 level Social Science offerings.

SCHOLARSHIPS

Current emphasis in the Air Force ROTC College Scholarship Program is to award scholarships to candidates pursuing undergraduate engineering or other scientific and technical disciplines. Many of the Air Force ROTC scholarships are awarded to students in these disciplines. However, students in every degree program enjoy scholarship opportunities, as the Air Force seeks to engage students who excel both academically and militarily.

Scholarships are awarded in increments of four, three and two years. All types of awards provide funds for books, most required fees and a $150 monthly nontaxable subsistence allowance. In addition to these scholarships, Air Force ROTC has an incentive scholarship program for cadets contracted into the Professional

Officer Course (POC). This POC Incentive scholarship pays up to $2,000 annually and is available to nearly all POC contracted cadets who are not already receiving scholarship benefits, and 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. Also, nonprior service scholarship recipients must be under age 25 as of June 30 of the calendar year during which commissioning is scheduled. Prior service applicants may have the age limit extended by the total days of active duty military service, up to a maximum of 35 years of age.

COURSE DESCRIPTIONS

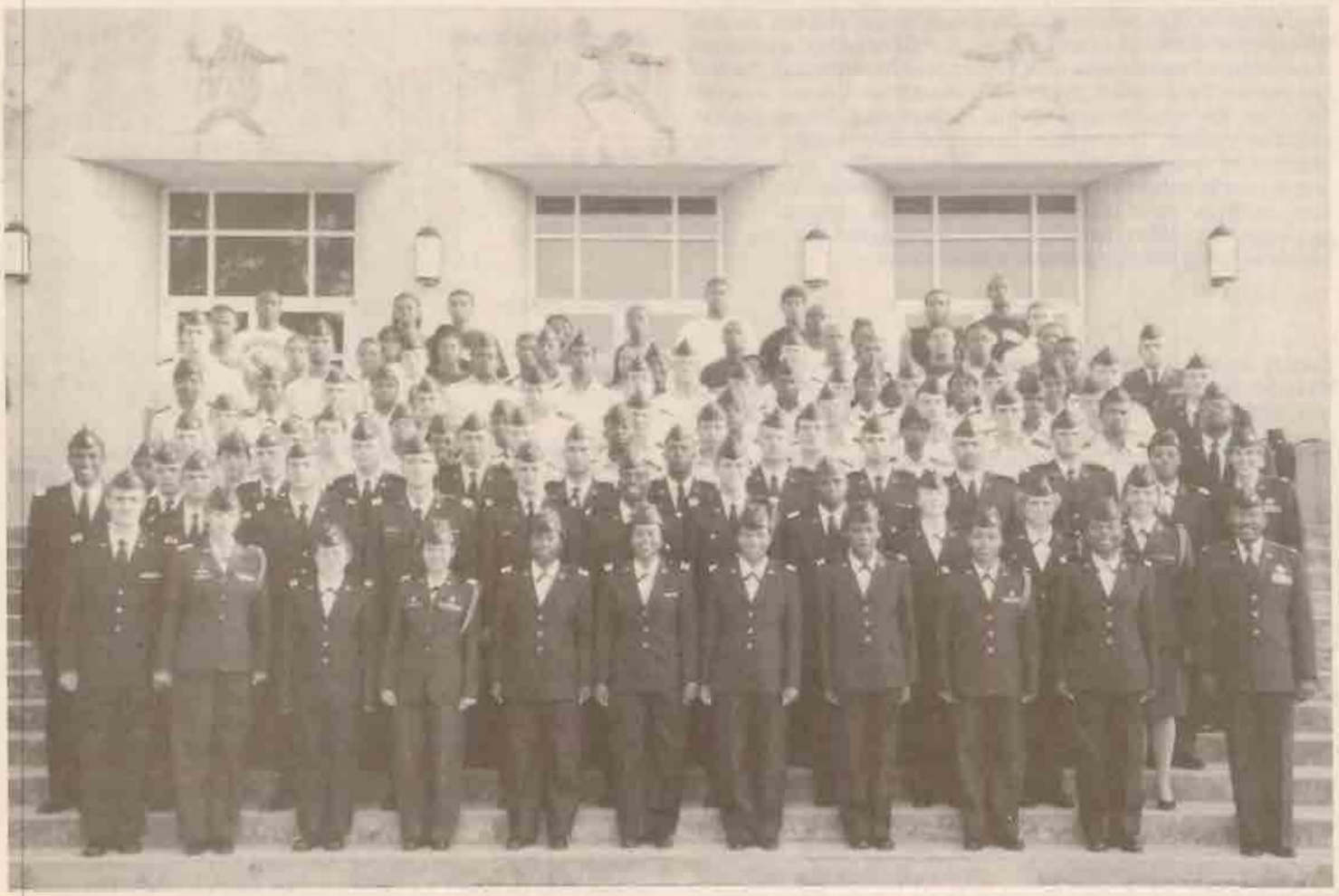
AERO 151, 152 The Foundations of the United States Air Force, is a survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, and an introduction to communication skills.

AERO 251, 252 The Evolution of USAF Air and Space Power, 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 air 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 leadership and management principles of this course.

AERO 451, 452 National Security Affairs/Preparation for Active Duty, examines the national security process, regional studies, advanced leadership ethics, and Air Force 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 military professionalism. Within this structure, continued emphasis is given to refining communication skills.

AERO 151 – 452L Leadership Laboratory. All cadets enrolled in the GMC or POC must take leadership laboratory each semester. The 1-1/2 hours per week is taken throughout the students' enrollment in AFROTC. Instruction is condensed within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. Leadership Laboratory involves a study of Air Force customs and courtesies; drill and ceremonies; career opportunities in the Air Force and the life and work of an Air Force Officer. Students develop leadership potential in a practical, supervised laboratory. Co-requisite: must be enrolled in 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 PHYSICAL THERAPY

MASTER OF PUBLIC ADMINISTRATION

MASTER OF SCIENCE
- Agricultural Science
- Biology
- Chemistry
- Computer and Information Engineering
- Guidance and Counseling
- Mathematical Sciences
- Music Education
- Psychology
- Speech and Hearing Science

MASTER OF SCIENCE IN NURSING

EDUCATIONAL SPECIALIST
- Administration and Supervision

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 Bulletin. Further information may be obtained by writing to:

The Dean of the Graduate School
Tennessee State University
3500 John A. Merritt Boulevard
Nashville, TN 37209-1561

All applications, test scores, and transcripts should be mailed to the above address.

Doctoral degree applicants must submit all application materials by the following deadlines:

Biological Sciences — March 15

Psychology & Administration and Supervision — Feb. 15
Public Administration — six weeks before a semester begins

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 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.

***Scheduled for implementation 2000-2001 academic year.**

The University Honors Program

Sandra W. Holt, Ph.D., Director
Learning Resources Center

Faculty: K. Bryant, F. Chen, Y. Clark, D. Daniels, D. Elliott, D. Gendron, S. Holt, H. Houston, J. Irby, L. James, G. Johnson, P. Kahlon, L. Lane, M. McDonald, C. McGinnis, J. McKinney, M. Mazzone, D. Moore, L. Powers, R. Simpson, J. Williams, C. Wilkey

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 cookout, 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 students 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, but no later than the beginning of the sophomore year. 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 internship 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 costs 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 score 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 3.0, based on all course work. A student may withdraw from the Program at any time, but he should first notify the Honors Office.

Graduation with University Honors: At commencement, four-year students who complete the requirements of the Honors Program will be graduated with "University Honors."

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 Advisory Council and such other persons who may be invited to sit with the Council, and 3) attain a cumulative average of at least 3.25.

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
ECON 211-212H	3-3

Junior Year

HP 300H	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 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.

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 Advisory Council and such other persons who may be invited to sit with the Council.



ACADEMIC ENRICHMENT, ADVISEMENT AND ORIENTATION

Monetha R. Reaves, D.A., Director
102, LRC

Faculty: H. Adi, M. Akbari, S. Arefin, J. Asamani, V. Batten, W.Buckley, M. Carter, J. Flournoy, J. Grimes, C. Helton, J. Mason, N. Minter, V. Owens, 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 as well as acquaints them with other students in this age category. 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 remedial/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 remedial, 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 online 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 the AAPP 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 AAPP;
- all GED recipients who are seeking regular admission must take the complete AAPP;
- 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 AAPP;
- 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 AAPP;
- 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 English portion of the AAPP;
- 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 with less than 60 hours of transfer credit must be tested unless they have taken college level English or Math.

No student may take remedial or developmental classes without AAPP assessment.

The AAPP 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 AAPP 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 remedial 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 remedial or developmental courses to remove high school deficiencies may not be diagnostically advanced from DSMA 082, DSEN 081, or DSRD 081.

Class Attendance

Class attendance in remedial and developmental studies courses is mandatory. For monitoring, each student must secure an excused-absence form from the Vice President for Student Affairs's office and have it stamped by the Director of Academic Enrichment 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 becomes a part of the student's file.

Class Withdrawals

Students who withdraw from a Remedial or Developmental course without the Director's approval will receive a W; this withdrawal is considered a failed attempt and can lead to suspension. The WD, or withdrawal with the Director's approval, is awarded when there are extenuating circumstances. The WD is not considered a failed attempt.

Credit Hours Earned

All credit hours earned in courses preceded by the course prefix RS (RSEN, RSMA, RSRD, etc.) or DS (DSEN, DSMA, DSSK, DSRD, etc.) and numbered less than 100 will be an addition to the hours required for graduation. Grades earned in these courses, however, are computed in the students' grade point average.

Readmission After Two Failures To Meet The Exit Criteria

A student who twice attempts a remedial or developmental studies course and fails to meet the minimum standards for progression will be suspended for a minimum of one term. 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.

In order to be readmitted, the suspended student must have the recommendation of the Director of Academic Enrichment and must comply with all readmission conditions.

Grading

Only grades of A, B, C, F, I, IP and WD will be used for classwork, tests, laboratory work, and final grades in the Developmental Studies Program. A student will be judged to have achieved minimum competency if he/she achieves an average of 70 percent.

Testing

All remedial 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 remedial and developmental courses.

Transfer of Remedial And Developmental Credit

Remedial and developmental work successfully completed at another System institution (and shown on the student's transcript) will be accepted as equivalent to TSU courses and/or laboratories which cover the same skills and competencies as the courses or laboratories at the other institution. A student who transfers remedial or developmental work from another 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 coursework or laboratory assistance, the student will be required to enroll in the appropriate course or laboratory. The student, however, will not be required to enroll in a course if he/she has taken an equivalent course at another institution. Students who have been tested and taken coursework in states may still be required to take the AAPP.

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 for students 21 years of age or older who are returning to an academic setting. It may be taken instead of the major orientation course with departmental approval and is designed to introduce the adult learner to the college community and to all facets of university life as well as to acquaint them with other students in this age category. Effective study habits, student support services, interpersonal skills and basic computer skills are included. 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 DEVELOPMENTAL STUDIES PROGRAM.** The course is co-requisite to the R/D course that suspended the student and must be taken upon re-enrollment into the University.

Remedial Studies

RSEN 070 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 student is placed by the AAPP, the course is prerequisite to DSEN 081 and all college-level English and language courses.

RSEN 071 English Fundamentals (4). Development of language skills, with concentration on such matters as spelling, grammar, punctuation, and vocabulary, leading to writing proper sentences and brief paragraphs by the end of the semester. Students will spend three hours per week in the classroom and one hour per week in mandatory Writing Clinic. If student is placed by the AAPP, the course is pre- requisite to DSEN 081 and all college-level English and language courses.

RSMA 071 Essential 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 AAPP, the course is prerequisite to DSMA 081-082 and all college-level math and all math-based courses, such as chemistry, physics, accounting, and statistics.

RSRD 079 Reading and Comprehension (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 improvement of the student's college-level vocabulary, and his 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 the AAPP, the course is prerequisite to DSRD 081 and all intensive college-level reading courses, such as history, psychology, sociology, biology, and chemistry.

Developmental Studies

DSEN 081 Basic English Skills (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 AAPP, the course is prerequisite to all college-level English and language courses.

DSMA 081 Foundations of Mathematics I (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 AAPP, the course is prerequisite to DSMA 081 and all college-level math courses and all math-based courses, such as chemistry, physics, accounting, and statistics.

DSMA 082 Foundations of Mathematics II (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 DSMA 081, 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 AAPP, 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.

DSRD 081 Reading Comprehension II (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 AAPP, the course is prequisite to all intensive college-level reading courses, such as history, psychology, sociology, biology, and chemistry.

DSSK 081 Developmental Studies Study Skills (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 Center's 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, inservice 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. 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 Resource Efforts (CAREs) unit administers 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 project 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. Tennessee CAREs' goals 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) Program

The Tennessee Early Childhood Training Alliance (TECTA) Program is part of RPC's 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 state-wide system of certificate and degree training programs for early childhood education teachers and administrators. TECTA includes center-based, family and group home preschool models as well as school age models.

Science and Technology Programs and the National Science Foundation Project

The Center administers a hands-on science and technology consortium involving several Tennessee school systems through the Tennessee Hands-on Science and Technology Consortium (TSTC). Areas of emphasis include teacher and administrator enhancement, material management and evaluation. Additional Center/TSTC projects include school-community and private sector partnerships, and conferences, as well as coordination with state offices and federal projects.

The Center also administers one of the original 26 National Science Foundation's Local Systemic Change (LSC) Projects in partnership with Metro-Nashville Public Schools, and with Rutherford, Sumner, and Williamson County Schools. The project provides professional development for 3400 teachers and 149 elementary and middle schools to reform elementary science instruction. The Center houses a Teacher Enhancement and Materials Management (TEMM) Center which serves a multicounty region, distributing nationally validated science modules and hands-on, inquiry-based training for teachers and principals. The TEMM Center is a state and national model.

State Employee Child Care Center (SECCC)

The state's employee child care center is administered by the BERS 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 area.

Head Start State Training Technical Assistance Center

The State Training Center has operated as the principal training resource for Head Start Programs in Tennessee for several years. 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 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 Center's CDA program celebrated credentialing the 100,000th CDA, in the USA, who completed her CDA program at TSU.

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 three-year research and evaluation project which resulted in the publication of a competency-based curriculum. In conjunction with the Tennessee Conference on Social Welfare, a Social Service Practitioner's 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 entity which provides the following services in the area of technology and learning: 1) teacher, parent and administrator training, 2) child enrichment classes, 3) research, 4) conferences, 5) technical assistance, and 6) a variety of public-private partnership programs.

The Consortium is administered through the 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. The 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.

School-Age Child Care Technical Assistance Office

Initiated in 1981 through a grant from the Wellsley College Center for Research on Women, this office continues to provide assistance to schools, organizations, and communities in Tennessee and the Southeast who are developing or conducting school-age child care programs. Special workshops, a library of resource material, and on-site technical assistance are available to organizations and community agencies. The office works directly with the editor of School-Age Notes in disseminating information to interested individuals and organizations.

CENTER FOR EXTENDED EDUCATION AND PUBLIC SERVICE

Ken J. Looney, Ph.D., 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 which is responsible for coordinating the institution's overall efforts to serve non-traditional students both on and off campus. 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:

1. Off-campus centers and extended credit.
2. Conferences and Institutes.
3. 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 Council.

Units	Departments	Programs
Extended Education & Public Service	Non-Credit Instruction Conferences and Institutes	CEU Courses and Programs - Conferences Institutes and Workshops
	Off-Campus & Distance Education Programs	Credit Courses and Programs

Off-Campus Centers and Distance Education

Shelia Collier, 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, Ransom Teachers Center, McGavock, Whites Creek and Hunters Lane Comprehensive High Schools, 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.

Academic Conferences and Institutes

The Department of Conferences and Institutes provides an opportunity for participants, members of the University community, and highly qualified resource persons to share new information and explore new ideas that will improve their job performance or complement their academic interest. These conferences and institutes are tailored to reflect the needs of the requesting client group.

The format used in short workshops and seminars varies with the type of program, but always is designed and tailored to meet expressed needs of the services groups. Whether credit or non-credit oriented, institutes and conferences are designed by the division to reflect the sponsorship of selected academic schools of the University. With the exception of organized student functions, the Conference Department is the primary contact for scheduling and logistical support for all campus functions.

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

Max J. Young, 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 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. Guidelines of the Southern Association of Colleges and Schools are followed in the presentation of all instruction. Continuing Education Units (CEU), as provided by the Southern Association, are awarded to participants in that selected instruction planned within the Association's guidelines. Institutional records of such learning are maintained by the 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.

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 Powerpoint program. The student will learn to use Powerpoint to create a presentation, modify, work with charts, provide on screen slides, and insert or remove material into Powerpoint.

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. 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 safety involving chemical and biological hazards with university, 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/** on availability and deadlines of external funding sources
- Maintains files on time and effort certifications of PIs
- Coordinates the TSU RISE (Research, Initiation, Supplement and Enhancement) Incentive Program
- Tracks equipment purchased under federal grants and contracts

Strengthening TSU'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 TSUs 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 TSU to conduct scientific and technological research and promote creative activity in education,
- strengthen the Institution'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 TSU students through their meaningful participation in research and special projects.

Tennessee State University conducts research in computer modeling and simulations, 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. TSU in addition, provides creativity in the arts, foreign languages, journalism, public policy, 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.

University Personnel and Instructional Faculty

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COLLEGE OF BUSINESS

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Aeronautical and Industrial Technology

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SCHOOL OF ALLIED HEALTH PROFESSIONS

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Cardio-Respiratory Care Sciences

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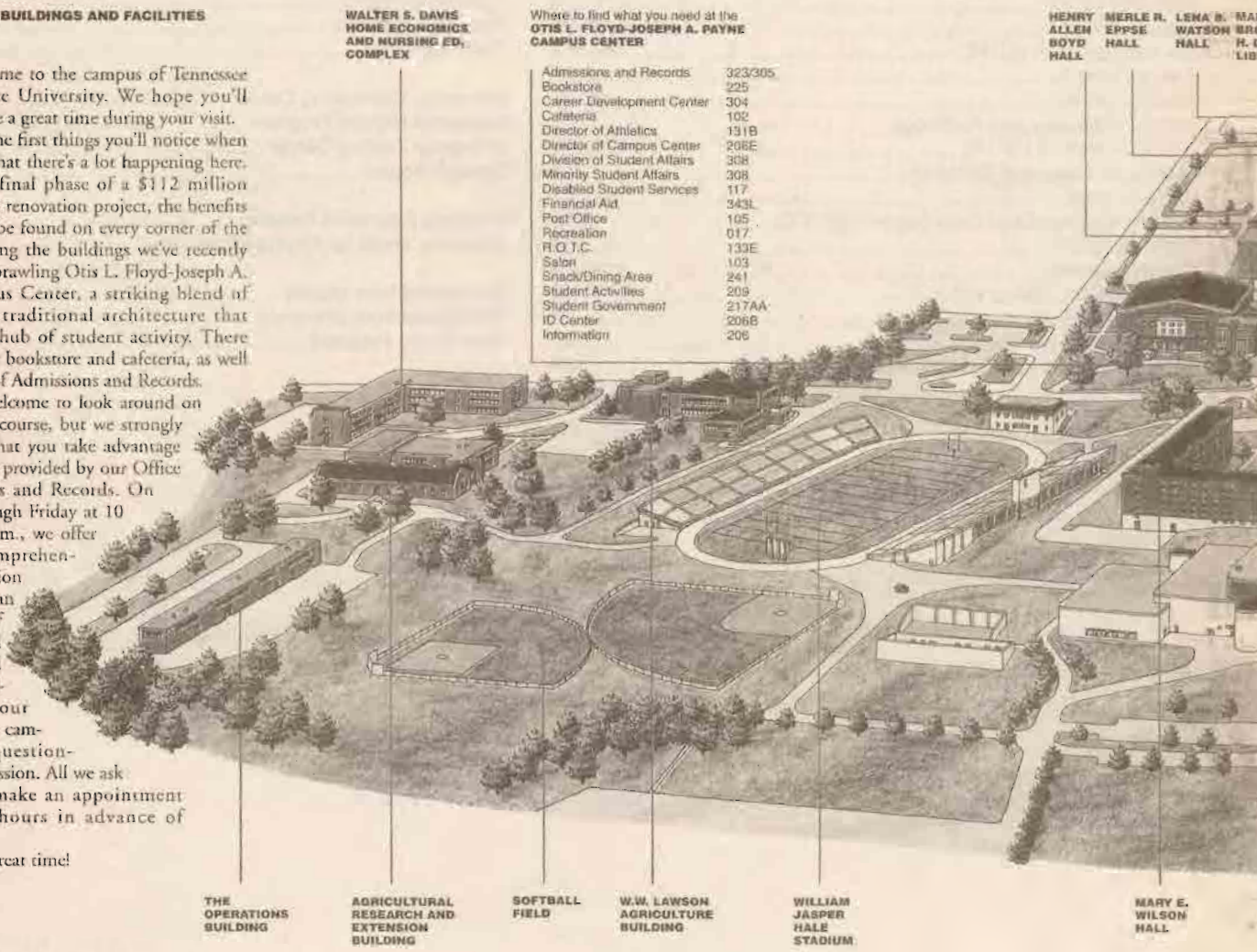
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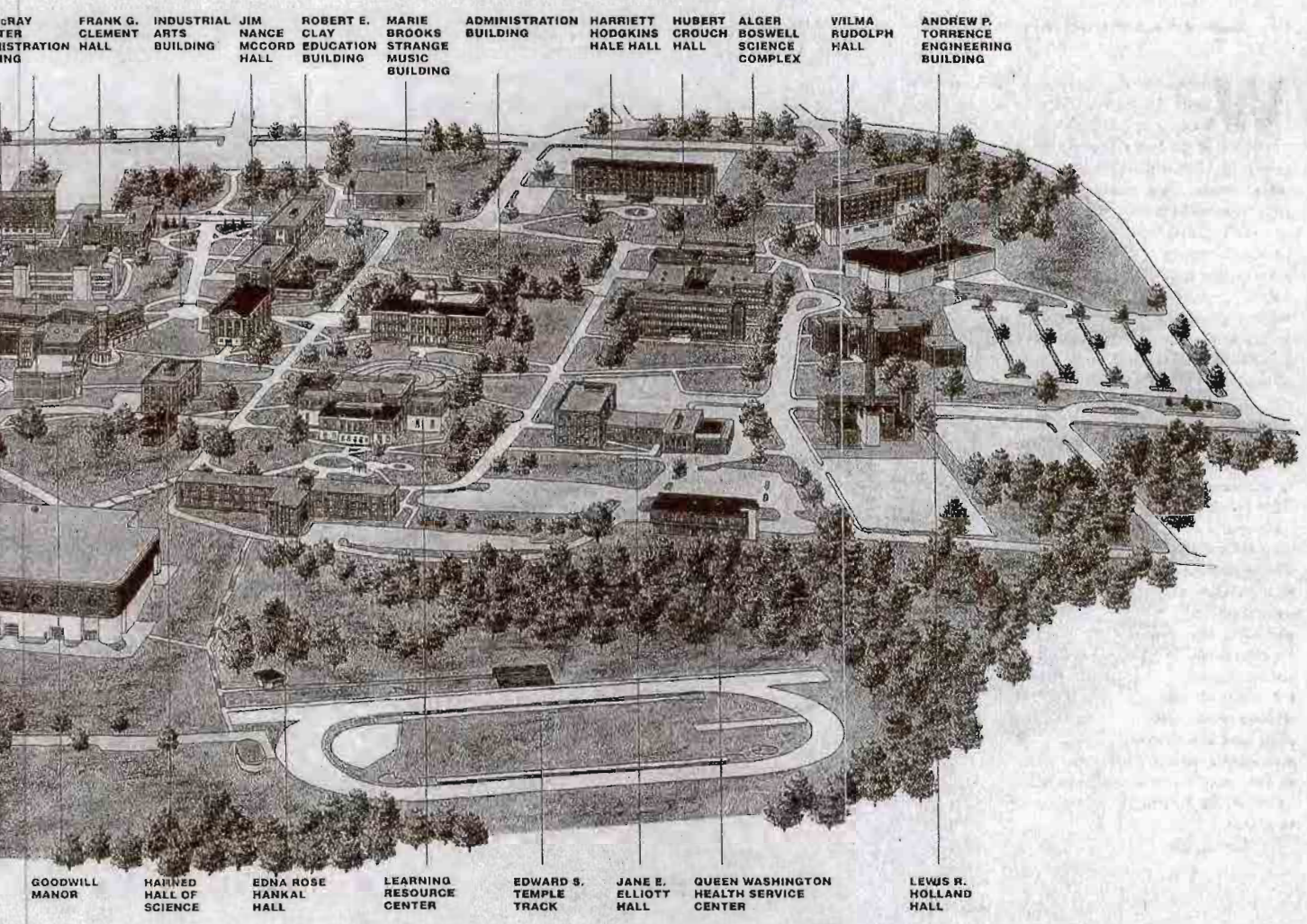
Welcome to the campus of Tennessee State University. We hope you'll have a great time during your visit.

One of the first things you'll notice when you arrive is that there's a lot happening here. We're in the final phase of a $112 million expansion and renovation project, the benefits of which can be found on every corner of the campus. Among the buildings we've recently added is the sprawling Otis L. Floyd-Joseph A. Payne Campus Center, a striking blend of modern and traditional architecture that serves as the hub of student activity. There you'll find our bookstore and cafeteria, as well as the Office of Admissions and Records.

You're welcome to look around on your own, of course, but we strongly recommend that you take advantage of the services provided by our Office of Admissions and Records. On Monday through Friday at 10 a.m. and 2 p.m., we offer visitors a comprehensive presentation that includes an overview of academic and financial aid issues, a guided tour of our 450-acre main campus, and a question-and-answer session. All we ask is that you make an appointment at least 48 hours in advance of your visit.

Have a great time!




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3500 John A. Merritt Blvd.
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1-888-463-6878

UNDERGRADUATE APPLICATION FOR ADMISSION AND READMISSION

Check one: _____New Applicant _____Readmission

Legal Name _____ Social Security Number ___-___-____

Last *First* *Middle Initial*

Not required. If U.S. Social Security Number is unavailable, a Student Identification Number will be assigned. The applicant must retain this number for access to their file.

Previous Full Name(s) If previous transcripts are listed under a different name, please list such name(s).

_____

Last *First* *Middle Initial*

Selective Service All male citizens of the United States of America born in 1960 or thereafter must have registered for the draft prior to registering for classes. This requirement does not apply to veterans and others exempted by federal law. Indicate whether or not you have registered for the U.S. draft. ____Yes ____No ____Exempt

Your completion of the following questions is requested for reporting purposes only. This information will not be used to discriminate against any applicant in the admissions decision process.

Date of Birth _____ Gender: ☐ Male ☐ Female

Race ☐ Asian or Pacific Islander ☐ American Indian ☐ Black ☐ Hispanic

☐ White ☐ Alaskan Indian ☐ Undecided

Did parent/guardian attend or graduate from TSU ? ☐ Yes ☐ No

Permanent Home Address _____

Street *City* *State* *Zip Code*

Permanent Telephone Number ___ ___-____

Area Code *Telephone Number*

Local Mailing Address _____

Street *City* *State* *Zip Code*

Local Telephone Number ___ ___-____

Area Code *Telephone Number*

Emergency Contact _____

Name *Relationship (Optional)* *Area Code* *Telephone Number*

Residency Information **No student shall be deemed to have gained resident classification in the University by his/her mere presence as a student in the state of Tennessee.**

_____

Home County *Permanent Address* *City* *State* *Zip Code*

Have you lived in Tennessee continuously for the past 12 months, and filed tax returns? ___Yes ____No

Have you lived in Tennessee continuously since birth? ____Yes ____No

If "No," state your reason for moving to Tennessee_____

Citizenship Check one: U. S. Citizen: _____Yes _____No _____Visa Type _____Resident Alien

Current Employment Employed: _____Full-time _____Part-time _____Total hours per week

Employer / Telephone Number *Location* *Dates of Employment*

Employer / Telephone Number *Location* *Dates of Employment*

Admission Request

Semester you plan to enter TSU:

___Fall, ___ ___Spring, ___ Summer, ___ ___Summer I ___Summer II

Undergraduate Classification

___Freshman ___Sophomore ___Junior ___Senior
___Readmit ___Special ___Transient ___Transfer

Major

[ ] *See Instruction page* Degree [ ] *Indicate One*

Previous Education

[ ] *High School Name* *City* *State* *Zip*

Date of Entrance [ ] *Month/Date/Year* Date of Graduation [ ] *Month/Date/Year*

General Education Development (GED) [ ] *Month/Date/Year* ACT or SAT [ ] *Month/Date/Year*

List all colleges/universities attended (including TSU):

[ ] *College* *City/State* *Dates Attended*

[ ] *College* *City/State* *Dates Attended*

[ ] *College* *City/State* *Dates Attended*

Academic Fresh Start

Are you currently enrolled? _____Yes _____No

Will you participate in Academic Fresh Start? _____Yes _____No

If yes, give the date of last enrollment [ ] College/university of last enrollment [ ]

Have you ever been dismissed, suspended, or placed on probation at any previously attended college/university?

_____Yes ____No If yes, explain:_____

Application Certification and Agreement

I understand that withholding information requested in this application or giving false information may make me ineligible for admission to Tennessee State University or subject to dismissal. With this in mind, I certify that the information contained herein is correct and complete.

I understand that acceptance as a degree student requires submission of a copy of my high school transcript or GED, official college transcript(s), and placement test or ACT scores. Grades and transcripts of credits will be withheld and registration for subsequent terms may be denied until this requirement is met.

NOTICE: If you are accepted as a student, there are certain performance tests you will be required to take during your academic career. It is a requirement of admission that you agree to take any test deemed necessary by the institution. In those instances in which tests are administered by an external entity, you hereby agree that the results of such tests be released to the institution. The purpose of this requirement is to comply with the Legislature's expressed intent that institutions regularly evaluate and improve instruction at all levels. If you are under 21 years of age and are required by institutional policy to complete the Academic Assessment Placement Program (AAPP) test, your scores on these tests and course placement may be reported to your high school for research purposes. Any test scores will be treated confidentially as required by law.

_____
Signature *Date*

Health Screening Provision: All new and readmitted students born after January 1, 1957 must have proof of measles vaccination or an acceptable immunization document. Your family physician or local health department will need to furnish documented proof of your having immunity or having been immunized after January 1, 1980 unless contraindicated because of pregnancy, allergy to a vaccine component, or valid medical reasons. Failure to receive an official copy of a "Permanent Tennessee Certificate of Immunization" (form PH-2414) or comparable immunization from another state will prevent you from enrolling in Tennessee State University. This form should be mailed to: Student Health Center, Tennessee State University, 3500 John A. Merritt Blvd., Nashville, TN 37209-1561.

FOR OFFICE USE ONLY

ADMISSIONS ACTION: APPROVED _____ DATE_____
NOT APPROVED _____ DATE_____

STATEMENT OF PROCEDURES: All credentials become the property of the University and cannot be forwarded or returned.

Credentials will be maintained in active files for a 12-month period. After this period, credentials will be relegated to inactive status and must be submitted again before an admissions decision can be made.

TENNESSEE STATE University

Office of Admissions and Records
Tennessee State University
3500 John A. Merritt Blvd.
Nashville, Tennessee 37209-1561
1-888-463-6878

UNDERGRADUATE APPLICATION FOR ADMISSION AND READMISSION

INSTRUCTIONS

A $15 non-refundable fee is required of all applicants who have never attended Tennessee State University. Checks or money orders should be made payable to Tennessee State University and submitted with a completed application form to the TSU Office of Admissions and Records. An application will not be processed without the required fee. All supporting documents for admission must be received by the TSU Office of Admissions and Records before acceptance can be granted. ***PLEASE DO NOT SEND CASH.***

FRESHMEN

Those applicants who have never attended a post-secondary education institution must:

1. Forward an official high school transcript covering all academic work completed through the first semester of the 12th grade. A final transcript stating the date of graduation must be submitted the week following graduation.
2. Submit an official report of the ACT (American College Test) or the SAT (Scholastic Aptitude Test) scores.
3. Take the AAPP (Academic Assessment Placement Program) Test, if the composite ACT score or the English and mathematics subtest scores are 18 or below. Applicants whose ACT composite score is 19 or higher but whose English subscore is 18 or lower must complete the AAPP Writing Sample. Applicants whose ACT mathematics subscore is 18 or lower must take the AAPP Test in Arithmetic and the appropriate AAPP Algebra Test as determined by the applicant's level of high school preparation in mathematics. Applicants 21 years or older will be required to complete the entire AAPP Test. The AAPP Test is administered prior to registration for the fall, spring, and summer semesters.
4. Have minimum composite score of 45 on the GED (General Education Development) Test, if 18 years or older and not a high school graduate. Applicant must:
   - Request the testing agency to forward GED results.
   - Request high school or record center to forward official transcript.
5. Have a 2.25 GPA or 19 ACT or 890 SAT, if in-state.
6. Have a 2.50 GPA or 19 ACT or 890 SAT, if out-of-state.
7. Meet the Admissions Unit Requirements, if high school graduation was after June 1989 (see page 2).

TRANSFER STUDENTS

Those applicants who have attended post-secondary education institutions prior to applying to Tennessee State University must:

1. Submit two official transcripts from each college/university attended.
2. Submit an official AAPP 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 AAPP subtest in mathematics and/or English if the ACT subscore(s) in the subject(s) is not acceptable, and if college credit has not been earned in English and/or mathematics.

AUDIT STUDENTS

Those applicants who wish to take a course without receiving credit must:

1. Submit a transcript from the last college/university attended.

SPECIAL STUDENTS

Those applicants who do not wish to receive a baccalaureate degree must:

1. Submit an official high school transcript or equivalent or college/university attended.
2. Take the AAPP test in English and/or mathematics prior to enrolling in these areas, if the first college-level course in English and/or mathematics has not been completed.

TRANSIENT STUDENTS

Those applicants who are enrolled in another institution and desire admission for a limited period, usually one semester, must:

1. Submit a letter of good standing from the college/university of current attendance.

INTERNATIONAL STUDENTS

Those applicants seeking admission from another country 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 and freedom from tuberculosis.
6. Submit official transcripts from colleges/universities attended in the United States.
7. Copies of visa and Alien Registration Card.

READMISSION STUDENTS

Former students who were not enrolled in TSU during the previous fall or spring semester must:

1. Submit an application for readmission.
1. Submit official transcripts from all colleges/universities attended since last enrollment at TSU.
3. Consult the University catalog for eligibility if suspended from TSU.

ACADEMIC FRESH START

For persons who have not been enrolled in any institution of higher learning for the four years just prior to this application for admission to TSU. Academic Fresh Start must be declared on this application. Upon completing 40 semester hours, these persons may petition to have grades on all courses prior to the 40 semester hours disregarded in calculating the cumulative grade point average. The dean of the college/school in which the student is pursuing a major should be contacted for additional information.

Housing Note: A housing application cannot be processed until the admission application is approved.