## Tennessee State University



Olndergraduate Catalog 2007-2009


## Undergraduate Catalog 2007-2009

## Tennessee State University

## A Tennessee Board of Regents Institution

VOL. LXXI-2007-2009

The provisions of this catalog do not constitute a contract between a student at TSU and the University. The sole purpose of the catalog is to provide regulations, course listings and degree programs which are in effect at the time of publication. TSU reserves the right to change the regulations in this catalog at any time during the period for which it is in effect and to add, modify, or withdraw courses at any time. All changes will be published under the TSU webpage at www.tnstate.edu

## 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 admissions and graduation, financial aid information, student services and housing.

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

Students who have already made decisions concerning the area of study in which they are interested, such as English, Mathematics, 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 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 department heads. Those students with specific questions concerning specialized areas of study should consult with each specific department.

The TSU UNDERGRADUATE CATALOG is published biennially by Tennessee State University,

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Nashville, Tennessee 37209-1561

## 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 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 nonracially identifiable student body.

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Nashville, Tennessee 37209-1561
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Tennessee State University10th and Charlotte AvenuesNashville, Tennessee 37203-3401

## GENERAL INFORMATION

- Historical Statement
- Statement of Vision
- Statement of Mission
- Statement of Purpose
- The Campus
- General Fee Information
- Program Accreditation and Institutional Memberships
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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 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 five colleges: The College of Arts and Sciences, The College of Business, The College of Education, The College of Engineering and Technology, The College of Health Sciences; and three schools: The School of Agriculture and Consumer Sciences, , 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.

## Vision Statement

Tennessee State University aspires to achieve national and international prominence, building on its heritage and preparing leaders for a global society.

## Mission Statement

Tennessee State University, an Historically-Black College/University (HBCU), fosters scholarly inquiry and research, life-long learning, and a commitment to service.

## Core Values

Tennessee State University maintains the following core values:

- Excellence - Shared governance
- Learning • Diversity
- Accountability • Service
- Integrity


## Statement of Purpose

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

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

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

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

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

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

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

## 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 Center for Extended Education and Public Service, the College of Public Service and Urban Affairs, the College of Business, the Testing Center and departmental office, programs, and courses for of the Colleges of Arts \& Sciences, Education, and Health Sciences. Other facilities include faculty offices, classrooms, lecture halls, computer laboratories, library, and a 400-seat auditorium. Daytime and evening classes are available at the Williams campus.

## Major Buildings-Main Campus

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

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

The James E. Farrell and Fred E. Westbrook Agricultural Complex (The Barn) is located behind the Lawson Agriculture Building. Extensive 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 and 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. 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 College of Health Sciences, 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 Criminal Justice; History, Geography, and Political Science. The program of Modern Foreign Languages, along with the language laboratory, is located in the building.

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

The Jane E. Elliott Hall (also known as the Women's Building) is located west of the Learning Resources Center, on the north side of campus. The building contains laboratories, lecture rooms, faculty offices and 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, 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 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 Tom Jackson Industrial Arts Building, renovated in 1999, is located at John A. Merritt Boulevard and 35th Avenue. Instructional staff offices for the Department of Aeronautical and Industrial Technology are in this building. This facility also houses The School of Allied Health Professions Departments of CardioRespiratory 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 and renovated in 2002 to include the new Performing Arts Building, contains the offices of the Department Heads and faculty of the Music and Communications Departments, classrooms, listening laboratories, studios for piano and instrumentation, an auditorium seating 400 and a recital hall seating 226. It is located at the south end of the campus near 35th and Alameda.

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

The Harold M. Love (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 Elliott Hall (the Women's Building).


## General Fee Information

Tennessee State University reserves the right to increase the charges listed herein or to add new fees whenever such increases or additions become necessary. All fees and housing rents detailed below are those approved for the academic year 2007-2008 and are subject to change by action of the Tennessee Board of Regents. The listing of any fee or incidental charge in this catalog in no way constitutes a contract between the University and the student. As a condition of registration, each student must pay the appropriate fees in effect at the time of registration. Bills will not be mailed. Students access myTSU@http://myTSU.tnstate.edu to view account balances. Fees assessed at the time of registration are subject to audit and correction at a later date. For fees for subsequent years please visit the TSU website at http://www.tnstate.edu/interior.asp?mid=413\&ptid=1

The Office of Admissions and Records determines a student's residency classification for fee-paying purposes. If a student is incorrectly classified, he/she will be charged 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. Use "myTSU" to make payments by personal check and credit card (MasterCard or Visa only), unless otherwise specified.

## Registration and Other Fees

NOTICE: The fee amounts listed below are those approved for the 2007-2008 academic year. Fees for the 2008-2009 and 20092010 academic years will be published on the University's website when approved by the Tennessee Board of Regents.

## REGISTRATION FEES:

All fees are subject to change by the Tennessee Board of Regents. Changes, if made, will be effective July 1, 2008 and/or July 1, 2009
$\left.\begin{array}{ccc} & \text { In-State } & \text { Out-of State } \\ \begin{array}{c}\text { Full-time: } \\ \text { Undergraduate } \\ \text { (12+ hours) }\end{array} & \begin{array}{c}\$ 2,443 / \\ \text { semester }\end{array} & \begin{array}{c}\$ 7,581 / \\ \text { semester } \\ \text { Graduate }\end{array} \\ \begin{array}{c}\$ 3, \text { hours) }\end{array} & \text { semester }\end{array} \quad \begin{array}{c}\$ 8,275 / \\ \text { semester }\end{array}\right]$

## Additional Part-Time Registration Fees:

Student Government ...................................... $\$ 3 /$ semester
$\qquad$
Debt Service ......................................... $\$ 8 /$ hour ( $\$ 89$ max)
Post Office Box
$\$ 15$ term for 7+ credit hours
(Non-refundable)
Business Course Fee \$20/hr
(This fee is required for all business courses except Business Orientation, Principles of Economics I and Introduction to Statistical Analysis II)
General Access Fee:
Undergraduate
\$12/hr.plus \$95.00
Graduate
\$14/hr.plus \$107.00

| Regents On-Line Degree (RODP) | Registration Fees: |  |
| :--- | :--- | :--- |
|  | $\underline{\text { In-State }}$ | $\underline{\text { Out-of State }}$ |
| Undergraduate | $\$ 178.00 / \mathrm{hr}$ | $\$ 624 / \mathrm{hr}$ |
| Graduate | $\$ 288.00 / \mathrm{hr}$ | $\$ 734 / \mathrm{hr}$ |

## Additional REGENTS ON-LINE DEGREE Fee:

Undergraduate ........................................................ \$71/hour
Graduate................................................................\$71/hour
RODP students must pay for every hour, even if their total hours exceed full-time status (i.e., twelve hours for undergraduates or nine for graduates). RODP students are not required to pay student government, post office, debt service, general access, or student activity fees. If RODP students desire to attend campus activities, they may request to pay the additional student activity fee.

## Residence Facility Fees:

|  | On-Campus |  |
| :--- | :--- | :--- |
| Sale/Rudolph |  |  |
| Single(per semester) | $\$ 2,840$ |  |
| Residence |  |  |

## Meal Plans:

19 meals + \$100 ..... \$1,110
10 meals + \$100 .....  $\$ 980$
5 meals + \$50 .....  $\$ 460$

Residents of on-campus 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 10meal plan is the minimum required for on-campus students with 30 or more hours earned.

## Other Fees:

Orientation Fee \$40
International Student $\qquad$ . $30 /$ semester; $\$ 0$ summer Developmental Courses-Maintenance..............Fee \$101/hr Science Lab Materials Fee ....................................... \$ 5/hr

## Other Applicable Charges

FEES SUBJECT TO CHANGE WITHOUT NOTICE:
Application (non-refundable): Undergraduate/Graduate $\$ 25.00$
Breakage Deposit (Chemistry course) \$15.00
Child Care (per term):
Main Campus
\$88.00/wk
Avon Williams Campus: First Child \$2.75/hr Each Additional Child $\quad \$ 2.25 / \mathrm{hr}$ Late Pick Up $\$ 1 /$ minute Application


Class Audit same as for credit
Diploma Mailing Fee $\$ 7.00$
Graduate Comprehensive Exam $\$ 15.00$
Graduate Oral Exam $\quad \$ 15.00$

Housing/Room Deposit (non-refundable) \$100.00
I.D. Card Replacement (non-refundable) $\$ 10.00$

Incomplete Project Writing (after three semester hours) \$25.00
Incomplete Thesis Writing (after four semester hours) $\quad \$ 25.00$
Late Registration Fee $\$ 100.00$

| Music, Voice and Instrument Lessons | \$100.00/course |
| :---: | :---: |
| Parking Decal Replacement | \$2.00 |
| Proctored Test Fees: |  |
| Paper | \$20.00 (per test) |
| Computer: (RODP \$0.00) |  |
| First Hour | \$20.00 |
| Each additional quarter-hour | \$5.00 |
| PPST (\$125-combined test; \$75.00-one part; \$145-three parts) |  |
| Returned Check Charge | \$30.00 |
| Room and Board Deferment | \$15.00 |
| Testing (non-refundable): |  |
| ACT (Residual) | \$38.00 |
| Credit by Exam | \$15.00/per hour |
| CLEP Test | \$80.00 |
| (\$60 payable to CLEP and |  |
| \$20 payable to TSU \$10.00 fee for essay |  |
| with Freshmen College Composition.) |  |
| GED: |  |
| Test (\$65 for complete, \$13 for each part) | \$65.00 |
| Re-Take | \$7.00 |
| Score Report (per report) | \$3.00 |
| Score Report Special Handling | \$5.00 |
| DANTES Test | \$90.00 |
| (\$70 money order payable to Dantes and |  |
| \$20 payable to TSU, and pre-paid FedEX |  |
| or \$15 to cover cost of postage.) |  |
| GRE - General | \$130 |
| TOEFL | \$140.00 |
| NCLEX | \$28.00 |
| NLN - Single Exam | \$8.00 |
| NLN - Comprehensive- Associate Degree | \$40.00 |
| NLN - Comprehensive-Baccalaureate Degree | \$48.00 |
| MAT | \$50.00 |
| NET | \$30.00 |
| Speech Pathology \& Audiology Courses (per term): |  |
| Diagnostic | \$0.00-\$65.00* |
| Therapeutic | \$0.00-\$60.00* |
| Dissertation: |  |
| Binding | \$55.00 |
| Copyright | \$65.00 |
| Microfilming | \$55.00 |
| Thesis: |  |
| Microfilming | \$45.00 |
| Binding | \$55.00 |
| TSU Deferment Plan | \$25.00 |

*No charge for employees/students. Some patients on sliding fee scale.
NOTE: Additional charges may be assessed for courses that require materials and supplies in excess of the average required for other courses within the department.

## Application Fee

A one-time non-refundable fee of $\$ 25.00$ is charged to any individual who applies for undergraduate admission or for graduate admission. (Since these are one-time fees, there is no additional undergraduate reapplication fee and no additional graduate reapplication fee.)

## New Student Orientation Fee - $\mathbf{\$ 4 0 . 0 0}$

A one-time non-refundable fee of $\$ 40.00$ is charged to undergraduates enrolled for 12 or more hours for credit their first semester (or 6 credit hours if the first enrollment occurs in a summer term). All other undergraduates are charged this one-time fee after they have accumulated 36 semester hours.

## Late Registration Fee - $\$ 100.00$

Students who complete registration during the late registration period will be charged a $\$ 100.00$ 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.

## General Access Fee

The General Access Fee consists of the Technology Access Fee, Graduation Fee, and Student Parking Permit Fee. (The Technology Access Fee provides computer labs, network access and other computer support to students.) No separate assessment for these items will be made. Parking is $\$ 60.00$ plus applicable taxes for faculty/staff.

## Returned Check Charge - \$30.00 Per Check

Students with proper identification may pay fees by personal check. Personal checks will not be accepted for students who have returned checks. A $\$ 30.00$ returned check fee will be assessed on all returned checks in addition to a $\$ 100.00$ late fee, if applicable.

## Library Fines

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

## Class Audit Fees

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

## Traffic Fines

All fines imposed by the University for parking and traffic violations must be remitted to the Bursar's Office.

## 65-Year-OId/Disabled Student Credit

In accordance with T.C.A. Section 49-7-113, persons 65 years of age or older and persons permanently and totally disabled who are domiciled in Tennessee may register for classes for credit on a space-available basis after regular registration is completed by paying a minimum registration fee. The fee is one-half the semester hourly rate, up to a maximum of $\$ 70.00$. No late fee is charged. An application fee 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.

## FINANCIAL REGULATIONS

No student is allowed to register or obtain grades, diplomas, degrees or transcripts until all accounts are paid. A student is not officially enrolled until all fees are paid or covered by appropriate third parties. Balances are subject to collection. The student is responsible for all attorney fees and other reasonable collection costs and charges necessary for the collection of any amount not paid when due. Any default on payments may be disclosed, along with other relevant information, to collection agencies and credit bureau organizations.

## Refund of Fees

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

## Fall and Spring Semesters

Students who withdraw from the University before the first day of classes will be refunded $100 \%$ of fees assessed. Those who withdraw within 14 calendar days from the first day of classes for the Fall and Spring terms will be refunded $75 \%$ of their registration fees. Those withdrawing after the 14th day, but before $25 \%$ of the time period covered by the term has passed, will be refunded $25 \%$ of their fees. No 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

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

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

## Refunds of Housing Expenses

## Rent

Full rent will be refunded if:

1. The student is prevented from entering or returning to the University because of medical reasons confirmed in writing by a licensed physician.
2. The student is denied admittance or re-entry to the University or the residence halls.
3. Residence hall space is not available.

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

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

## Housing/Room Deposit

A $\$ 100.00$ non-refundable housing deposit is required for all students who apply for university housing. The non-refundable deposit is paid once a year to reserve an on-campus housing space for the upcoming academic year. The $\$ 100$ is deducted from the housing fee for the fall semester or whichever term is applicable. Charges for damage, defacement or missing fixtures and/or furnishings or cleaning in excess of the housing deposit will be assessed to the student.

## Appeals Procedures for Fees and Refunds

A student may appeal the assessment, application calculation or interpretation of any University fee, charge, deposit or refund or any University action connected with fees or charges. Questions should be discussed with personal in the Bursar's Office. A written appeal can be made to the Office of the Vice President for Business Affairs. His/her determination may be appealed to the President of the University, whose decision will be final.

## All Student Financial Aid Recipients

A student who received Federal Financial Aid assistance and withdraws officially or unofficially from the university must return any unearned funds to the Student Financial Aid Programs. The institution must calculate the amount of the funds that were unearned, up through the $60 \%$ point in each payment period or period of enrollment. A pro rata schedule will be used to determine how much SFA Program funds that a student has earned at the time of withdrawal. NOTE: The amount of refundable (or balance outstanding) institutional charges will be set by the University policy. If there is a balance owed from these adjustments, the student is responsible for payment.

## 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 aid of all its students, students are urged to investigate and seek aid from outside the University. Fair and equal consideration is given to all applicants without regard to race, color, sex, handicap, or religious beliefs.

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

- Meet program eligibility requirements
- Be enrolled or accepted for enrollment in a degree seeking program on at least a half time basis
- Comply with selective service and anti-drug requirements
- Not be in default on a loan or owe a repayment to a Federal Title IV Program
- Make Satisfactory Academic Progress


## Sources of Federal Aid

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

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

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

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

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

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

Parent Loans 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.

Tennessee Educational Lottery Scholarship - Provides scholarships to Tennessee residents who meet specific requirements (see our website www.tnstate.edu click on Financial Aid page for link to requirements). As a Tennessee Lottery Scholarship recipient you are required to remain in school on a continuous basis to stay eligible. If you enroll and withdraw or change your enrollment status anytime during the semester, you risk losing eligibility for the scholarship completely.

## Standard of Satisfactory Progress for Financial Aid

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.

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

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

Even though all students will be given (1) 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/2-time 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 5.5 increments but less than 6 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 120 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 U.S. Department of Education'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 6 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 6 year maximum, if the student has not received his/her bachelor's degree. If a student matriculates for 6 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 | MINIMUM GPA |
| Full time | 1st | 22 | 1.4 |
|  | 2nd | 44 | 1.7 |
|  | 3rd | 66 | 1.9 |
|  | 4th | 88 | 2.0 |
|  | 5th | 110 | 2.0 |
|  | 6 th | 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 |
|  | 3 rd | 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 |

## All Student Financial Aid Recipients

A student who received Federal Financial Aid assistance and withdraws officially or unofficially from the university must return any unearned funds to the Student Financial Aid Programs. The institution must calculate the amount of the funds that were unearned, up through the $60 \%$ point in each payment period or period of en-
rollment. A pro rata schedule will be used to determine how much SFA Program funds that a student has earned at the time of withdrawal. NOTE: The amount of refundable (or balance outstanding) institutional charges will be set by the University policy. If there is a balance owed from these adjustments, the student is responsible for payment.

## THE UNIVERSITY

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

## Program Accreditations

## Art

Chemistry
Music
Social Work
Business
Education

Engineering
Aeronautical and Industrial Technology
Family \& Consumer Sciences

Cardio-Respiratory Care Sciences
Dental Hygiene
Health Care Administration and Planning Health Information Management

Medical Technology
Occupational Therapy
Speech Pathology and Audiology
Nursing
Physical Therapy

National Association of Schools of Art \& Design
American Chemical Society
National Association of Schools of Music
The Council on Social Work Education
AACSB-The Association to Advance Collegiate Schools of Business
National Council for Accreditation of Teacher Education (NCATE)
American Psychological Association (APA)
Accreditation Board for Engineering and Technology
National Association of Industrial Technology
Council for Accreditation of the American Association of Family and Consumer Sciences
Accreditation of Allied Health Education Programs
Commission on Dental Accreditation
Association of University Programs in Health Administration
Commission on Accreditation of Allied Health Education Programs in collaboration with the Council on Education of the American Health Information Management Association
National Accrediting Agency for Clinical Laboratory Sciences
Accreditation Council for Occupational Therapy Education
Council of Academic Accreditation of the American Speech-Language-Hearing Association
National League for Nursing Accreditation Commission
Accreditation in Physical Therapy Education


## INSTITUTIONAL MEMBERSHIPS

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


## Undergraduate Degree Programs

Tennessee State University is authorized to grant the following undergraduate degrees:
School/College
Agriculture and
Consumer Sciences

| Program | Degree(s) |
| :--- | :--- |
| Agricultural Sciences | B.S. |
| Family Consumer Sciences | B.S. |
| Early Childhood Education | B.S. |

Arts and Sciences

Education

Engineering

Health Sciences

Nursing
Public Service and Urban Affairs

Africana Studies
Art
Arts and Sciences
Biology
Chemistry
Criminal Justice
English
Foreign Languages
History
Interdisciplinary Studies
Mathematics
Music
Physics
Political Science
Professional Studies
Social Work
Sociology
Speech Communication and Theatre
Accounting
Business Administration
Economics and Finance
Business Information Systems
Human Performance and Sport Sciences
Psychology

Aeronautical \& Industrial Technology B.S.
Architectural Engineering
Civil Engineering
Computer Science
Electrical Engineering
Mechanical Engineering
Cardio-Respiratory Care Sciences
Dental Hygiene
Health Care Administration and Planning
Health Information Management
Health Sciences
Medical Technology
Occupational Therapy
Speech Pathology and Audiology
Nursing
Urban Studies
B.S.
B.S.
B.S.
B.S.
B.S.
B.S.
B.A.
B.A.
B.A.
B.I.S.
B.S.
B.S.
B.S.
B.S.
B.P.S
B.S.
B.S.
B.A., B.S.
B.B.A.
B.B.A.
B.B.A.
B.B.A.
B.S.
B.S.
B.S.
B.S.
B.S.
B.S.
B.S.
B.S.
A.A.S., B.S.
B.S.
B.S.
B.S.
B.S.
B.S.
B.S.
A.A.S., B.S.N.
B.S.

## 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 desig-nated-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.

Deans: 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

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 Family and Consumer Sciences, 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.

## ACADEMIC CALENDAR, 2007-2008

FALL SEMESTER, 2007- for updated schedule see http://www.tnstate.edu/interior.asp?mid=856\&ptid=1

| Aug | 16-17 | Faculty/ Staff Institute |
| :---: | :---: | :---: |
| Aug | 22-24 | Registration |
| Aug | 27 | Classes begin |
| Aug | 27-Aug 31 | Late registration/Schedule Adjustment |
| Sept | 3 | Holiday-Labor Day |
| Sept | 11 | Opening Convocation |
| Oct | 13-16 | Fall Break**( includes weekend preceding) |
| Oct | 22-28 | Mid-term Examination Week |
| Nov | 7 | Last day to withdraw from courses-Office of Records |
| Nov | 7 | Last day to withdraw from UniversityCounseling Center |
| Nov | 22-25 | Holiday-Thanksgiving (Includes weekend) |
| Dec | 6 | Last day of classes |
| Dec | 7-14 | Final examinations for Fall 2007 semester*** |
| Dec | 15 | Commencement |
| Dec | 18 | Faculty must have posted all grades via "MyTSU" |
| SPRING SEMESTER, 2008 |  |  |
| Jan | 2 | University Re-opens-8:00 a.m. |
| Jan | 7-8 | Faculty Institute |
| Jan | 8-11 | Registration |
| Jan | 14 | Classes begin |
| Jan | 14-18 | Late registration/Schedule Adjustments |
| Jan | 21 | Holiday |
| Mar | 3-9 | Spring Break |
| Mar | 10-16 | Mid-term Examination Week |
| Mar | 28 | Last day to withdraw from courses-Office of Records |
| Mar | 28 | Last day to withdraw from UniversityCounseling Center |
| Mar | 21 | Holiday |
| Apr | 24 | Last day of class |
| Apr | 25-May 2 | Final examinations for Spring 2008 semester |
| May | 3 | Spring Commencement |
| May | 6 | Faculty must have posted all grades via "MyTSU" |

SUMMER SEMESTER, 2008 10 week Session
tba Early registration begins for Summer and Fall 2007 semesters
May 29-30 Registration-All Summer Sessions
June 2 Classes begin
June 2 Late registration/Schedule Adjustments
July 4 Holiday
July 7 Last day to withdraw from 10 week courses-
Office of Records
Last day to withdraw from UniversityCounseling Center
Last day of classes
Summer Commencement
Faculty must have posted all grades via "MyTSU"

1st Five Week Session- Summer 1
\(\left.\left.$$
\begin{array}{lll}\text { May } & 29-30 & \begin{array}{l}\text { Registration-All Summer Sessions-(See } \\
\text { class Schedule for details) } \\
\text { Classes begin }\end{array} \\
\text { June } & 2 & \begin{array}{l}\text { Late registration/Drop/Add } \\
\text { June } \\
\text { June }\end{array} \\
\text { Last day to withdraw from First-session } \\
\text { courses-Records }\end{array}
$$\right] \begin{array}{l}Last day to withdraw from University- <br>

June\end{array} 20 \quad $$
\begin{array}{l}\text { Counseling Center }\end{array}
$$\right]\)| Last day of classes |
| :--- |
| July |
| July |
| July |

2nd Five Week Session-Summer II

| July | 7 | Classes begin <br> July |
| :--- | :--- | :--- |
| Late registration/Drop/Add for Summer II |  |  |
| July | 2 | Last day to withdraw from Second-session <br> courses-Records <br> Last day to withdraw from University- <br> Counseling Center |
| July |  | Last day of classes |
| Aug | 8 | Summer Commencement <br> Aug <br> Faculty must have posted all grades via <br> "MyTSU" |
| Aug | 12 |  |

## ACADEMIC CALENDAR, 2008-2009

FALL SEMESTER, 2008

| Aug |  | Faculty Institute |
| :--- | :--- | :--- |
| Aug | $20-22$ | Registration |
| Aug | 25 | Classes begin |
| Aug | $25-29$ | Late registration/Schedule Adjustment |
| Sept | 1 | Holiday-Labor Day |
| Sept | 9 | Opening Convocation |
| Oct | $11-14$ | Fall Break**- Including weekend |
| Oct | $20-26$ | Mid-term Examination Week |
| Nov | 7 | Last day to withdraw from courses-Office of <br>  |
|  | Records <br> Last day to withdraw from University-Counsel- <br> ing Center |  |
| Nov | $27-30$ | Holiday-Thanksgiving (including weekend) |
| Dec | 4 | Last day of classes |
| Dec | $5-12$ | Final examinations for Fall 2008 semester*** |
| Dec | 13 | Commencement <br> Dec |
|  |  | Faculty must have posted all grades via |
|  |  | "MyTSU" |

## SPRING SEMESTER, 2009

| Jan | 2 | University Re -opens-8:00 am |
| :---: | :---: | :---: |
| Jan | 8-9 | Faculty/Staff Institute |
| Jan | 13-17 | Registration |
| Jan | 19 | Holiday |
| Jan | 20 | Classes begin |
| Jan | 20-23 | Late registration/Schedule Adjustments |
| Mar | 9-15 | Spring Break |
| Mar | 16-22 | Mid-term Examination Week |
| Mar | 31 | Last day to withdraw from courses-Office of Records |
| Mar | 31 | Last day to withdraw from University-Counseling Center |
| Apr | 10 | Holiday |
| Apr | 30 | Last day of class |
| May | 1-8 | Final examinations for Spring 2008 semester |
| May | 9 | Spring Commencement |
| May | 12 | Faculty must have posted all grades via "MyTSU" |

SUMMER SEMESTER, 2009
Full 10 week Session

| May | $28-29$ | Registration-All Summer Sessions <br> June <br> Classes begin |
| :--- | :--- | :--- |
| June | 1 | Late registration/Schedule Adjustments <br> July |
| 6 | Holiday( July 4th is on Saturday)Check with <br> HR <br> Last day to withdraw from 10 week courses- <br> July | 10 |
| Office of Records |  |  |

1st Five Week Session- Summer 1

| May | 29-30 | Registration-All Summer Sessions-(See class Schedule for details) |
| :---: | :---: | :---: |
| June | 1 | Classes begin |
| June | 1 | Late registration/Drop/Add |
| June | 19 | Last day to withdraw from First-session courses-Records |
| June |  | Last day to withdraw from University-Counseling Center |
| July | 3 | Last day of classes |
| July | 7 | Faculty must have posted all grades via "MyTSU" |
| Aug | 8 | Summer Commencement |
| 2nd Five Week Session-Summer II |  |  |
| July | 7 | Classes begin |
| July | 7 | Late registration/Drop/Add for Summer II |
| July | 24 | Last day to withdraw from Second-session courses-Records |
| July |  | Last day to withdraw from University-Counseling Center |
| Aug | 7 | Last day of classes |
| Aug | 8 | Summer Commencement |
| Aug | 11 | Faculty must have posted all grades via "MyTSU" |

For updated schedules see http://www.tnstate.edu/interior.asp? mid=856\&ptid=1

## 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 such as official high school transcripts showing proof of graduation and receipt of a diploma 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)

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

Social Studies, including world history, ancient
history, modern history, world geography,
European history
United States History

## A single Foreign Language

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

## ADVANCED PLACEMENT CREDIT

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

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

| SUBJECT | SCORE | CRS | RELATED COURSE(S) |
| :---: | :---: | :---: | :---: |
| History of Art | 3,4 | 3 | Art 1012 |
| Biology | 3 | 4 | BIOL 1010, 1020 or 1030 w/lab |
|  | 4,5 | 8 | BIOL 1110 \& 1120 w/lab |
| Chemistry | 3 | 3 | CHEM 1010 w/lab |
| Lang \& Comp. | 3 | 3 | ENGL 1010 |
|  | 4,5 | 6 | ENGL 1010 \& 1020 |
| French | 3 | 3 | FREN 1010 |
|  | 4,5 | 6 | FREN 1010 \& 1020 |
| Gov't Politics | 3 | 3 | POLI 2010 |
| Comparative | 4,5 | 6 | POLI 2010 \& 2040 |
| European Hist | 3 | 3 | HIST Elective |
|  | 4,5 | 6 | HIST Elective |
| United States | 3 | 3 | HIST 2010 |
|  | 4,5 | 6 | HIST 2010 \& 2020 |
| Calculus (ab) | 3 | 3 | MATH 1830 |
|  | 4,5 | 6 | MATH 1830 \& 1140 |
| Calculus (bc) | 3 | 3 | MATH 1830 \& 1140 |
|  | 4,5 | 9 | MATH 1830, 1140 \& 1710 |
| Theory | 3,4,5 | 2 | MUSC 1010 |
| Listen \& Lit. | 3 | 3 | MUSC 140 |
|  | 4,5 | 5 | MUSC 1010 \& 1400 |
| Physics | 3 | 3 | PHYS 2010 w/lab |
| (B) Mechanics | 4,5 | 6 | PHYS 2010 \& 2030 w/lab |
|  | 3 | 3 | PHYS 2010 w/lab |
| (C) Elect/Mag | 4,5 | 8 | PHYS 3110 \& 3120 |
| Language | 3 | 3 | SPAN 1010 |
|  | 4,5 | 6 | SPAN 1010 \& 1020 |
| Computer Sci | 3 | 3 | COMP 1210 |
| CS (A) | 3 | 3 | COMP 1210 |
| CS (AB) | 4,5 | 6 | COMP 1210 \& 2110 |
| Economics | 3 | 3 | ECON 2010 |
|  | 4,5 | 6 | ECON 2010 \& 2120 |
| Spanish | 3 | 3 | SPAN 1010 |
|  | 4,5 | 4,5 | SPAN 1010,1020 |
| Psychology | 3 | 3 | PSYC 2010 |
|  | 4,5 | 6 | PSYC 2010 \& 2020 |

## First-time Freshmen General Requirements

1. All students are required to submit an application for admission and a $\$ 25$ 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 2005-2007:
A. ACT Score of 19 or 900 and above on the SAT, or
B. Minimum grade point average of 2.25 on a 4.00 system and
C. Must pass the Tennessee Proficiency Examination, and
D. Must have completed 14 High School State Board of Regents Unit requirements.

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

NOTE 2: An applicant over the age of 21, who fails to meet the required grade point average may be admitted by attaining the required ACT score of 19.

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 2005-2007.
A. ACT Score of 19 or 900 and above on the SAT, or
B. Minimum grade point average of 2.50 on a 4.00 system and
C. Must have completed 14 High School State Board of Regents Unit requirements.

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 19.

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

## Admission by Exception

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

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

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

## Regulated Admission

1. Applicants will be given consideration for admission on a regulated basis if they 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 must meet the following requirements:
A. Be 18 years of age.
B. Submit a GED Report showing a composite score of 450/45 or above and an official High School Transcript.
C. Take the ACT/SAT. Applicants who are 21 years of age or older and meet the required GED score are exempt from taking the ACT/SAT.
D. Remove high school deficiencies within 64 hours after initial enrollment. (Applicants who received a GED in 1989 and thereafter are considered to have met all high school unit requirements except Foreign Language.)
E. GED recipients must take the COMPASS and/or ACT test for placement purposes.

## High School Deficiency Removal

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

| High School | Requirements | TSU Deficiency Removal |
| :---: | :---: | :---: |
| English | 4 | Take COMPASS Test and abide by placement |
| Algebra I ment | 1 | Take COMPASS Test and abide by place- |
| Algebra II ment | 1 | Take COMPASS Test and abide by place- |
| Advanced Math | 2 | DSMA 099 |
| Nat/Phy Sci. | 2 | BIOL 1010 \& Lab, Chem 101+100 Lab CHEM 1010+1011, CHEM 1020+1021, BIOL 1110 \& Lab, BIOL 1120 \& Lab, BIOL 2210 \& Lab, BIOL 2220 \& Lab (1 or 2 courses may be needed) |
| U. S. History | 1 | History 2010 |
| Social Studies | 1 | Enroll in HIST 1210, HIST 1220, HIST 1211, HIST 1221 |
| Foreign Lang. | 2 | FREN 1010 \& 1020, GR 1010 \& 1020, SPAN 1010 \& 1020 ( 1 or 2 courses may be needed) |
| Visual/ <br> Performing Arts | 1 | ART 1012, ART 135O, HPER 1022, THTR 1010 |

Must earn grade of " $C$ " or better.

## Placement

All first-time freshman students under the age of twenty-one (21) are required to submit their American College Test (ACT) or Scholastic Aptitude Test (SAT) scores as a condition for admission. ACT sub-scores in Reading, Math and English are used to determine initial placement in college preparatory or college-level courses. Any student, regardless of age, who has a valid ACT will be placed according to that test. Students who place in college preparatory courses and who wish to challenge their initial ACT placement in Reading, Math and/or English may take the COMPASS adaptive computerized placement test for a fee of $\$ 20$. Firsttime students over twenty-one years of age who do not have a valid ACT will use COMPASS for placement purposes. There is no fee if COMPASS must be used as the placement test.

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

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

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

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

Students must not be enrolled in an R/D English, mathematics, or reading course without a valid ACT or placement. 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 ACT or COMPASS placement will not be used as a basis for waiving requirements.

If there are extenuating circumstances, a student may retake the COMPASS for a fee of $\$ 20$, providing the student has taken no course work in the retest area.

## Required Testing

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

## Early Admission

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

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

## Re-Admission

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

## Transfer Students

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

All transfer applicants must:
(1) Submit two official transcripts from each college/university attended.
(2) Submit an official COMPASS report, if applicable.
(3) Submit official ACT or SAT scores.
(4) Have a GPA (based on all courses attempted at Tennessee Board of Regents colleges/universities) equal to TSU's retention standards.
(5) Have a minimum 2.00 GPA, for out-of-state college/university.
(6) Take the COMPASS subtest in Mathematics and/or English if the ACT (Enhanced) subscore(s) in the subject(s) is not acceptable or 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 University Orientation if they have not attempted Math and/or English.
(7)Students who have taken remedial and/or developmental courses at a non-TBR institution must undergo COMPASS assessment. However, if they transfer remedial and/or developmental course work which is equivalent to that offered at the University, the course(s) for which the transfer course is equivalent will be waived. Remedial and developmental courses transferred from other TBR institutions are automatically accepted.

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 <br> ATTEMPTED <br> 0 to 14 | REQUIRED GPA <br> No minimum GPA <br> (Will be admitted as special students |
| :--- | :--- |
|  | until GPA is at least 1.4) |
| 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 |

## ATTEMPTED <br> REQUIRED GPA

0 to 14

15 to 29
30 to 50
Above 67 hours

No minimum GPA
(Will be admitted as special students until GPA is at least 1.4)

Not less than a 1.7 cumulative average
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 an additional 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/nonaccredited) will be assigned by the Office of Admissions once the student is admitted. The University does not grant upper division credit (3000-4000 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 an official transcript and a letter of good standing from the college or university Registrar's Office in which he/she is enrolled. The transient student who wishes to become a regular student must file an appropriate application and meet the same requirements for admission as a transfer student.

Transient students who have taken the COMPASS at other TBR institutions and who have not yet completed required courses must abide by test placement results.

## Advanced Standing

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

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

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

## Adult Special Student

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

1. He or she must hold a high school diploma or the equivalent and meet the requirement for admissions.
2. He or she may complete a maximum of 36 semester hours credit at TSU in this category. After receiving 36 hours, the applicant, to continue enrolling at TSU, must apply for regular classification and must meet transfer admission requirements.
3. He or she must take the COMPASS sub-test in English and/or Math before enrolling in these college-level courses unless the applicant has been placed by a valid ACT/SAT. If the student's ACT places him/her in college preparatory courses rather than in college-level courses, the student may take the COMPASS to challenge such placement for a fee of $\$ 20$.

## 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. Students cannot audit developmental courses.

## 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 have ACT/SAT equivalent score will be placed according to these scores. Students who have not had college-level English and/or Math must undergo COMPASS testing. Applicant must:

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

If complete documents are not on file by this deadline, the application will be considered for the next scheduled registration period. The application must be accompanied by a nonrefundable fee of $\$ 15$.

## Course Numbering System

Degree level courses are numbered from 1000 to 8990 . Undergraduate courses are numbered from 1000 to 4999; courses which are primarily masters' level are 5000 and 6000; doctoral level courses are 7000 and 8000 . Remedial and developmental courses, numbered below 1000, 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 | April 1 |
| :--- | :--- |
| Fall Semester | July 1 |
| Spring Semester | November 1 |

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

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

Students seeking a change in permanent residency must:

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

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

1. Dean of Admissions and Records
2. Provost and Executive Vice President
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 begins 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 "l".

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 in which the student is currently enrolled
f. any course which the student attempted or was enrolled in for four or more weeks prior to withdrawal

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.

## MINIMUM SCORES REQUIRED ON CLEP AND DANTES EXAMINATIONS



## 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
Suite C
963-7111

## Academic Fresh Start Admission

Academic Fresh Start is available to re-admitted student who were formally enrolled in the institution as well transfer students who meet institutional requirements for admission and who have been separated from all institutions of higher education for a minimum of four (4) years. 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 applying 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.
5. Students who take advantage of the Academic Common Market Program can not pursue a double major unless both majors are listed on an approved Academic Common Market Certification by the students' state of residency.

Students who are eligible for this program must pursue the appropriate major as designated on the Academic Common Market Certification that is submitted by the Department of Higher Education/Postsecondary Education of their state of residency. No other majors can be taken simultaneously with the selected major per academic common market. Students who violate this policy will be subject to payment of fees required of non-resident students

## 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 $\$ 100.00$. 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.
3. Former students must submit a re-admission application and settle all prior accounts in the Business Office before registering.

The following must be observed during the registration periods:

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

## Academic Policies and Requirements

## Retention Standards and Academic Probation

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

Probationary status will be incurred by the student who fails to meet the standards listed below in any term.
0-14 quality hours attempted
No minimum GPA
Not less than a 1.4 cumulative average
Not less than a 1.7 cumulative average
51-67 quality hours attempted
Not less than a 1.9 cumulative average
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 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 report to the Records Office located in the Floyd-Payne Campus Center, Room 305 during registration in order for the audit to appear on his/or her schedule. 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 or one semester hour credit of aerospace studies at the 100 or 200 level may be added to the normal load.

## Probationary Student Class Loads

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

## Maximum Class Loads

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

Graduating seniors who have applied for graduation and 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 must apply to his school dean, who may approve request for such increases in class loads. The school dean must notify the Admissions Office in writing of each case approved.
Twelve semester hours constitute full time status for undergraduate students for the Fall and Spring semesters. Course loads of 18 hours in the Fall and Spring and 15 hours in the Summer are permitted without special approval for undergraduate students in good academic standing-not on probation.

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

All overloads must be approved prior to the student enrolling in the course. The maximum course load for undergraduate students for Summer, (including courses taken at TSU and other institutions), is 15 hours in regular sessions ( 6 Summer I, 6 Summer II, 3 full) combined. The three hour overload may be approved for sophomores, juniors and seniors with cumulative degree averages of 3.00 and above and for prospective Summer graduates.

## Classification of Students

All undergraduates must be classified in one of the following categories:
Freshmen: Those who have completed less than 30 semester hours Sophomores: Those who have completed between 30 and 59 semester hours
Juniors: Those who have completed between 60 and 89 semester hours
Seniors: Those who have completed 90 semester hours or more. Specials: (A) Those who meet entrance requirements and who wish to pursue particular studies but not to qualify for a bachelor's degree. Such students may be admitted with the permission of the Dean of Admissions and Records. (B) Those who are 21 years of age and who have not completed four years of high school work may enroll in such courses as they are prepared to take up to a maximum of 36 semester hours.

## English Proficiency Requirements

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

## Examinations

Late Final Examinations: Students are expected to take all examinations according to the schedule except in very unusual circumstances, such as incapacitating ill health. If a student does absent himself from final examination without having first secured the writ-
ten 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. Student participation in courses is mandatory, and monitoring of attendance and participation is ongoing by faculty teaching the course. Irregular attendance or any substantial number of unexcused absences may weigh adversely in the consideration of grades or any petition for a special academic privilege such as make-up assignments and/or examinations. To be allowed to make up work, students must present appropriate documentation to the classroom instructor. Students who have excused absences must arrange with the instructor to make up class and laboratory work immediately. Information on attendance and participation becomes a part of the student's file. Attendance is also considered in the awarding of, and continued eligibility for, student financial Aid.

Regular Monday, Wednesday, and Friday classes during the academic year are scheduled for 55 minutes with a 15 minute break between classes. Regular Tuesday and Thursday, classes are scheduled for 85 minute periods and are separated by 15 minute intervals. Classes scheduled for one day per work are scheduled for three hours. 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.

Students must not attend classes unless they have officially registered and paid for them. Grades will not be granted to students after the fact-retroactive registration and payment will not be accepted.

## 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

- 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.
- 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.) The department head will provide the instructors response regarding the appeal to the student. If not satisfied with the instructor's decision, the student may file a written appeal to the department head within 10 days of receipt from instructor.. The Department head must render a written decision with ten days of receipt of the appeal. 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. Copies of the written decision from the faculty member and the department head must be attached to this appeal. 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 written decision within ten days of receipt of the appeal. If the student does not agree with the decision of the Dean, the next level of appeal is the Office of the Provost. The student filing the appeal must submit the appeal in writing along with copies of all decisions of the faculty, department head and Dean in order fro the Office of the Provost to analyze the appeal.

If the instructor happens to be the department head or the dean, the appeal will be submitted to the next higher academic officer (that is, to the dean if the department head is the instructor or to the Provost if the dean is the instructor). In such cases, the decision of the Provost 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 "l"

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 "l" 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 "l" was awarded are not met within one semester, the grade of "l" will automatically covert to a grade of " $F$."

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 "l" contract.
2. Secure from the Office of Admissions and Records the replacement grade card.
3. Take the replacement grade card to the teacher of the course in which the "l" was earned.
4. 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

Student wishing to withdraw from a course must do so via "myTSU". Athletes wishing to withdraw from a must secure approval and signature from their Athletic Advisor and submit the proper form to the Records Office. 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 time period listed the Class Schedule and/or the Academic Calendar which is listed on the web at www.tnstate.edu. 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."

## Withdrawing from the University

A student may not withdraw from all courses via "MyTSU". Withdrawal from all courses during the semester is considered a "withdrawal from university" and must be handled through set university procedures. Contact the Office of Admissions and Records fro details.

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 and the Office of the Provost. 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 "l" 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 instructions and regulations:

## Instructions

1. The student must submit the course description for which enrollment is desired.
2. The student must receive the approval, on this form, of the appropriate Department Head.
3. The student must sign the form.
4. The student must return the form to Records for verification of eligibility and signature of the Registrar.
5. Approval is only required when course equivalency information is not available on the web site.

## Regulations

1. The student cannot be on academic probation while attending another institution.
2. The student must earn the last 30 hours needed for graduation at TSU. Six of these hours may be taken at another institution if prior permission is provided.
3. All courses/grades received will be posted on the student's records at TSU.

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

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

## Grading System

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

| Grades | ity Points 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. |
| " ${ }^{\prime}$ | 0.0 | Represents incomplete work of passing quality and is given when a student is unable to complete required course work because of documented medical reason or catastrophic events beyond the control of the student. |
| "IP" | 0.0 | An "in process" grade indicates that the student has satisfactory attendance and has shown serious commitment to study but has not yet acquired the skill level in development or remedial courses to perform successfully at the college-level. The student must re-enroll in the course in which he/she receives this grade. While it is not a failing grade, it is considered an unsuccessful attempt. This grade is used only in Developmental Studies courses. |
| "S" | 0.0 | Represents satisfactory performance in a non-credit course. |
| "U" | 0.0 | Given for unsatisfactory performance in a non-credit course. |
| "W" | 0.0 | Represents official withdrawal from a course or the University. |
| "AU" (Audit) | 0.0 | Given when the student has registered and attended a course for audit rather than for credit. |
| "X" | 0.0 | Unofficial Withdrawal - Given when the student stops attending and/or never attended a course(s) and carries the same weight as " F ". |

## Substitution of Courses

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

1. All courses being considered for substitution must meet the University's requirements for transfer credit.
2. The student must have a minimum of $C$ in the course to be used for substitution if the course is a requirement for the major.
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.
10. Substitutions will not be allowed in meeting requirements of the 41 hour general education core.

> 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 and Class Schedules.

## Applicable Catalog

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

## Dean's List

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

## Degrees With Honors

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

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

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

Candidates for honors must qualify one semester prior to graduation.

## Philosophy of General Education

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

## Learning Outcomes and Courses

The General Education Core is designed to provide students with the opportunity to develop, practice, and demonstrate essential competencies, or learning outcomes, in the areas of: (1) oral and written communication, (2) the humanities and/or fine arts, (3) the social and behavioral sciences, (4) history, (5) the natural sciences, and (6) mathematics

## General Education Courses

# Approved Courses for General Education Requirements 

B.S. and /or B.A. Degrees

Fall Semester, 2004 and After

| Discipline | Number |  | Credit Hours |
| :--- | :---: | :---: | :---: |

## Humanities and/or Fine Arts- Nine hours required

*Of nine required hours, three hours must be one of listed sophomore literature courses.

| ART | 1010 | 3 | Art Appreciation |
| :--- | :--- | :--- | :--- |
| ENGL | $2110^{*}$ | 3 | American Literature |
| ENGL | $2310^{*}$ | 3 | World Literature I |
| ENGL | $2012^{*}$ | 3 | Literary Genres I |
| ENGL | $2013^{*}$ | 3 | Black Arts and Literature I |
| ENGL | $2210^{*}$ | 3 | Survey of English Lit. I |
| ENGL | $2120^{*}$ | 3 | American Literature II |
| ENGL | $2320^{*}$ | 3 | World Literature II) |
| ENGL | $2022^{*}$ | 3 | Literary Genres II |
| ENGL | $2023^{*}$ | 3 | Black Arts and Literature II |
| ENGL | $2220^{*}$ | 3 | Survey of English Lit. II |
| HIST | 1210 | 3 | World History I |
| HIST | 1220 | 3 | World History II |
| MUSC | 1010 | 3 | Music Appreciation |
| PHIL | 1030 | 3 | Introduction to Phil |
| RELS | 2010 | 3 | Introduction to Religious Studies |
| THTR | 1020 | 3 | Appreciation of Drama |

## Social and Behavioral Sciences- Six hours required

| AFAS | 2010 | 3 | Intro. to Africana Studies |
| :--- | :---: | :--- | :--- |
| ANTH | 2300 | 3 | Intro. to Cultural Anthropology |
| ECON | 2010 | 3 | Principles of Economics I |
| ECON | 2020 | 3 | Principles of Economics II |
| GEOG | 1010 | 3 | World Regional Geography I |
| GEOG | 1020 | 3 | World Regional Geography II |
| HPSS | 1510 | 3 | Health and Wellness I |
| POLI | 2010 | 3 | American National Government |
| POLI | 1010 | 3 | Introduction to Political Science |
| PSYC | 2010 | 3 | General Psychology |
| SOCI | 2010 | 3 | Introduction to Sociology |
| WMST | 2000 | 3 | Intro. To Women's Studies |


| History- Six hours required |  |  |  |
| :--- | :---: | :---: | :---: |
| HIST 2010 3 | American History I |  |  |
| HIST | 2020 | 3 | American History II |
| HIST | $2030^{*}$ | 3 | History of Tennessee |
| *HIST | 2030 may be taken as a substitute for either | American history course |  |


| Natural Sciences- Eight hours required |  |  |  |
| :---: | :---: | :---: | :---: |
| ASTR | 1010 | 4 | Introduction to Astronomy I |
| ASTR | 1020 | 4 | Introduction to Astronomy II |
| BIOL | 1010/1011 | 4/0 | Introductory Biology I for Non-Science Majors |
| BIOL | 1020/1021 | 4/0 | Introductory Biology II for Non-science Majors |
| BIOL | 1110/1111 | 4/0 | General Biology I for Science majors |
| BIOL | 1120/1121 | 4/0 | General Biology II for Science Majors |
| BIOL | 2210/2211* | 4/0 | Human Anatomy and Physiology I/ Lab |
| BIOL | 2220/2221* | 4/0 | Human Anatomy and Physiology II/ Lab |
| CHEM | 1030/1031 | 3/1 | General Chemistry I for Non-Science Majors |
| CHEM | 1040/1041 | 3/1 | General Chemistry II for Non-Science Majors |
| CHEM | 1110/1111 | 3/1 | General Chemistry I for Science Majors |
| CHEM | 1120/1121 | 3/1 | General Chemistry II for Science Majors |
| PHYS | 2010/2011 | 3/1 | College Physics I |
| PHYS | 2020/2021 | 3/1 | College Physics II |
| PHYS | 2030/2031 | 3/1 | General Physics I |
| PHYS | 2040/2041 | 3/1 | General Physics II |

*BIOL 2210/2211 and BIOL 2220/2221 approved to meet General Education requirements only for students in Nursing and Health Sciences majors.

| Mathematics- Three hours required |  |  |  |
| :--- | :---: | ---: | :--- |
| MATH | 1013 | 3 | Contemporary Mathematics |
| MATH | 1110 | 3 | College Algebra I |
| MATH | 1120 | 3 | College Algebra II |
| MATH | 1410 | 3 | Structure of the Number System I |
| MATH | 1710 | 3 | Pre-Calculus Mathematics I |
| MATH | 1720 | 3 | Pre-Calculus Mathematics II |
| MATH | 1730 | 3 | Pre-Calculus Mathematics |
| MATH | 1830 | 3 | Basic Calculus I |
| MATH | 1910 | 4 | Calculus I, Alternate |
| MATH | 1915 | 4 | Calculus and Analytical Geometry I |

Honors sections of the above referenced courses may also be used to meet General Education requirements.
No course substitutions will be allowed in the approved general education core.

# University Requirements for a Bachelor's Degree- For Students Entering Fall, 2004 Semester And After 

A bachelor's degree is conferred on students who are officially enrolled for the intended semester of graduation and 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 120 semester hours ( 128 for College of Engineering-engineering programs only) 122 for Biology and 124 for Teacher Education Programs) with a minimum cumulative average of "C" ( 2.00 quality point average). Students must meet all specific minimum hours for graduation, retention requirements and GPA graduation requirements as included in each program description. Credit hours earned in Remedial or Developmental courses are accepted as institutional credit; however, they are not applicable to credit hours required for baccalaureate or associate degrees.
2. A minimum of 42 semester hours must be earned at the 3000 and 4000 level of courses
3. A minimum of 24 semester hours in a major with a minimum of 21 hours at the 3000 and 4000 level.
4. Nine semester hours in courses designated as Communication. Of these 9 hours, six semester hours must be in English composition (ENGL 1010 and 1020 ). Students must earn at least a " $C$ " in each of these courses; if they earn less than a " $C$ " in either course, they must enroll in that course the following semester and repeat it until they raise their grade to at least a "C." An additional requirement for Communication is a three semester hour in Speech (COMM 2200).
5. Nine semester hours in humanities, including at least three semester hours in sophomore literature, from the approved General Education list. The remaining six hours may include one other sophomore literature course and one other approved course from other humanities disciplines. Courses in the other disciplines include ART 1010, MUSC 1010, PHIL 1030, THTR 1020, RELS 2010, HIST 1210, or HIST 1220.
6. Six semester hours of introductory-level social behavioral science (AFAS 2010, ANTH 2010, ECON 2010, ECON 2020, GEOG 1010, GEOG 1020, POLI 2010, POLI 1010, PSYC 2010, SOCI 2010, or WMST 2000).
7. Six semester hours of a survey of American history (HIST 2010 and 2020). One semester of Tennessee history (HIST 2030) may be substituted for three of these hours.
8. Eight semester hours in natural sciences with accompanying laboratories (BIOL 1010/1011 and 1020, BIOL 1110 and 1120, CHEM 1030 and 1040, CHEM 1110 and 1120, PHYS 2010 and 2020, PHYS 2030 and 2040, ASTR 1010 and 1020, plus the appropriate laboratory components which must be taken with all of these classes during the same semester. Students may not take a sequence of $\mathrm{BIOL} 1010 / \mathrm{BIOL} 1110$; BIOL 1020/BIOL 1120; CHEM 1030/CHEM 1110; CHEM 1040/CHEM 1120.
9. Three semester hours in mathematics from the approved list of General Education courses.
10. A Senior Project or Senior Seminar.
11. For programs requiring 120 hours fro graduation, 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) are required For programs over 120 hours, a minimum of 25 percent of the total hours required for any specific degree must be taken in residence at Tennessee State University. Upon matriculation at the University, transfer hours must be approved in writing in advance by the department head and the dean of the school or college in which the student is earning the degree. Additionally, the student must earn the last 30 hours needed for graduation in residence at TSU. Six(6) of these hours may be taken at another institution with prior written permission from the departmental advisor.
12. 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.
13. 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.
14. Students who entered the University prior to Fall 2004 may elect to matriculate under the new 120 hour (or hours required of each major); however they must understand that by doing so, they must meet all requirements of the 120 hour curriculum including specific courses required in the 41 hour general education core and specific departmental/program courses required by the major. The previously stated provision of 8 years for applicable catalog must still be used.
15. Students electing to change their major will be required to meet all general education and major requirements listed in the catalog effective at the time they officially change their major.
16. All students are required to take the Rising Junior Exam, Senior Exit Exam and any required program major field test exams prior to graduation.
17. It is the student's responsibility to satisfy all degree requirements specified in his/her selected major, minor, or concentration. The University does not assume any responsibility for fees or charges based on a student's claim of inadequate advisement. Students are responsible for reading and following the applicable catalog.
*Students for whom transfer equivalence of " $A$ ", " $B$ ", or " $C$ " in ENGL1010 and 1020 has been accepted by the University will be determined to have satisfied the English Proficiency requirement. A transfer student with a grade of "D" or "F" 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.

## Tennessee Board of Regents' Minimum Degree Requirements

All universities and community colleges in the Tennessee Board of Regents (TBR) system share a common set of minimum require-
ments for the baccalaureate degrees or associate degrees designed for transfer. Every TBR institution incorporates the 41 hour General education core and accepts all courses designated as meeting these requirements from other TBR institutions. By insuring the transferability of course fulfilling the Minimum Degree requirements, the TBR has eliminated unnecessary repetition of courses by students transferring within the TBR system. A complete list of courses that satisfy the Minimum Degree Requirements at all TBR institutions is available on the TBR web page. (www.tbr.state.tn.us)

## 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 all candidates for the Bachelor of Arts must obtain equivalency through the intermediate level (courses numbered 2010 and 2020 or the equivalent) in a single foreign language at the college level. Students who achieve advanced placement in a foreign language as a result of previous competency must still meet the minimum 120 hour requirements of that program of study.

## 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.
3. Must complete all general education courses required for both majors when applicable.

## 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.

## Second Bachelors Degree

All students who hold a baccalaureate degree from a regionally accredited institution of higher education* may earn another bachelor's degree in a different discipline by satisfying the following requirements:

Must have minimum GPA as required for full admission into the upper division program for second degree

Complete all requirements for the major as determined by the department in which the second baccalaureate degree is sought.

Complete a minimum of 30 semester hours in residence at TSU
Complete two American history courses (equivalent to TSU's HIST 2010-2020-2030) as required by Tennessee State Law.

Any general education courses that are pre-requisites for progression in the major program must be completed as specified by the department. If the first baccalaureate degree is from a nonU.S. university, the student must complete ESL 1010, 1020, and/or pass the English Placement Test.

Earn a minimum cumulative grade point average of 2.0 and a minimum GPA of 2.0 in all coursework taken at Tennessee State University. If program minimum grade point average for graduation is higher than 2.0, the student must attain the posted required minimum GPA.
*American institutions must be regionally accredited, and foreign institutions must be approved as "reputable" through consultation with the Director of International Student Affairs, the relevant TSU department chairs, and appropriate faculty members.

## 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 30 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 30 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.

## Requirements for the Associate Degree

The University requirements for an associate degree are as follows:

1. Completion of at least 60 semester hours of credit. Students must meet the specific minimum hours as outlined in the program of study. Remedial and Developmental courses may not be applied to meeting graduation requirements. Students must complete the minimum number of hours as stated in the departmental Program of Study and meet all retention and graduation policies as stated in that program.
2. Completion of 15-17 hours of approved general education core including a)ENGL 1010 and an approved course in b)Humanities, c)Math or Natural Science, d)Social Science e) another approved course from either of the five disciplines.
3. A minimum quality point average of " $C$ " (2.00).or higher as set in specific program requirements.
4. 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.
5. 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.
6. Students who entered the University prior to Fall 2004 may elect to matriculate under the new 60 hour ( or hours required of each major);however they must understand that by doing so, they must meet all requirements of the 60 hour curriculum including specific courses required in the 15-17 hour general education core and specific departmental/program courses required by the major.

## General Education Requirements for the Associate of Applied Science Degree <br> Communications <br> 3 hours

English 1010 (3)
Humanities 3 hours
Three Hours from Approved list
Social Behavioral Sciences 3 hours
Three hours from the approved list
Natural Science or Math
3 or 4 hours
Natural Sciences (4 hours) from approved list or 3-4 hours from approved Mathematics list
Other
3-4 Hours
One additional course required from either of the categories list above. See departmental requirements.
Total Required
15-17 hours
(No course substitutions will be allowed in the approved general education core.)

## Falsifying academic records

It is a Class A misdemeanor to misrepresent academic credentials. A person commits the offense of misrepresentation of academic credentials who, knowing that the statement is false and with the intent to secure employment at or admission to an institution of higher education in Tennessee, represents, orally or in writing that such person:
(1) Has successfully completed the required course work for and has been awarded one (1) or more degrees or diplomas from an accredited institution of higher education;
(2) Has successfully completed the required course work for and has been awarded one (1) or more degrees for diplomas from a particular institution of higher education; or
(3) Has successfully completed the required course work for and has been awarded one (1) or more degrees or diplomas in a particular field or specialty from an accredited institution of higher education.


# 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 Associate Vice President for Student Affairs Dean of Students \& Director of Residence Life Dean of Students for the Avon Williams Campus Counseling Center/New Student Orientation Program Career Center<br>Cooperative Education\& E-Business Opportunities<br>Wellness Center \& Floyd/Payne Campus Center<br>Graduate \& Professional Opportunities Health Center Student Activities<br>Disabled Students Program<br>TRIO Programs<br>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 nine residence halls/centers/apartments on campus: two for men, four for women and three for co-ed. These residence facilities are designed to provide personal, social, and intellectual companionship for students. Each resident is held responsible for knowing and abiding by the rules and regulations for residence hall/center/apartment living. All residential facilities are staffed with a residence director/assistant director and student residence assistants. The staff is responsible for the operation of the hall/center/apartment 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 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 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 room deposit 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 Hale Hall is a co-educational honors residence hall which houses upper-class men and women. It is a six-story, air conditioned facility; each room is semi-private. The hall is equipped with a card entry system, a combination barber/beauty salon, lounges,
laundry room, computer lab, telephone services, an elevator, and apartments for the residence hall director and assistant director.

Harold E. Ford and John N. Ford Residential Complex is a coeducational residence center which houses upper-class 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, electricity and air with one full bath in the two bedroom units and two full baths in four bedroom units. Each student has his/her own bedroom with a personal phone line and computer data hook-up, a twin bed, desk, chair, a chest of drawers, and closet space. The complex is supervised by a director and two assistant directors. The complex includes a community center that houses the main office, computer lab, barber/beauty salon, and an exercise room. Outdoor basketball and volleyball courts are also available along with grilling areas for cook-outs. There are residential parking areas and bicycle racks. Fire safety and security measures are assured with the installation of fire alarms, a sprinkler system, and a security gate with card entry access that is monitored by the TSU Police Department.

New Residence Complex is a co-educational residence center which houses upper-class men and women. The center consists of 72 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, electricity and air with two full baths in each unit. 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 an assistant director. The complex includes a community center that houses the main office, computer lab, barber/beauty salon, and an exercise room, outdoor basketball courts. There are residential parking areas. Fire safety and security measures are assured with the installation of fire alarms, a sprinkler system, and a security gate with card entry access that is monitored by the TSU Police Department.

## Residence Halls For Men

Lena B. Watson Residence Hall for freshman men is a six-story, air conditioned facility with an elevator. This facility is equipped with a card entry system, a lounge, academic center, 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 upper-class 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 upper-class students is a six-story, airconditioned 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 a graduate assistant.

Edna Rose Hankal Hall houses upperclass women. It is a threestory, 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 freshman women. This facility is equipped with card entry system, study lounges, cooking areas, academic center, computer lab, telephone services, as well as apartments for the residence hall director and two assistant directors.

Wilma Rudolph Residence Center is a six-story facility that houses upperclass women. The suite style rooms are arranged for double occupancy. This facility is equipped with a card entry system, study lounges, beauty salon, telephone services, and apartments for the residence hall director and assistant 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 without referral. Confidentiality is maintained and appointments can be made in person or by telephone.

Counseling services for disabled students are designed to assist them in functioning within the university setting and to enable their full participation in the academic, cultural and social activities at TSU. A vocational rehabilitation counselor is available to provide individualized services in conjunction with the Office of Disabled Student Services.

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

## 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, golf, track and field, cross country, tennis, softball and women volleyball.

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

## The Student Handbook

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

## CAMPUS POLICE

## Mission Statement

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

## Responsibilities

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

## CAREER CENTER

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

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

## Career Counseling \& Orientation Program

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

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

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

## Student Employment/Internship Program (Off Campus)

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

## Student Employment Program (On Campus)

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

Placements for the FWS are coordinated by the Career Center. Students are required to attend a placement session where they are given information on general work ethics and job expectations. Students are required to fill out direct deposit, W-4, I-9, and work assignment notice forms before they are assigned a placement.

## COOPERATIVE EDUCATION

Cooperative education is an academic support program that assists students in gaining practical work experience related to their academic major as an optional part of their academic program. The program permits students to get involved in the practical application of academic theory learned in the classroom. Students are awarded three hours of academic credit for each successfully completed co-op work experience.

## Purpose

The world of work has changed radically in recent years. The downsizing and restructuring of corporate America have placed a premium on acquiring the necessary skills and education to be eligible for desired professional employment. On cooperative educa-
tion work assignments students are exposed to the dynamics of the professional work place. They have an opportunity to enhance their social interaction skills, earn money to defray the cost of their education, and narrow their career choices.

## Eligibility

Students who have completed at least thirty (30) semester hours with a minimum grade point average of 2.50 are eligible for the program. Transfer students who meet the above requirements may participate in the program immediately. Students are required to furnish the co-op office an up-to-date transcript, a résumé, and a completed co-op application. Co-op orientation seminar attendance is a must. Students will be interviewed by employers during a Co-op Interview Day held once a semester. Special employer interview schedules may be held after Co-op Interview Day activities for employers with special staffing needs.

## Compensation

The jobs made available to co-op students will be in business, industry, government, and social agencies. The co-op student will receive full pay for the job that he or she performs. The average salary is dependent upon the student's major, the company involved, and the region of the country in which the position is located. Usually, a student can expect to earn no less than $\$ 7$ per hour. While financial reasons are secondary to the educational benefits, the center realizes that many students will seek participation in this program in order to meet the financial needs of completing their college education.

## Length of Co-op Experience

The Alternating plan requires a minimum of 35 hours of work per week on a co-op assignment for the length of a semester. A minimum of two work semesters with a school semester in between is required. Academic credit is awarded for the learning objectives completed during a co-op work assignment. All participating students are required to enroll in the appropriate co-op course prior to beginning any co-op work assignment.

The Parallel plan requires 20 to 25 hours of work per week in a co-op assignment and a maximum of 13 hours of academic courses, including enrollment in the appropriate co-op course. These local area work assignments may continue throughout the school year.

Most students participate in the program in their sophomore and junior years and return to the university for their senior year of academic work on campus.

## Advantages to the Student:

Permanent job placement for the co-op student is easy because of his/her background of work experience.

By coordinating work experience with the campus education program, theory and practice are more closely integrated and students find greater meaning in their studies. This coordination of work and study increases student motivation. As students see connections between the jobs they hold and the subjects they are learning on the campus, greater interest in academic work develops.

Cooperative education helps markedly to orient college students to the professional world of work.

## GRADUATE \& PROFESSIONAL OPPORTUNITIES

The Office of Graduate \& Professional Opportunities which was established as a Presidential Initiative in August 1995, seeks to prepare, motivate, and support students who plan to pursue graduate and professional studies upon graduation from the University.

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

## Tennessee Institutes for Pre-Professionals

The Tennessee Institutes for Pre-Professionals (TIP) is a statesupported summer enrichment program for African-American residents of Tennessee who wish to pursue a career in law, dentistry, medicine, pharmacy, or veterinary medicine. The program is designed to increase the number of African-American residents of Tennessee who pursue professional degrees in the state. The PreProfessionals Fellowship Program (PFP) represent two independent, but parallel programs: one for aspiring lawyers (situated on the campuses of the University of Tennessee and East Tennessee State University, Johnson City). To be eligible to participate in the program you must: (1) be an African-American resident of Tennessee; (2) be currently enrolled in an accredited college of university; (3) show demonstrated evidence of involvement and leadership in school and/or community activities; and (4) submit completed application materials by the application deadline to the campus TIP advisor. For more information, please contact the Office of Graduate and Professional Opportunities at 963-5176 or visit the program in the Floyd/Payne Campus Center.

## POLICY ON ID CARDS

The T.S.U. Identification Card is your official University identification for library privileges, cafeteria plans, athletic events and any other University functions or services that you may be entitled to receive as a University student. The card also serves as a debit card for financial aid refunds and as a cash card for vending services on campus. The card must be carried at all times. Further information about this card is available in the brochure "TSU ID Card" available in the ID Center, McCord Hall 17.

The first card is provided to students after payment of the first semester tuition and fees. The procedure for lost/stolen cards is: 1) Student MUST first call the ID Center (963-5311) or drop by McCord Hall 17 to report the loss; this will initiate the canceling of the old card and creation of a new card. New cards take up to two hours to be created. 2) Pay a $\$ 10.00$ non-refundable fee to Cashier's Office to replace the lost card, a receipt will be issued. 3) Return to the ID Center with the receipt to receive the replacement card. The replacement card will not be available for up to two hours after initially reporting it lost/stolen. Damaged cards also require a $\$ 10.00$ non-refundable fee for replacement.

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.

## 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 Office in the Floyd/Payne Campus Center Room 308.

## DISABLED STUDENT SERVICES

The Office of Disabled Student Services seeks to coordinate university-wide services available to students with current medical/psychological documented disabilities. Services range from providing physical accommodations on campus to helping students with learning disabilities succeed in classroom activities. Additionally, the office attempts to:

- Raise the level of educational development for students with disabilities.
- Improve understanding of and support from the University community for students with disabilities.
- Enhance and refine within the Office of Disabled Student Services, a basic service program focused on students with disabilities.
- Place emphasis on orientation and survival skills for new students and others who might benefit from these experiences.
- Monitor development of the physical plant to ensure accessibility and opportunity for students with disabilities.
- Help faculty and staff better understand physical and learning disabilities and provide them with effective methods of working with students with disabilities.
- Use of every available opportunity to advocate for special needs of students with disabilities and to seek a means to obtain those services.


## ACADEMIC AFFAIRS SUPPORT ACTIVITIES

## CHILD CARE CENTERS

The Department of Family and Consumer Sciences operates two centers: the Early Learning Center on the Main Campus and the Child Care Center on the Avon Williams Campus. The Child Care Center provides convenient, dependable and professional child care for students, staff and faculty while attending classes on the Avon Williams (downtown) Campus and the main campus, when feasible. The program currently operates during the evening hours, Monday through Thursday. Children three years of age and older are eligible for enrollment. There is a non-refundable registration fee of $\$ 5$ for first-time enrollment. The fee is per hour, per child, with a $\$ .50$ reduction per hour for the second and third child. Parents are billed monthly.

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

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

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

## 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. The required SEVIS (the Student and Exchange Visitor Information System) reporting along with other communication to Homeland Security and their various Embassies is provided. The program also provides planned programming and special events that make use of the strengths and skills that this population of students brings to the University and the surrounding community. Students are assisted with all official communications to their respective home governments, including clearance for foreign currency exchange. In addition, foreign students may utilize the advisor function of the program to assist them in their cultural assimilation into the lifestyle they experience in the United States and to assist them with other needs they may have specific to their status.

## NEW STUDENT ORIENTATION AND FIRST-YEAR STUDENT ACTIVITIES

All first-time TSU students are required to participate in new student orientation activities held at the beginning of each semester. A more intensive summer (Pre-Fall Priority Orientation) is held in July and in August to prepare students for Fall admission and early course entry. Orientation activities are designed that help to acclimate students to buildings and the general campus environment as well as University, administration, faculty, staff, other students, and departmental programs of study. Throughout the year, seminars are held for students to provide information on internships, networking opportunities, and key points that aide in overall student development and academic success. Participants are connected with mentors, receive scholarships, and are given assignments that provide them with practical service learning experiences. The First-Year Students Program addresses both the students' academic needs (study skills/career workshops, etc.) and social needs (film review/discussions, conversations on personal topics, and other student-driven evening gatherings).


## 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, TECHNOLOGY, AND COMPUTER SCIENCE
- COLLEGE OF HEALTH SCIENCES
- COLLEGE OF PUBLIC SERVICE AND URBAN AFFAIRS
- SCHOOL OF AGRICULTURE AND CONSUMER SCIENCES
- SCHOOL OF NURSING
- AEROSPACE STUDIES
- THE SCHOOL OF GRADUATE STUDIES
- ACADEMIC ENRICHMENT, ADVISEMENT AND ORIENTATION
- UNIVERSITY HONORS PROGRAM
- CENTER FOR EXTENDED EDUCATION
- INSTITUTE FOR AGRICULTURAL AND ENVIRONMENTAL RESEARCH
- COOPERATIVE EXTENSION PROGRAM
- TESTING CENTER


## ACADEMIC ABBREVIATIONS

| ACCT | Accounting | GERM | German |
| :---: | :---: | :---: | :---: |
| AREN | Architectural Engineering | HCAP | Health Care Administration and Planning |
| AERO | Aerospace Studies | HIMA | Health Information Management |
| AFAS | Africana Studies | HIST | History |
| AGSC | Agricultural Sciences | HLSC | Health Sciences |
| HLSC | Allied Health Professions | HMGT | Home Management |
| AITT | Aeronautical and Industrial Technology | HONR | Honors Program |
| ANTH | Anthropology | HPSS | Human Performance Sport Sciences |
| ART | Art | COMM | Journalism |
| ASOR | Arts and Sciences Orientation | MATH | Mathematics |
| BISE | Business Information Systems Education | MEEN | Mechanical Engineering |
| BISI | Business Information Systems Industry | MFLA | Modern Foreign Languages |
| BIOL | Biology, Botany, Microbiology, Science | MGMT | Management |
| BLAW | Business Law | MKTG | Marketing |
| BSUS | Urban Studies | MSVU | Military Science, Vanderbilt University |
| CRCS | Cardio-Respiratory Care Sciences | MEDT | Medical Technology |
| CVEN | Civil Engineering | MUSC | Music |
| CHEM | Chemistry | NUFS | Nutrition |
| CRMJ | Criminal Justice | NURS | Nursing |
| COOP | Cooperative Education | AEAO | Orientation Undecided Majors |
| COMP | Computer Science | HPSS | Physical Education |
| DHYG | Dental Hygiene | PHIL | Philosophy |
| DIGN | Design | PHYS | Physics |
| DSPW | Developmental Studies English | POLI | Political Science |
| DSPM | Developmental Studies Mathematics | PSYC | Psychology |
| DSRD | Developmental Studies Reading | PHTH | Physical Therapy |
| ECON | Economics | REUD | Real Estate |
| ECCD | Early Childhood, Child Development | RELS | Religious Studies |
| EDAD | Educational Administration | COMM | Radio and Television |
| EDCI | Education, Curriculum and Instruction | SOCI | Sociology |
| EDRD | Education Reading | COMM | Speech |
| EDSE | Education, Special Education | SPAN | Spanish |
| EECE | Electrical Engineering | SPTH | Speech Pathology and Audiology |
| ENGL | English | STAT | Statistics |
| ENGR | Engineering | SOWK | Social Work |
| FCS | Family and Consumer Sciences | THTR | Theatre |
| FINA | Finance | URBS | Urban Studies |
| FREN | French | WMST | Women's Studies |
| GEOG | Geography |  |  |

# THE COLLEGE OF ARTS AND SCIENCES 

William D. Lawson, Ph.D., Dean<br>112 Hubert Crouch Hall (Graduate Building) Telephone 615-963-5971


#### Abstract

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 essential skills in solving problems, communicating, and working in cooperation with others. Encouraging students to be lifelong learners and self-motivated individuals are also important aims of the College.


## Evening Studies Program

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

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

## Accreditation

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

## Teacher Education

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

All students who seek certification in any of these programs must be formally admitted through the College of Education, usually in the sophomore year. Admission requires a 2.75 cumulative grade point average and a passing score on the Praxis Exams. For a complete list of admission and retention requirements in the Teacher Certification Program, see College of Education in 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. 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, students in the College of Arts and Sciences must take Arts and Sciences Orientation (ASOR) 1001,1002,1003 or the equivalent as part of their general education. Teacher certification students should take EDCI 1010 in place of ASOR 1001,1002,1003.
Admission to Upper Division of Programs: Student majors in all Arts and Sciences programs must be formally admitted to the upper-division components of their programs of study. Students must apply for this status through their department or program, and the department or program must give official admission to its upper division: students must initiate the process, and admission is not automatic.

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

1. Completed all basic and developmental requirements.
2. Removed all high school deficiencies.
3. Completed all general education requirements, including
a. an acceptable orientation course
b. six (6) semester hours of English composition (ENGL 1010, 1020), with a minimum grade of $C$ in all courses, and three (3) semester hours of Speech (COMM 2200).
c. at least three (3) semester hours of sophomore literature
d. six (6) semester hours of American history (HIST 2010, 2020)
e. a college-level mathematics course (MATH 1013 or above)
f. two (2) semesters (8 hours) of science from the approved General Education list, including the laboratories accompanying the lectures
g. two (2) social science courses from the approved general education list
h. two (2) humanities courses from the approved general education list
4. Completed the Rising Junior Examination administered by the University.

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

For students seeking teacher certification, the requirements for admission are those for the Teacher Education Program, contained in the College of Education section.

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

The College wants to assist students toward completing degree requirements as quickly as possible. It recognizes that it can best achieve this goal by insuring 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 upperdivision programs.

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

All graduates of Tennessee Board of Regents institutions are required to take an examination or examinations in the academic year in which they graduate to measure the effectiveness of their core curriculum and/or their major program. At the present time, all students are required to take the ETS Academic Profile 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 an application for graduation with the Records Office and complete a Senior Standing Form 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 se-
mester 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 transfersto the University, its major policies and regulations, degree requirements, career opportunities, study skills, and campus facilities. Special programs and speakers are also offered during orientation sessions. The Arts and Sciences orientation program offers three courses, which should be chosen by students on the basis of their own majors. Students who intend to become licensed to teach should take EDCI 1010 for their orientation, rather than any of the courses listed below.

ASOR 1001 Orientation for Science Majors (1) (Formerly ASOR 100A). A required orientation and advisement class for new students in the sciences, including biology, chemistry, computer science, mathematics, premedicine, pre-pharmacy, and physics. The course focuses on topics related to the sciences.

ASOR 1002 Orientation for Social Science Majors (1) (Formerly ASOR 100B). 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 1003 Orientation for Humanities Majors (1) (Formerly ASOR 100C). 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 minor is 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
ACCT 2110 or
ACCT $2120 \quad$ Principles of Accounting I or II 3
ECON 2010 Economic Principles I 3
MGMT 3010 Management and Organization Behavior 3
BISE 2150 Microcomputer Applications 3
BLAW 3000 Legal Environment of Business 3
MGMT 4030 Human Resources Management or 3
or BISE 4300 Administrative Office Management

## Elective Courses

3-9 semester hours
BISE 3150 Business Communication
HIST $3690 \quad$ Economic History of the United States 3
PHIL 3350 Business Ethics 3
BISE 1210 Microcomputer Keyboarding 3

Minor in Women's Studies<br>Coordinating Committee: Samantha A. Morgan-Curtis, Ph.D. (Chair) 121 Humanities Building Telephone: 615-963-1536<br>Faculty: S. Browne, G. Johnson, R. Kimbrough, H. King, E. McClain, and L. Yan., R. Dixon

General Statement: The Minor in Women's Studies is open to any degree-seeking student at Tennessee State University. The Women's Studies Minor at Tennessee State University seeks to develop, enhance, and strengthen the University's general education program by providing an organizational structure for the focused study of women as serious academic inquiry. An 18-hour undergraduate minor, the Women's Studies Program brings together and integrates courses from across many departments of the University that explore issues of gender, sexuality, and inequality through examinations of the lives of women, the work of women, and the social representations of women, in contemporary and historic contexts, around the globe and within the U.S., and across differing races, ethnicities, classes, and social groups. The Women's Studies Program is expressly multidisciplinary and interdepartmental, and its purpose is to provide a framework for new scholarship about women-multiculturally, multidimensionally, and multinationally. Within a University community richly diverse in gender, age, race, nationality, ethnicity, faith, economic structures, and sexual orientation, the Women's Studies program provides another forum for students to consider the social construction of difference through analyses of literature, the arts, the media, social theory, histories, and cultures. The Women's Studies Program at TSU promotes integrative thinking, reevaluation, and new ideas about women, as a local contribution toward expanded global understanding and respect for women.

Participating students may major in any area or program leading to a bachelor's degree at the University while taking the minor (18 semester hours).

The goal of the Women's Studies minor is to enhance students' understanding of the complexity of our shared world through the analysis of the construction of gender identities. The students as citizens and educated members/leaders of their communities and the world need to know and appreciate their own gendered human cultural heritage and its development in historic and global contexts. Because of its implicit multidisciplinary and interdisciplinary approach, the Women's Studies Program borrows substantively from all fields of study, and Women's Studies paradigms will concomitantly serve to strengthen both the investigations and goals of students' major fields of study and their materials, and to deepen the students' appreciations of their own major fields.

## Core Required

WMST 2000 Introduction to Women's Studies
WMST 4000 Independent Study/Capstone
12 hours (any 4 of the following-
only one 2000 level class may be taken)
AFAS 3000 African Male
3
AFAS 3050 African Female 3
AFAS 3600 African Extended Family 3
AFAS 3620 African American Family 3
ANTH 2300 Introduction to Cultural Anthropology 3
ECFS 4630 Family Relationships 3
ENGL 3010 Critical Approaches to Literature
3
ENGL 3860 Women in Literature

ENGL 4600 African-American Women Writers
HIST 3100 American Women's History to 1890
HIST 3110 American Women's History 1890 to the Present
HIST 4240 History of Feminism
PSYC 3310 Principles of Human Sexuality
SOCI 2400 Courtship and Marriage
SOCI 3101 Sex, Gender, \& Social Interaction
SOCI 3200 Anthropology
SOCI 3600 The Family
WMST 4100 Special Topics in Women's Studies
Students who took HIST 4325 (formerly 432B) Vital Topics: Women's History may count that course towards the minor requirements.

WMST 2000. Introduction to Women's Studies. (3). Functioning as an overview to and integration of the women's studies courses available to TSU students across the University, this introductory course to the Women's Studies program and minor offers a conceptual and theoretical baseline from which each student may develop her/his trajectory of study. The course is expressly multidisciplinary and multicultural; it explores feminist theories and looks at women and gender as treated in the humanities, social sciences, and sciences. This introduction may be team taught and may represent ideas from the perspectives of faculty within differing disciplines. No prerequisites.
WMST 4000. Capstone/Independent Study. (3). This one-semester course acts as the capstone for the Women's Studies minor in that the individual student will produce an independent research work that synthesizes his/her major field with the required course work in the Women's Studies minor. This course will be monitored by the WS Coordinator/Coordinating Committee, but the student will also work with a faculty member from her/his major area. Enrollment by permission of the WMST Coordinator/Coordinating Committee. Prerequisite WMST 2000 or by permission.

WMST 4100. Special Topics. (3). This interdisciplinary course can be proposed by the instructor either based on individual or student interest. The course must be approved by the Women's Studies Coordinating Council/Committee and fulfill the competencies of the Women's Studies Program. Topics may include but are not limited to the history of Women's Studies, representations of women in music, a comparative study of women's movements and activisms, feminism and racism, specific representations of women within different nationalities, etc. Permission of the instructor required.

## INTERNATIONAL AFFAIRS MINOR <br> Coordinator: Dr. John Miglietta 211 Hubert Crouch Hall (Graduate Building) 615-963-5515

This program is open to students throughout the University regardless of major. The minor in International Affairs has a core component of Political Science, History, and Geography courses. In addition students are asked to specialize in a specific areas of emphasis. These are Area studies (African, Asian, European, Latin American, and Middle Eastern studies); International Security, Law, and Organization; International Development; Foreign Policy Analysis and Comparative Politics; and International Peace and Justice, Cultural Studies. This minor offers a multidisciplinary approach to the study of international affairs. The International Affairs minor provides students with exposure to various disciplines (Africana Studies, Agriculture, Anthropology, Business, Communications, History, Geography, Philosophy and Religious Studies, Political Science, and Sociology). By taking a menu of courses students develop an understanding of cultural, economic, historical, geographical, and political aspects of the international system.

## Course Requirements

a. Required Courses
b. Emphasis Electives
c. Total Hours

21 (7 courses)
d. Required Courses

POLI 2200 Introduction to International Politics
POLI 3690 Theoretical Approaches to International Relations
One History Course: From the Following

- HIST 4520 Latin American History II
- HIST 4820 Asian Civilizations II
- HIST 4860 History of Africa II
- HIST 4890 Modern Africa, 1960-Present
- HIST 3030 Europe, 1871-1945
- HIST 3040 Europe, 1945-Present

One Geography Course: From the Following

- GEOG 4700 Political Geography
- GEOG 4750 Economic Geography
- GEOG 4640 Environmental Geography
- GEOG 4440 Cultural Geography
- GEOG 4300 Social Geography


## Summary of the Core in International Affairs: $\mathbf{1 2}$ credits

POLI 2200: Provides an introduction to the various economic, political, and social issues in international affairs. 3 credits

POLI 3690: Provides a multi-perspective approach to the theoretical philosophies of international affairs. 3 credits

One upper-level History Course: Gives students exposure to a particular region of the world. 3 credits

One upper-level Geography Course: This provides students with a broad global geographical understanding. 3 credits

This core gives students a background in aspects of the politics, history, and geography of international affairs while also providing a theoretical and methodological foundation.
b. Summary of Areas of Emphasis: Students will take three electives ( 9 credit hours) from one of the areas below, drawn from the following menus. (All courses are 3 credits.)

1. Area Studies (African, Asian, European, Latin America, and Middle East)
2. International Security, Law, and Organizations
3. International Development
4. Foreign Policy Analysis/Comparative Politics
5. International Peace and Justice Studies
6. Area Studies: 9 hours in a region: African, Asian, Europe, Latin American, and Middle East. These courses are drawn from the following departments: Africana Studies, History, Geography, and Political Science.

## African Emphasis

- AFAS 3850 Caribbean Societies and Modernization
- AFAS 3920 Post Independent Africa
- AFAS 4120 Classical African Civilizations
- AFAS 4200 African Roots
- HIST 4850 History of Africa I
- HIST 4860 History of Africa II
- HIST 4890 Modern Africa, 1960-Present

Latin American Emphasis:

- GEOG 3720 Geography of Mexico and the Caribbean
- GEOG 3730 Geography of South America
- GEOG 4000 Geography of Latin America
- HIST 4510 Latin American History I
- HIST 4520 Latin American History II
- SPAN 3130 Latin America

Asian Emphasis:

- HIST 4810 Asian Civilizations I
- HIST 4820 Asian Civilizations II
- GEOG 4110 Geography of Asia

Middle East Emphasis: (Courses Being Developed)
European Emphasis:

- GEOG 3810 Geography of Europe
- HIST 3010 Europe, 1648-1789
- HIST 3020 Europe, 1789-1871
- HIST 3030 Europe, 1871-1945
- HIST 3040 Europe, 1945-Present

A History course taken in the core, cannot also be counted for elective credit.
2. International Security, Law and Organizations:

- POLI 3630 International Organizations
- POLI 3700 International Security Studies
- POLI 4350 International Law
- POLI 4050E Special Topics: Terrorism and Political Violence

3. International Development:

- AFAS 4000 Political Economy of African Nations
- AFAS 4450C Business Opportunities in Africa
- AGSC 4040 World Agriculture
- AGSC 4090 Community Development
- ECON 4100 International Economics
- ECON 4150 Economic Development
- POLI 3930 International Political Economy

4. Foreign Policy Analysis/Comparative Politics:

- HIST 4210 Diplomatic History of the United States I
- HIST 4220 Diplomatic History of the United States II
- POLI 3600 Introduction to Comparative Government and Politics
- POLI 3650 International Relations
- POLI 3680 Third World Politics
- POLI 3670 American Foreign Policy

5. International Peace and Justice, Cultural Studies:

- AFAS 4120 Classical African Civilizations
- ANTH 2300 Introduction to Cultural Anthropology
- ANTH 3100 Comparative Social Structures
- PHIL 4100 Philosophy of Religion
- RELS 4100 Contemporary Religious Thought
- RELS 4200 African Roots in Christianity
- COMM 4320 Intercultural Communications
- SOCI 3550 Social Movements

Courses can be substituted under different areas of emphasis with permission of the Coordinator of the International Affairs Minor. (Students should see Coordinator for additional courses to be added to areas of emphasis)

## Arts and Sciences

# (Interdisciplinary Studies) 

Veronica J. Duncan, Ph.D., Coordinator 408 Hubert Crouch Hall (Graduate Building) Telephone 615-963-5755

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

The degree, which is the Bachelor of Science in Arts and Sciences, permits students to develop a personalized program of study in consultation with their advisor. Students have a primary discipline of 15 semester hours, strengthening it with 8 hours from a related discipline. For example, a student interested in the humanities may have concentrations in any two of the following disciplines: Art, English, French, Music, Philosophy, Religious Studies, Spanish, and Theatre. A student in the social sciences may concentrate in any two of these disciplines: Africana Studies, Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Work, Sociology, and Communications. A student in the sciences may choose any two of Bi ology, Chemistry, Computer Science, Mathematics, and Physics.

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

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

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

Program Requirements
32 Semester Hours

## For Bachelor of Science

Arts and Sciences (Interdisciplinary Studies Degree)
General Education Core
Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II
(Minimum grade of C in each)
COMM 2200 Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2320 Sophomore Literature Course 3
Elective One course from approved list. 3
Elective One course from approved list. 3
Social and Behavioral Science (6 hours)
Elective One course from approved list. 3
Elective One course from approved list. 3
History (6 hours)
HIST 2010 American History I
HIST 2020 American History II or
Aisery of Tennessee 3
HIST $2030 \quad$ History of Tennessee 3
Natural Science (8 hours)
Two four-hour courses with labs from approved General Education list
Mathematics (3 hours)
One course from approved list.

Orientation (1 hour)
ASOR 1001, 1002 Orientation for Arts and Sciences or 1003; AEAO 1010 Orientation for Non-traditional Students

Total General Education Hours

## Upper-division Admission

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

Major Core: A minimum of 32 upper-level (3000- and 4000-level) hours must be completed in Arts and Sciences. For this purpose Economics, Computer Science, and Psychology are treated as Arts and Sciences disciplines, although they are administered through other colleges in the University. Students must earn at least a C in all 32 of these hours.
(a) Twenty-three upper-level hours must be completed in one of the three broad areas or families of disciplines: the arts and humanities, the social sciences, or the sciences and mathematics. Fifteen of these hours must be in a single discipline and eight must be in a second discipline from the same family.
(b) Nine additional upper-level hours must be completed in arts and sciences disciplines or in Economics, Computer Science, or Psychology.

## Bachelor of Science Degree in Arts and Sciences

## Suggested Four-Year Plan

## FRESHMAN YEAR

## FALL SEMESTER <br> HR SPRING SEMESTER

ENGL 10103

HIST 2010

## ENGL 1020

HIST 2020 or 2030
ELECTIVE
NATURAL SCIENCE
ELECTIVE
HUMANITIES
NATURAL SCIENCE
ASOR 1001, 1002, 1003

$$
14
$$

## SOPHOMORE YEAR

FALL SEMESTER
HR
ELECTIVE INTRO DISC I
SOPHOMORE LITERATURE
SOCIAL SCIENCE
COMM 2200
MATH

## SENIOR YEAR

FALL SEMESTER
1ST DISCIPLINE, 3000/4000
HR

2ND DISCIPLINE, 3000/4000
ELECTIVE, 3000/4000 ARTS AND SCIENCES ELECTIVES, 3000/4000 ANY SCHOOL OR COLLEGE ELECTIVE, ANY LEVEL 3

SPRING SEMESTER
1ST DISCIPLINE, 3000/4000 ELECTIVE, 3000/4000 ANY SCHOOL OR COLLEGE ELECTIVE, ANY LEVEL

15

## Arts and Sciences

Interdisciplinary Studies<br>Certification in Elementary Education, Grades K-6<br>William Cumming, M.A., Coordinator 407 Crouch Hall (Graduate Building) Telephone 615-963-5759

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 the student the opportunity to prepare for a license to teach in grades Kindergarten through sixth grade. This 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 a given grade level means that the student is especially well prepared for those grades, but is also eligible to teach at whatever level the license includes. The concentration is child development and learning, with licensure for grades K-6. The specific requirements are listed below. The coordinator of the Elementary Education program is the advisor for students seeking this license.

## Program Requirements <br> For Bachelor of Science <br> Arts and Sciences <br> Certification in Elementary Education

All candidates for certification in elementary education will complete a minimum of 120 semester hours, to receive the B.S. degree in Arts and Sciences. These hours include a general education core ( 42 hours), a major concentration of content and knowledge courses ( 26 hours), and a professional education core ( 37 hours), including one semester of student teaching in primary and middle schools ( 9 hours). To be eligible for admission to any certification program in the University, students must have at least a 2.75 cumulative quality point average at the time of application and must earn acceptable scores on the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessment Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST. Students must also make a written application through the College of Education before being formally admitted to the program, usually during the sophomore year. For a complete statement of ad-
mission and retention requirements in the Teacher Education Program, see the section in the college of Education in this catalog.

Accreditation: The teacher certification program in Elementary Education, with its concentration, is approved by the Tennessee Department of Education. In addition, the teacher education program is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

Specific course requirements in General Education, Other Requirements, the Professional Education curriculum, and the concentration follow.

## General Education Core

42 Semester Hours
The general education liberal arts component is designed to foster the intellectual development of the whole person and provide the foundation of a broad college education.

## Required General Education Core

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II 6
(minimum grade of $C$ in each)
COMM $2200 \quad$ Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2320 Sophomore Literature Course 3
MUSC 1010 Music Appreciation 3
ART 1010 Art Appreciation 3
Social and Behavioral Science (6 hours)
SOCI 2010 Introduction to Sociology 3
PSYC 2010 Introduction to Psychology 3
History (6 hours)
HIST 2010 American History I 3
HIST $2020 \quad$ American History II 3
HIST $2030 \quad$ History of Tennessee 3
Natural Science (8 hours) 8
Two four-hour courses with labs from approved General Education list
Mathematics (3 hours)
MATH $1410 \quad$ Structure of Number System I 3
(MATH 1013 or higher may be used.)
Orientation (1 hour)
EDCI 1010 Orientation for Education
Total General Education Hours $\overline{42}$
Other Requirements: 18
Mathematics (3 hours)
MATH 1420 Structure of Number System II 3
(MATH 1110 or higher may be used.)
History (3 hours)
HIST 1210 or 1220 World History I or II
Psychology (3 hours)
PSYC 2420 Human Growth and Learning
Human Performance and Sports Sciences (6 hours)
HPSS 2060 First Aid and Cardio-Pulmonary Resuscitation
HPSS $3100 \quad$ Concepts of Games and Play 3
HIST 4910 or 4920 African American History

## Professional Education

37 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 2010.


Each teacher candidate, regardless of concentration, must complete EDCI 4720, Enhanced Student Teaching in the Elementary School ( 9 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-6)."

## Concentration in Child Growth and Development Licensure for Grades K-6

Suggested Four-Year Plan
FRESHMAN YEAR
FALL SEMESTER

* ENGL 1010

HIST 2010 OR 2020

* MATH 1410
* BIOL 1010, 1011 COMM 2200 EDCI 1010

HR SPRING SEMESTER HR

* ENGL 1020

ART101 0

* MATH 1420
* BIOL 1020, 1021

PSYC 2010

FALL SEMESTER

## JUNIOR YEAR

ENGL 3730
SPRING SEMESTER
**EDCI 2100
EDCI 4900
PSYC 3120
**EDCI 3110
ECFS 3320
**EDCI 2200
**EDCI 3500
**EDRD 3500
HPSS 3100
**EDCI 4190
16
(Apply for Student Teaching)

## SENIOR YEAR

FALL SEMESTER
HR *SPRING SEMESTER HR
HIST 4910 or 4920
**EDCI 4706
ECFS 3610
**EDCI 4720
**EDCI 4620 $\qquad$
**EDCI 4500
3
**EDRD 4500
*(No other courses may be taken during this semester.)
**Must be admitted to Teacher Education to take this course.

# Department of Africana Studies 

# Wosene Yefru, Ph.D., Interim 301 Jane E. Elliott Hall (Women's Building) Telephone 615-963-7462 

Faculty: M. Monanabela, W. Yefru.
General Statement: The Africana Studies curriculum is based on an African paradigm. It seeks to restore the cultural, economic, political, social, and spiritual links between Africa and her Diaspora. The primary goal of the Department is the practical education of students in the cultures, history, knowledge, and skills of the global African experience.

The Africana Studies core curriculum is designed to give students a solid foundation in African culture, philosophy and worldview. It provides students with a general knowledge base and orientation which is essential for the mastery of the university's General Education Core and the specialized knowledge of the Africana Studies discipline. Senior seminar and research methods courses prepare students to participate in the community internship and write a senior project. Finally, students are taught how to apply African culture, knowledge and skills to develop the African world community and to remedy social problems that interfere with building institutions and community development.

Career Opportunities: Africana Studies prepares students for advanced studies in graduate and professional schools. It further prepares them for career opportunities in business, education, international affairs, law, the humanities, the behavioral and social sciences, and work in developing communities and nations.
*Prerequisite for admission to Teacher Education
(Apply to Teacher Education; a GPA of 2.75 is required and appropriate scores on the PPST or ACT)

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | ---: | :--- | ---: |
| ENGL- Sophomore Literature | 3 | Humanities - MUSC 1010 | 3 |
| HIST 1210 or 1220 | 3 | HIST 2030 | 3 |
| ECFS 2010 | 3 | POLI 2010 or SOCI 2010 | 3 |
| * PSYC 2420 | 3 | HPSS 2060 or HPSS 1510 | 3 |
| * EDCI 2010 | $\mathbf{3}$ | GEOG 1010 or 1020 | $\frac{3}{15}$ |

## Departmental Requirements <br> For Bachelor of Science <br> Africana Studies

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 120 semester hours in order to receive a B.S. degree. Forty-two of these hours must be in the general education core shown below. Thirty-three of these hours must be in the major core outlined below.

33 Semester Hours

Students must earn at least a C in all thirty-three 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.

## General Education Core

Communications (9 hours)

| ENGL 1010, 1020 | Freshman English I, II (minimum grade of $C$ in each) | 6 |
| :---: | :---: | :---: |
| COMM 2200 | Public Speaking | 3 |
| Humanities and/or Fine Arts (9 hours) |  |  |
| ENGL 2013 | Black Arts and Literature I | 3 |
| ENGL 2023 | Black Arts and Literature II | 3 |
| MUSC 1010, or | Music Appreciation, or |  |
| ART 1010 | Art Appreciation | 3 |
| Social and Behavioral Science (6 hours) |  |  |
| ECON 2010 | Principles of Economics I | 3 |
| HPSS 1510 | Health and Wellness | 3 |
| History (6 hours) |  |  |
| HIST 2010 | American History I | 3 |
| HIST 2020 | American History II | 3 |
| Natural Science (8 hours) |  |  |
|  | Two four-hour courses with labs from approved General Education list |  |
| Mathematics (3 hours) |  |  |
| MATH 1110 | College Algebra I | 3 |
| Orientation (1 hour) |  |  |
| ASOR 1002 | Orientation for Social Science Majors |  |
| Total General Educ | cation Hours | 42 |

## Upper-division Admission

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

## Major Core

AFAS 1010-1020, or Arabic I-II
1030-1040, or Kiswahili I,II
1050-1060 Yoruba I, II
AFAS 2010 Introduction to Africana Studies 3
AFAS 2020
AFAS 2030
Survey of Africa, or 3

AFAS 3100
AFAS 3600
AFAS 3620
AFAS 3950
AFAS 3650
PISI 4920
AFAS 4400
AFAS 4500
AFAS 4510
AFAS 4900
TOTAL
African Diaspora
Psychological Impact of Enslavement
and Colonization or
African Extended Family, or
The African-American Family
Great Debate
The African-American Community
3
Black Politics
Senior Seminar
Research Methods
Africana Studies Internship
Senior Project

Double Major in African Studies: Students can concurrently pursue a major in Africana Studies and a second major. Double major combinations can be Africana Studies and business, computer science, psychology, history or political science, or any other traditional discipline.

University Honors Program: The Africana Studies Department participates in the University Honors Program by offering AFAS 3952 Honors Great Debate (3) on a regular basis.

## Bachelor of Science Degree in Africana Studies

## Suggested Four-Year Plan

## FRESHMAN YEAR

FALL SEMESTER
HR SPRING SEMESTER HR
AFAS 2010
MATH 1110
ENGL 1010
ENGL 1020
HIST 2010
HIST $2020-3$
AFAS 1010, 1030, or 10503 AFAS 1020, 1040 or 1060
ART 1010 or
ART 2010 or MUSC 23003
MUSC 1010, HPSS 1510
3
ASOR 1002 Orientation

## SOPHOMORE YEAR

## FALL SEMESTER <br> HR <br> SPRING SEMESTER <br> HR

AFAS 2020 or 2030
PHIL 2500 or RELS 2011
ENGL 2013
ENGL 2023
Natural Science
Natural Science
ECON 2010
Electives/ Double Major
COMM 2200

## JUNIOR YEAR

FALL SEMESTER
HR SPRING SEMESTER

## HR

PSYC 3110 or SOC 3000
AFAS 4500
AFAS 3100
Electives/Double Major
Electives/Double Major
AFAS 4510

## SENIOR YEAR

FALL SEMESTER
HR
AFAS 4450
SPRING SEMESTER
AFAS 4320
AFAS 4900
HIST 4850 or 4860
HIST 4910 or 4920
ELECTIVES,
3000/4000 LEVEL
3000/4000 LEVEL
DOUBLE MAJOR
AFAS ELECTIVE

## Course Descriptions

## (AFAS)

AFAS 1010, 1020 Beginning Arabic I, II (3, 3).(Formerly AFAS 101,102). 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 2000, 2001 Intermediate Arabic I, II (3, 3) (Formerly AFAS 201,202). This two semester course in classical Arabic will focus on communication skills in every day life. It will enhance students' reading, writing and speaking skills through interactive teaching methods.

AFAS 3010, 3020 Advanced Arabic I, II (3, 3). This two semester course shall focus on conversation, comprehension and understanding of the Arabic language in the media and the internet. It will also enhance the students' ability to express ideas and share opinions in the language.

AFAS 1030, 1040 Beginning Kiswahili I, II (3, 3) (Formerly AFAS 103, 104). Introduction to a language widely spoken in East Africa and parts of Central Southern Africa. Students are guided through the process of ac-
quisition 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 1050, 1060 Beginning Yoruba I, II (3, 3) (Formerly AFAS 105, 106). Introduction to a West African language spoken in Nigeria and other parts of Africa. Students are guided through the process of acquisition following an oral approach that stresses classroom participation in a cooperative atmosphere. The aim is to help students gain threshold oral fluency in the language and the ability to read simple text. Laboratory work is an integral part of the course.

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

AFAS 2020 Survey of Africa (3). This course investigates patterns of state-society relations in 21st century Africa from three perspectives: precolonial; colonial and post-independence Africa. Surveys of these periods include conflict resolution; conflict management; ethnic politics; social and economic development.

AFAS 2030 African Diaspora: Cultures, Communities and Nations (3). The African Diaspora is a survey of African descendants living in Asia, the Caribbean, Europe, the Middle East, North America and South America.

AFAS 2110 Cultural Anthropology of Africa (3). The course focuses on the Paleolithic period of Africa in the Nile Valley. Special attention shall be given to the people of the Nile Valley areas and Northeast Africa, Upper Kemet, Nubia, the Fayum, Middle Kemet and the Libyan oasis.
AFAS 2120 Physical Anthropology of Africa (3). This course is a scientific study of the origin of modern Homo sapiens, the genetic reconstruction of human history based on paleontology research. Topics include the history of Austropiticus, Aegyptopiticus, Dryopithecus, Ramapiticus and Zinzathropus.

AFAS 3000 African Male: Identity, Culture, and Expressions (3) (Formerly AFAS 300). 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 3050 African Female: Identity, Socialization, and Status (3) (Formerly AFAS 305). 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 3100 Psychological Impact of Enslavement and Colonization (3) (Formerly AFAS 310). Critical examination of Enslavement and colonization on the minds and institutions of Africans throughout the world. Either this course, AFAS 3900 or AFAS 3950 is required of all Africana Studies majors.

AFAS 3600 African Extended Family (3) (Formerly AFAS 360). 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 3620 The African-American Family (3) (Formerly AFAS 362). 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 3650 The African-American Community (3) (Formerly AFAS 365). 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 3700 Malik El-Shabazz Seminar (3). This course shall chronologically and systematically explore the transformations of Malcolm Little to Malcolm X and finally to El-Hajj Malik El-Shabazz. The primary focus of the course shall be the cultural, historical, political, social and spiritual dimensions of these transformations.
AFAS 3850 Caribbean Societies and Modernization (3) (Formerly AFAS 385). 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 3900 Black Nationalism (3) (Formerly AFAS 390). A survey of the various Black Nationalist and Pan-African movements that emerged between 1850 and the present. Special attention is given to the movements of Martin Delaney, Edward Blyden, Marcus Garvey, the Nation of Islam, and other contemporary groups. Either this course AFAS 3100 or AFAS 3950 is required of all Africana Studies majors.
AFAS 3920 Post Independent Africa (3) (Formerly AFAS 392). A study of traditional African societies, the constraints of colonization on their development, and the transformation of the traditional societies through the processes of industrialization and modernization. Either this course or PISI 4920 (Black Politics) is required of all Africana Studies majors.
AFAS 3950 The Great Debate: Martin Luther King, Jr., and Malcolm X (3) (Formerly AFAS 395). A critical examination of the philosophies of Dr. Martin Luther King, Jr., El-Hajj Malik El-Shabazz (Malcolm X), and a synthesis of these two perspectives. The climax of the course is a debate in which the students argue important issues from these three perspectives. Traditional African ceremonies and cultural vignettes are an integral part of this debate. Either this course or AFAS 3100 or AFAS 3900 is required of all Africana Studies majors.
AFAS 3952 Honors Great Debate (3) (Formerly AFAS 445H). Course examines the thoughts of Martin Luther King, Jr., and Malik El-Shabazz (Malcolm X). Students study how the teachings of the Prophet Muhammad (pbuh), Mohandas K. Gandhi, Henry David Thoreau, and Marcus Garvey influenced the epistemologies and paradigms of King and El-Shabazz. Enrollment is restricted to students in the University Honors Program.
AFAS 4000 Political Economy of African Nations (3) (Formerly AFAS 400). Concentration on the culture, human resources, natural resources, and political structures of African nations. Attention is given to the constraints of the world political economy on education, housing, transportation, medical and health care, food production, and industrial and technological development of African nations. Prerequisite: admission to upper level.
AFAS 4070 Political Economy of the African-American Community (3) (Formerly AFAS 407). 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 AfricanAmericans. Attention is also given to professionals and the dynamics of African-American businesses. Prerequisite: admission to upper level.
AFAS 4100 Mentorship in Africana Studies (3) (Formerly AFAS 410). Mentorship with professor in a well defined area of practice, such as assisting in the teaching of a specific course, a research project, or a community development project. May be repeated once for credit. Prerequisites: admission to upper level and permission of instructor.

AFAS 4200 Media, Social Change, and Mass Empowerment (3) (Formerly AFAS 420). An examination of how the mass media are used as agents of oppression in world African communities. This analysis is followed by an exploration of the media's potential to serve as an instrument of humane social change and mass empowerment. Prerequisites: AFAS 2010 and admission to upper level.

AFAS 4320 Spiritual Empowerment and Transformation (3) (Formerly AFAS 432). An introduction to the spiritual core of African cosmology and civilization. Exploration of selected classical and contemporary African spiritual paradigms and their potential to empower and transform. Prerequisite: admission to upper level.

AFAS 4400 Senior Seminar (3) (Formerly AFAS 440). As the capstone course in the department, a culmination of the knowledge, practical experiences, and solutions that students have acquired as a result of their matriculation in the curriculum. Prerequisite: admission to upper level. Required of all Africana Studies majors.
AFAS 4450 Classical African Civilizations (3) (Formerly AFAS 445). An advanced seminar to explore in depth some aspect of ancient civilizations of Africa. It concentrates on such topics as cosmology and primordial philosophy. Particular attention is given to Kemetic astronomy, mathematics, the solar calendar, and the writing system.

AFAS 4455 Advertising and Marketing in African Communities (3) (Formerly AFAS 445B). Emphasis on the principles and practices of African-centered advertising and marketing. Course focuses on market analysis and the design and implementation of culturally appropriate advertising and marketing strategies in African communities. The course may operate as an advertising and marketing firm, working with real clients in the African community. Course is taught from a liberal arts perspective.

AFAS 4456 Business Opportunities in Africa (3) (Formerly AFAS 445C). Students learn how to assess business opportunities in Africa. Emphasis is on meeting real needs of African people and on socially responsible business practices. Course includes an examination of cultural paradigms that undergird entrepreneurial philosophy and practice in Africa. Students draft comprehensive business opportunity reports. Course is taught from a liberal arts perspective.

AFAS 4500 Research Methods in Africana Studies (3) (Formerly AFAS 450W). 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 writingintensive course. Prerequisites: AFAS 2010 and admission to upper level. Required of all Africana Studies majors.

AFAS 4510 Africana Studies Internship (3-6) (Formerly AFAS 451). A practicum experience in which students are given the opportunity to apply the knowledge gained from course work in Africana Studies. Students are placed in agencies that are addressing concerns, issues, and problems in the African community. Empirical data from this experience are used for writing the senior project. Course may be repeated once for a maximum total of six hours of credit. Prerequisites: admission to upper level and permission of Department head.

AFAS 4600 Independent Studies and Research (3-6) (Formerly AFAS 460). Course designed to allow students to work independently or in groups on significant topics and projects not covered in other courses. Students carry out their work through a preceptorial arrangement with instructor. May be repeated once for a maximum total of six hours of credit. Prerequisites: admission to upper level and permission of instructor.
AFAS 4900 Senior Project: Theory, Practice, and Solutions (3) (Formerly AFAS 490). A scholarly and scientific project in which students bring to bear the knowledge and skills they have acquired in the Africana Studies major. Prerequisites: admission to upper level candidacy and AFAS 4500. Required of all Africana Studies majors.

## Department of Art

## Carlyle Johnson, Head 112 Jane Elliott Hall (Women's Building) Telephone 615-963-5921

Faculty: H. Beasley, S. Dunson, X. Guo, N. Lovelace, M. McBride, J. McKinney, P. Zeppelin

General Statement: The department of art is a community of scholars, both faculty and students, engaged in a common pursuit of knowledge. Our goal is to be a facilitator of learning: to prepare competent and caring practitioners with multicultural perspectives. Aware that education and learning are life-long experiences, the research and service are all part of our function. The mission of the department at Tennessee State University is to:

1. provide a four year course of study for students desiring to enter the work force in the visual arts;
2. provide a four-year course of study for students desiring careers as elementary and/or secondary art teachers;
3. help students develop an attitude, which leads to continued study at a more advanced or professional level in the field, as well as to engage in life-long learning practices;
4. provide service courses for students engaged in study within other units of the university;
5. provide an opportunity for the campus and the community at large to gain exposure to the range and vitality of contemporary art and contemporary concerns in art education through exhibitions, lectures, visiting artists, and seminars;
6. provide a historical context for personal study and development in the visual arts and/or visual arts education.

Accreditation: The Art program is accredited by the National Association of Schools and Art and Design (NASAD), the Tennessee Department of Education, and the National Council on the Accreditation of Teacher Education (NCATE).

Departmental Requirements
58-66 Semester Hours for Bachelor of Science Degree

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 120, while the minimum in the Studio Art concentration is 120 . The minimum number of hours required in Art courses for certification in Art is 64, while in the Studio Art concentration is 58.

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, during the sophomore year. They must have a 2.75 cumulative quality point average at time of application for admission and must pass the Pre-Professional Skills Test (PPST) or the ComputerBased 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 or the CBT. For a full statement of admission and retention requirements see the Teacher Education Program under the College of Education section. Students are required to student teach at both elementary and secondary schools to fulfill the certification requirements. Satisfactory completion of the program results in licensure for teaching grades K-12 in Tennessee public schools.

## General Education Core

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II
(minimum grade of $C$ in each)
COMM $2200 \quad$ Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2322 Sophomore Literature Course
ART 1010 Art Appreciation
PHIL 1030 Introduction to Philosophy 3
Social and Behavioral Science (6 hours)
SOCI $2010 \quad$ Introduction to Sociology 3
Elective Health and Wellness 3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
BIOL 1010/1011 Introductory Biology I with lab
BIOL 1020/1021 Introductory Biology II with lab 4 Mathematics ( 3 hours)
MATH 1110 College Algebra I 3

Orientation (1 hour)
ASOR 1003 Orientation for Humanities Majors (Teacher certification students should take EDCI 1010.)
Total General Education Hours with Orientation
1
-42

## Upper-division Admission

For admission into the upper-division program of Art, students must complete all of the General Education Core and Major Core Requirements. They must have also removed all high school deficiencies; passed all remedial/developmental courses, earned a cumulative grade point average of 2.0 or above on college-level course work, and completed the Rising Junior Examination. Art majors must earn at least a " C " in courses used to satisfy department requirements. Any classes with grade below a $C$ will have to be repeated.

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 $1210 \quad$ Fundamentals of Drawing
Figure Drawing
3
ART 1220 Figure Drawing
ART 1310
Design I
3

ART 2010 African American 3
ART $4490 \quad$ Portfolio Seminar 3
ART 4500 Senior Project 3
Additional Art courses are required, depending on the degree program one pursues. For these courses, see the following four-year plans. Students may count no more than 9 hours of Individual Problems courses (ART 4000)

## Bachelor of Science Degree in Art Concentration in Studio Art

## Suggested Four-Year Plan

## FRESHMAN YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | ---: | :--- | ---: |
| ASOR 1003 | 1 | ART 1220 | 3 |
| ART 1210 | 3 | ART 1320 | 3 |
| ART 1301 | 3 | MATH 1010 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | $\mathbf{1 3}$ |  | 15 |

SOPHOMORE YEAR
FALL SEMESTER
ART 2010
HR

ART 2210
BIOL 1010, 1011
ENGL 2010 or 2020
SOCI 2010

| SPRING SEMESTER | HR |
| :--- | ---: |
| ART ELECTIVE | 3 |
| ART CONCENTRATION | 3 |
| BIOL 1010, 1011 | 4 |
| PHIL 1030 | 3 |
| SOC/BEH SCI ELECTIVE | $\frac{3}{16}$ |

JUNIOR YEAR

FALL SEMESTER
ART 3310
ART CONCENTRATION
ART STUDIO ELECTIVE
HUMANITIES ELECTIVE General Elective

FALL SEMESTER
ART 4000
ART HIST ELECTIVE ART STUDIO ELECTIVES ART 4490
GENERAL ELECTIVE

SENIOR YEAR

| HR | SPRING SEMESTER | HR |
| ---: | :--- | ---: |
| 3 | ART 4010 | 3 |
| 3 | ART 4500 | 3 |
| 3 | ART STUDIO ELECTIVE | 3 |
| 3 | GENERAL ELECTIVES | 6 |
| $\frac{3}{15}$ |  | -15 |

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

Suggested Four-Year Plan - Total 124

## FRESHMAN YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | ---: | :--- | ---: |
| ART 1210 | 3 | ART 1220 | 3 |
| ART 1310 | 3 | ART 1320 | 3 |
| ENGL 1010 | 3 | MATH 1010 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| EDCI 1010 | $\underline{1}$ | ENGL 1020 | 3 |
|  | $\mathbf{1 3}$ |  | 15 |

## SOPHOMORE YEAR

FALL SEMESTER
HR SPRING SEMESTER
ART 2010
ENG 2010 or 2020
BIOL 1010, 1011
SOCI 2010
ART 2210

FALL SEMESTER
JUNIOR YEAR
HR SPRING SEMESTER HR
ART 3310
ART 3710
ART 3310
ART 3500
PSYC 3120
COMM 2200
EDCI 4190
ART 3600
ART 3410
ART 3310
EDCI 3870
EDAD 4000
18

## SENIOR YEAR

FALL SEMESTER
ART 4490
HR

ART 4500
EDCI 4705
ART HIST ELECTIVE
EDSE 3330
EDRD 4910
HUM ELECTIVE
PSYC 2420

BIOL 1020, 1021
SOC/BEH SCI ELECTIVE 3
PHIL 1030
*These courses should be in the student's declared studio concentration.

## Course Descriptions

(ART)
ART 1210 Fundamentals of Drawing I (3) (Formerly ART 121). 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 1220 Figure Drawing II (3) (Formerly ART 122). An exploration of formal and expressive potentials of the figure, with traditional and experimental approaches to drawing. Prerequisite: ART 121.

ART 1310 Design I (3) (Formerly ART 131). A basic approach to the visual elements and principles of design as they related to two-dimensional
problems. Problem stating and problem solving are a vital part of the course with emphasis on design theory, materials and techniques.

ART 1320 Design II (3) (Formerly ART 131). An introduction on how to think outside the flat box utilizing three-dimensional media, design and design principles through creative projects dealing with simple construction techniques, mass, volume, space and variety of media. Applicable to art majors and students interested in design and three-dimensional media.
ART 1010 Art Appreciation (3) (Formerly ART 1010). 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 and connections between global art forms. This course may be used towards satisfying the University's humanities requirement.

ART 1011 Honors Art Appreciation (3) (Formerly ART 1011). Honors section of ART 1010 emphasizing the visual arts for students including fundamentals and distinctions between Art Media and periods. This course includes videos of contemporary African American Artists and other 20th and 21st Century Artists. Art 1011 satisfied the University humanities requirements. Enrollment is limited to members of the University Honors Program.
ART 1012 Art History and Appreciation (3) (Formerly ART 1012). 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 2010 African-American Art I (3) (Formerly ART 201). A survey of African American visual arts beginning with African roots and influences in the Americas and Caribbean Islands and highlighting the emergence of artists of African descent in the United States.

ART 2210 Painting I (3) (Formerly ART 221). An introduction of the study of color, composition and methodology. Students will learn how to prepare sound paintings, supports of canvas, panel and paper. The study of the versatile applications of oils and acrylics will be explored. Prerequisites: ART 110-120 or 121-122 or 132.

ART 2310 Painting II (3) (Formerly ART 231). This course will offer a combination of technical and conceptual fundamentals of painting. Students will explore spatial organization through observation and abstraction. The student will experiment with problem solving techniques which will advance the individual's personal artistic statement. Prerequisites ART 221.

ART 2410 Crafts (3) (Formerly ART 241). An introduction to various media, methods, and techniques of creative art production in two and three-dimensional art making. This course is primarily designed for prospective K-12 art specialists whose desire is to improve their knowledge, skills, and understanding of art production. Clinical and field based experiences which call for active participation by students are part of the course requirements.
ART 2510 Lettering and Layout I (3) (Formerly ART 251). Technique of letter indication, finished lettering, letter design, typography and film lettering, usage, and adaptation of lettering skills to practical problems. Prerequisite: ART 131,132.

ART 2530 Illustration I (3) (Formerly ART 253). The art of illustration as used by the graphic designer/commercial artist. The course includes a study of the history of illustration, methods, tool and techniques. Prerequisite: ART 121, 122, 131, and 132.

ART 3000 Aesthetics (3) (Formerly ART 300). Problems in philosophy of art and art criticism; aesthetic experience; truth and art; aesthetic value.
ART 3010 Ceramics I (3) (Formerly ART 301). Emphasis on clay as a creative medium as African masks, cultural masks and various projects are explored through hand-forming techniques, utilizing functional and sculptural forms. Students explore surface decoration, extruded forms, kiln firings, clays, glazes and an introduction to the potter's wheel.
ART 3020 Ceramics II (3) (Formerly ART 302). Emphasis on the potter's wheel and wheel throwing techniques for traditional and non-traditional functional forms. Students explore kiln firings, clays and glazes. Hand forming methods may be maximized to express conceptual series.
ART 3030 Jewelry and Metalsmithing I (3) (Formerly ART 303). Introduction to basic techniques, design and concepts of jewelry, Metalsmithing
and small sculptural forms. Techniques include African glass beadmaking, stone setting, soldering, sheet and wire forming. Students buy their own material: i.e., metal, stones, plastic or glass depending on the student's own design and budget. Prerequisites: ART 121, 122, 131, and 132, or permission of instructor.
ART 3040 Jewelry and Metalsmithing II (3) (Formerly ART 304). Advanced techniques in jewelry, Metalsmithing and small sculptural forms. Techniques include lost wax casting, chasing, repousse African glass beadmaking, bezel setting of stones, fabrication and design. Students buy their own material, i.e., metal, stones, plastic or glass, depending on the student's own design and budget. Prerequisite: ART 303 or permission of Instructor.

ART 3060 Illustration (3) (Formerly ART 306). Continuation of ART 253 with a focus on in depth work in any chosen medium including combinations of media. Prerequisite: ART 253

ART 3100 Advanced Drawing and Pictorial Design I (3) (Formerly ART 310). Advanced composition, stressing figure. Prerequisites: ART 210-220 or permission of the instructor.
ART 3110 Graphic Design (3) (Formerly Art 311). A problem-solving approach to visual communication, with a special concern for word and image. The course emphasizes the understanding of design, theories, and skills with a focus on the social and cultural dimensions of communication. Prerequisite: ART 251-252.

ART 3120 Production (3) (Formerly ART 312). Technology and skills necessary for the designer/ artist. Courses include digital technology preparation of finished art suitable for reproduction. Prerequisites: ART 251.

ART 3130 Advanced Illustration (3) (Formerly ART 313). Study of advanced pictorial concepts, methods, and techniques. Prerequisite: ART 253.

ART 3200 Advanced Drawing and Pictorial Design II (3). Advanced composition, stressing figure. Prerequisite: ART 310 or permission of instructor.

ART 3210 Intermediate Painting (3) (Formerly ART 321). In this course, a conceptual, theoretical approach to painting will be emphasized; lectures, field trips and critical discussions on current directions in painting will be discussed. This course will challenge the student's personal artistic style through the introduction of a variety of new media painting styles. Prerequisite: ART 221 or permission of instructor.
ART 3260 Photography (3) (formerly ART 326). The fundamentals of photographic process, including the proper use and maintenance of the digital camera, photographic and related equipment.

ART 3300 Watercolor Painting (3) (Formerly ART 330). Composition in transparent and opaque watercolor.

ART 3310 Art History I (3) (Formerly ART 331). An introductory survey of the development of the visual arts from the Paleolithic period through the Gothic Period.

ART 3320 Art History II (3) (formerly ART 332). An introductory survey of the development of the visual arts from the late fourteenth century through the contemporary period.

ART 3410 Sculpture I (3) (Formerly ART 341). Study of the figure, modeling, casting and construction with a variety of media including metals in an introduction to sculptural techniques and conceptual ideas. Class includes videos and information about African American 20th and 21st century sculptors.

ART 3420 Sculpture II (3) (Formerly ART 342). Figurative and portrait sculpture projects using the model to express conceptual ideas. Continued development of sculptural techniques and concepts. Students complete several projects and work of the student's choice. Prerequisite: ART 3410.

ART 3500 Printmaking I (3) (Formerly ART 350). An introductory course in the art of printmaking, its history, methods, and techniques, including a comprehensive study of various printmaking processes with an emphasis on the less toxic approach. Prerequisites: 1210, 1220, 1310, 1320.

ART 3510 Printmaking II (3) (Formerly ART 351). A continuation of Printmaking I with an emphasis on advances techniques, focusing on the definition of imagery as well as exploring non-traditional techniques. Prerequisite: ART 3500.

ART 3520 Intermediate Printmaking I (3) (Formerly ART 352). In-depth work in any chosen medium, including combinations of media. Prerequisites: ART 3500 and 3510.
ART 3600 Public School Art (3) (Formerly ART 360). 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 3710 Art Education Methods (3) (Formerly ART 371). A course designed to give students experience and 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 4000 Individual Problems (3 to 9) (Formerly ART 400A, 400B, 400C). Prior to enrolling for individual problems, students must have a form signed by the instructor and the Department Head. Forms are available in the Art Office. Upper-level art majors only. Art students can count no more than 9 hours of Individual Problems toward the major in Art.

ART 4090 Ceramics III (3) (Formerly ART 409). Advanced problems in technical and conceptual areas in clay that relate to the student's individual approach.
ART 4120 Advanced Graphic Design (3) (Formerly ART 412). A continuation of Art 3110, with an emphasis on Graphic imagery, topography and layout. Prerequisites: ART 2510, 3110.

ART 4150 Sculpture III (3) (Formerly ART 415). Students create a series of works intended to advance individual student expression of conceptual idea through sculptural media in consultation with the instructor. Students develop work in one of the following areas: casting, mold making, figurative works, installations, clay, multi-media, wood, glass or metal fabrication. Prerequisites: ART 3410 and 3420.

ART 4170 Advanced Photography (3) (Formerly ART 417). Emphasis on individual approaches to the photographic process.
ART 4210 Advanced Painting I (3) (Formerly ART 421). This is an open studio course which allows the student to identify the strengths and weakness in their paintings. The goal is to produce a self-defined body of work. Each student will create a contract stating the concept, material and amount of work that will be produced by the end of the semester. Student will sue the collective knowledge of the prerequisite courses to exhibit the relationships between form and content and the processes and materials explored. Prerequisites: ART 3210 and 3220, or permission of instructor.
ART 4400 Intro/Desktop Publishing (3) (Formerly ART 440). PageMaker basics, screen, menus, palettes, and other tools used together to create, modify, close, and open publications.

ART 4490 Portfolio Seminar (1) (Formerly ART 4490). Development of a portfolio, graduate school application, and a personal artistic statement. Students must provide twenty slides of their 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 their senior year.
ART 4500 Senior Project I (3) (Formerly ART 450). 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. Students must earn at least a B in the course to be eligible for the senior review and for graduation.
ART 4520 Advanced Printmaking (3) (Formerly ART 452). An advanced printmaking course with emphasis on in-depth, individual approaches in various printmaking processes. Prerequisite: ART 3490 or permission of instructor.
ART 4550 African-American Art II (3) (Formerly ART 455). A study of the development of African American visual arts from the twentieth century to the present period.
ART 4720 Enhanced Student Teaching in Elementary and Secondary School (12) (Formerly ART 472). 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 4705, which is taken concurrently.

# Department of Biological Sciences 

Terrance L. Johnson, Ph.D., Head 110 McCord Hall Telephone 615-963-5681

Faculty: M. Asson-Batres, M. Blackshear, C. Caudle, W. Cumming, A. Ejiofor, P. Ganter, C. Gardner, L. Harlston, A. Isa, M. Ivy, P. Kahlon, G. Komives, E. Martin, B. McAdory, E. Myles, R. Newkirk, J. Robinson, M. Stratton, B. Washington, X. Wang, A. Young-Seigler

General Statement: The curriculum of the Department of Biological Sciences is designed to fulfill the pre-professional 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 can provide a liberal education directed toward an appreciation of the complexity, diversity and beauty of nature.

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

## General Education Core

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II
(minimum grade of $C$ in each)
COMM $2200 \quad$ Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2230 Sophomore Literature Course I
ENGL 2110-2230 Sophomore Literature Course II 3
Humanities One course from approved list. 3
Social and Behavioral Science (6 hours)
Elective One course from approved list. 3
Elective One course from approved list. 3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
BIOL 1110/1111 General Biology I 4
BIOL 1120/1121 General Biology II 4
Mathematics (3 hours)
One course from approved list. 3
Orientation (1 hour)
ASOR 1001 Orientation for Science Majors 1
(Teacher certification students should take EDCI 1010.) -
Total General Education Hours with Orientation

## Major Core

Mathematics (3 hours)
MATH 1730, or 1720 Pre-Calculus Mathematics II, or Pre-Calculus Mathematics Alternative, or
MATH $1915 \quad$ Calculus and Analytical Geometry (required for Cellular and Molecular Biology students.)
Note: Students may need to pass
MATH 1710 or lower math if they
are unprepared for MATH 1720 or 1915.

Chemistry (16 hours)

CHEM 1110/1111 General Chemistry I with lab
CHEM 1120/1121 General Chemistry II with lab
CHEM 2010/2011 Organic Chemistry I with lab
CHEM 2020/2021 Organic Chemistry II with lab 4 Physics (8 hours)
PHYS 2010/2011 College Physics I with lab
PHYS 2020/2021 College Physics II with lab
Biology (8 hours)
BIOL 2110/2111 Cell Biology with lab
BIOL 2120/2121 Principles of Genetics with lab
Total Major Core
For Admission into the upper division of programs of the Biology major, students must complete all of the requirements listed above under General Education Core and the Major Core. In addition they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level coursework, and completed the Rising Junior Examination.

## Upper-division Curricula

The undergraduate curricula for majors results 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 pre-professional 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 124 semester hours is required in the teacher preparation program including 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 grade point average of 2.75 and a passing score on the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessment Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. To be eligible for upper-level certification courses, a student must be officially admitted to the Teacher Education Program. For a complete list of admission and retention requirements in the Program, see the College of Education section, Teacher education Admission and Requirements.

A major in Biology with emphasis in General Biology or Cellular and Molecular Biology requires 122 semester hours, of which 33 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 4190, 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 1110-1111; 1120-1121; 2110-2111 (Cell Biology), and 2120-2121 (Genetics). General Chemistry 1110 and 1120, with laboratories, are required as a supporting related course and must precede BIOL 2110. The remaining eight hours of the minor must be on the 3000 or 4000 level and may be elected in the minor area desired by the student.

Accreditation: The teacher certification program in Biology is approved by the Tennessee Department of Education. In addition, the teacher education program is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

## Bachelor of Science Degree in Biology General Biology Emphasis

## Suggested Four-Year Plan

FRESHMAN YEAR
FALL SEMESTER
HR SPRING SEMESTER
BIOL 1110, 1111
BIOL 1120, 1121 4
CHEM 1110, 1111
CHEM 1120, 1121
ENGL 1020
ENGL 1010
Social Science (Elective)
ASOR 1001
*MATH 1720 or Higher
Social Science (Elective)
*Students will have to take MATH 1710 or lower if they are unprepared for these courses.

## SOPHOMORE YEAR

## FALL SEMESTER

BIOL 2110, 2111
SPRING SEMESTER
CHEM 2010, 2011
4 CHEM 2020 2021
(FORMERLY CHEM 211, 211L)
ENGL 2010
3
HIST 2010
(FORMERLY CHEM 212, 212L)

COMM 2200
ENGL 2020
3
HIST 2020
3
HUMANITIES
17

## JUNIOR YEAR

FALL SEMESTER
HR
Physiology Elective
(BIOL 3210/3211, 3400/3401, OR 4300/4301)
BIOL ELECTIVE, 3000/4000
PHYS 2010, 2011
BIOL 3110 or AGSC 3120 or 3130

SPRING SEMESTER
4
BIOL 4120, 4121 HR

CHEM 3410, 3411
4

PHYS 2020, 20214
4 Electives, $3000 / 40003$
$-3$

## SENIOR YEAR

FALL SEMESTER
HR
BIOL 4170
SPRING SEMESTER HR
1
BIOL ELECTIVES, 3000/4000 4
ELECTIVES, 3000/4000 LEVEL 9
BIOL $4180 \quad 1$
BIOL ELECTIVES, 3000/4000 8
ELECTIVES, 3000/4000 LEVEL 3

## Bachelor of Science Degree in Biology Cellular and Molecular Biology Emphasis

## Suggested Four-Year Plan

## FRESHMAN YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | ---: | :--- | ---: |
| BIOL 1110, 1111 | 4 | BIOL 1120, 1121 | 4 |
| CHEM 1110, 1111 | 4 | CHEM 1120, 1121 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Social Science (Elective) | 3 | *MATH 1910 | 3 |
| ASOR 1001 | $\underline{1}$ | Social Science (Elective) | $\frac{3}{17}$ |

*Students will have to take MATH 1710 and 1720 if they are unprepared for 1915.

|  | SOPHOMORE YEAR |  |  |
| :--- | ---: | :--- | ---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| BIOL 2110, 2111 | 4 | BIOL 2120, 2121 | 4 |
| CHEM 2010, 2011 | 4 | CHEM 2020, 2021 | 4 |
| (FORMERLY CHEM 211, 211L) | (FORMERLY CHEM 212, 212L) |  |  |
| ENGL 2010 | 3 | ENGL 2020 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| COMM 2200 | 3 | HUMANITIES | 3 |
|  | 17 |  | 17 |

FALL SEMESTER
JUNIOR YEAR

PHYSIOLOGY
(BIOL 3200/3201, $2210 / 3211$
BIOL 3200/3201, 3210/3211,
3400/3401, OR 4300/4301)
CHEM 3410, 3411
PHYS 2010, 2011
BIOL 3110 or ABSC 3120
or 3130

FALL SEMESTER
BIOL 4170
BIOL ELECTIVES, 3000/4000
ELECTIVES, 3000/4000
$\square \overline{15}$

HR
RING SEMESTER
BIOL 4120, 4121
HR

CHEM 3420, 34214
4 PHYS 2020, $2021 \quad 4$
4 Electives, 3000/4000 3

```
15

\section*{SENIOR YEAR}

\section*{Bachelor of Science Degree in Biology With Teacher Certification Licensure for Grades 7-12}

\section*{Suggested Four-Year Plan - Total 124}

FRESHMAN YEAR

FALL SEMESTER
BIOL 1110, 1111
CHEM 1110, 1111
ENGL 1010
Humanities Elective
HPSS 1510
EDCI 1010
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
4 & BIOL 1120, 1121 & 4 \\
4 & CHEM 1120, 1121 & 4 \\
3 & ENGL 1020 & 3 \\
3 & *MATH 1720 OR HIGHER & 3 \\
3 & & \\
\(\frac{1}{18}\) & & -14
\end{tabular}
*Students will have to take MATH 1040 or lower if they are unprepared for 1720.

\section*{SOPHOMORE YEAR}
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
BIOL 2110, 2111 & 4 & BIOL 2120, 2121 & 4 \\
CHEM 2010, 2011 & 4 & CHEM 2020, 2021 & 4 \\
(FORMERLY CHEM 211, 211L) & (FORMERLY CHEM 212, 212L) \\
ENGL 2010 & 3 & COMM 2200 & 3 \\
HIST 2010 & 3 & HIST 2020 & 3 \\
PSYC 2420 & \(\mathbf{3}\) & EDCI 2010 & \(\frac{3}{17}\) \\
& \(\mathbf{1 7}\) & & 17
\end{tabular}

\section*{JUNIOR YEAR}
FALL SEMESTER HR SPRING SEMESTER HR

PHYSIOLOGY ELECTIVE
(BIOL 3200/3201, 3210/3211, 3400/3401, OR 4300/4301)
ART 1010
PHYS 2010, 2011
PSYC 3120

FALL SEMESTER
BIOL 3710
BIOL 4170 OR 4180
EDAD 4000
(FORMERLY EDCI 419)
EDCI 4190
EDRD 4910
BIOL 3010,3011

EDSE 3330

\section*{Course Descriptions}

\section*{Biology (BIOL)}

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

BIOL 1010, 1011 and 1020, 1021 Introductory Biology I, II and Laboratory (4, 4) (Formerly BIO 1010, 1011 and 1020, 1021). An interdisciplinary course for non-science majors involving the principles of mathematics, chemistry, physics and biology. The objective of the course is to integrate the areas as they are related to living organisms. Three hours lecture and two hours laboratory per week.

BIOL 1012, 1013 and 1022, 1023 Honors Introductory Biology I, II and Laboratory (4, 4) (Formerly BIO 1012, 1013 and 1022, 1023). Honors version of BIOL 1010, 1011, 1020, 1021. Courses limited to students in University Honors Program.

BIOL 1110, 1111 and 1120, 1121 General Biology I, II and Laboratory (4, 4) (Formerly BIO 1110, 1111 and 1120, 1121). A general biology course for science majors that covers structure, function, and life characteristics of organisms. The objective of the course is to provide students a survey of living organisms and the processes required for life.

BIOL 1112, 1113 and 1122, 1123 Honors General Biology I, II and Laboratory (4, 4) (Formerly BIO 1032, 1033 and 1042, 1043). Honors version of BIOL 1110, 1111, 1120, 1121. Course limited to students in University Honors Program.

BIOL 2110, 2111 Cell Biology and Laboratory (4) (Formerly BIO 211, 211L). Structure and function of cells and their components. Prerequisites: BIOL 1110, 1111, 1120, 1121.
BIOL 2120, 2121 Principles of Genetics and Laboratory (4) (Formerly BIO 212, 212L). An introduction to genetics, including classical and modern approaches, the laws of heredity, the role of heredity in developmental physiology, and the relation between heredity and evolution. Prerequisites: BIOL 1110, 1111, 1120, 1121.

BIOL 2210, 2211 and 2220, 2221 Human Anatomy and Physiology and Laboratory (4, 4) (Formerly BIO 221, 221L and 222, 222L). The fundamentals of the structure, function, and organization of the organ systems of man. These courses should be taken in sequence.

BIOL 2400, 2401 Principles of Microbiology (4). Identification, culture, sterilization, and disinfectant procedures employed in studying certain microorganisms. Open to majors in Family and Consumer Sciences, HPER, and Nursing. Prerequisites: BIOL 1110, 1111 or CHEM 1110, 1011, 1120, 1121.

BIOL 3010, 3011 Earth and Space Science and Laboratory (3) (Formerly BIO 301, 301L). 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 will be given to space exploration, including stars, space, and time. Two lecture periods and one two-hour laboratory per week.

BIOL 3110 Biometrics (3) (Formerly BIO 311). An introduction to the methods of statistics that are of particular interest to biologists for experimental design and interpretation. Prerequisites: MATH 1720, BIOL 2110, \(2111,2120,2121\), or their equivalents.

BIOL 3185, 3186, 3187 Cooperative Education (3,3,3) (Formerly BIO 318A, B, C). 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.
BIOL 3200, 3201 Comparative Physiology (4) (Formerly BIO 320, 320L). Introduces the concepts of physiology, including topics from cellular and animal physiology. Prerequisites: Successful completion of BIOL 2120, 2121; CHEM 211-211L and/or concurrent enrollment in CHEM 212212L and PHY 212-212L.

BIOL 3210, 3211 Mammalian Physiology and Laboratory (4) (Formerly BIO 321, 321L). Consideration of the dynamic interactions and integrations of mammalian organ systems. Special emphasis is placed upon recent advances in methodology and new concepts in physiology and contributing sciences. Prerequisites: BIOL 1110, 1111, 1120, 1121 and CHEM 1110, 1111, 1120, 1121, or equivalents.
BIOL 3240, 3241 Comparative Anatomy and Laboratory (4) (Formerly 324, 324L). The comparative anatomy and evolution of the organ system of chordate animals. Prerequisites: BIOL 1110, 1111, 1120, 1121.

BIOL 3300, 3301 Plant Morphology and Laboratory (4) (Formerly BIO 330, 330L). Consideration of the structure, embryology, and phylogeny of higher vascular plants. Prerequisites: BIOL 1110, 1111, 1120, 1121, BIOL 2120, 2121, 4110, 4111.

BIOL 3320, 3321 General Botany and Laboratory (4) (Formerly BIO 332, 332L). The anatomy, physiology, and taxonomy of plants. Prerequisites: BIOL 2110, 2111, 2120, 2121.
BIOL 3400, 3401 Introduction to Microbial Physiology and Laboratory (4) (Formerly BIO 340, 340L). 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: BIOL 3410, 3411 or CHEM 211, 211L concurrently.

BIOL 3410, 3411 Principles of General Bacteriology and Laboratory (4) (Formerly BIO 341, 341L). The isolation, identification, culture, nutrition, sterilization, and chemotherapeutic procedures employed in studying bacteria. Prerequisites: BIOL 2110, 2111, 2120, 2121; CHEM 1110, 1111, 1120, 1121.

BIOL 3710 Methods of Teaching Biology (3) (Formerly BIO 371). 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.
BIOL 4100 Special Topics (3) (Formerly BIO 410). Student- and facultygenerated course. Scope of subject matter is determined by students and instructor. Prerequisites: 12 hours upper-level Biology or permission of instructor. (Elective)

BIOL 4110, 4111 Molecular Genetics and Laboratory (4) (Formerly BIO 411, 411L). An introduction to molecular genetics in microorganisms, plants, and animals. Emphasis is placed on biotechnical advances and the methods and techniques used in these systems. Prerequisites: BIO 2110, 2111, 2120, 2121.

BIOL 4120, 4121 Principles of Ecology and Laboratory (4) (Formerly BIO 412, 412L). 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. Prerequisite: BIOL 1110, 1111, 1120, 1121, 2120, 2121, 4110, 4111.

BIOL 4130, 4140 Contemporary Problems in Ecology I, II (3, 3) (Formerly BIO 413, 414). A study of some of the contemporary problems constituting the environmental crisis, the hazards comprising such problems, and the complexity affecting their resolutions. (Elective)

BIOL 4150, 4151 Microtechnique and Laboratory (4) (Formerly BIO 415, 415L). Methods of microscopic study of tissues. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121 and CHEM 1110, 1111, 1120, 1121.
BIOL 4160 Evolution (3) (Formerly BIO 416). A study of current evolutionary theory, including systematics, with an examination of macroevolutionary patterns and microevolutionary processes. Prerequisites: BIOL 1110, 1111, 1120, 1121.

BIOL 4170 and 4180 Senior Seminar \((1,1)\) (Formerly BIO 417, 418). Current problems in biology. A minimum of one semester required of all seniors in the Department. Meets one hour per week.

BIOL 4190 Junior Honors Research (3) (Formerly BIO 419). 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 Department faculty. (Elective)

BIOL 4200, 4201 Invertebrate Zoology and Laboratory (4) (Formerly 420, 420L). Study of the morphology, physiology, taxonomy, and life histories of the invertebrates. Emphasis is placed on the systemic developments of invertebrate types. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121. (Elective)
BIOL 4210, 4211 Embryology and Laboratory (4) (Formerly BIO 421, 421L). 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. Prerequisite: BIOL 3240 and 3241 are strongly recommended.

BIOL 4220, 4221 Endocrinology and Laboratory (4) (Formerly BIO 422, 422L). 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. Prerequisite: BIOL 4210, 4211. (Elective)

BIOL 4230, 4231 Histology and Laboratory (4) (Formerly BIO 423, 423L). Study of animal tissues. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121, 4110, and 4111. (Elective)

BIOL 4240, 4241 Introduction to Parasitology and Laboratory (4) (Formerly BIO 424, 424L). Animal parasites and their methods of entering the body of man and mammals. The several types of host-parasite relationships are surveyed, with emphasis on the effects of parasites on or within the hosts, immunogenic responses by the host to parasitism, and a history of the discipline. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121. (Elective)

BIOL 4260, 4261 Field Zoology and Laboratory (4) (Formerly BIO 426, 426L). Study of selected groups of animals. Methods of collecting, classifying, and preserving will be emphasized. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121. (Elective)

BIOL 4270, 4271 and 4280, 4281 Physiology and Pathophysiology I, II and Laboratory (4, 4) (Formerly BIO 427, 427L and 428, 428L). A closely integrated series of lectures and laboratory demonstrations which emphasize human physiology and pathophysiology. Physiology of the nervous system, blood circulation, respiration, and special senses is considered, as is the basic and applied physiology of the digestive, excretory, and endocrine systems. Mechanisms of integrating various systems are emphasized. Must be taken in sequence. Prerequisites: BIOL 1110, 1111, 1120, 1121 or BIOL 2210, 2211, 2220 and 2221 and CHEM 211, 211L.

BIOL 4272, 4273 Physiology and Pathophysiology and Laboratory (4) (Formerly BIO 427A, 427K). An accelerated one-semester series of lectures and laboratory demonstrations which emphasize human physiology and pathophysiology. Immune response, gastrointestinal, cardiovascular, electrolytic, respiratory, renal, neurological, endocrinal, reproductive, and musculoskeletal disorders are considered. Both courses are required of Nursing majors. Prerequisites: BIOL 1110, 1111, 1120, 1121 or BIOL 2210, 2211, 2220 and 2221 and CHEM 211, 211L.

BIOL 4300, 4301 Introduction to Plant Physiology and Laboratory (4) (Formerly BIO 430, 430L). 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: BIOL 3320, 3321 and CHEM 1110, 1111, 1120, 1121.
BIOL 4320, 4321 Field Botany and Laboratory (4) (Formerly BIO 432, 432L). 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. Prerequisite: BIOL 3320, 3321. (Elective)

BIOL 4400, 4401 Pathogenic Microorganisms and Laboratory (4) (Formerly BIO 440, 440L). 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. Prerequisite: BIOL 3410, 3411.

BIOL 4410, 4411 Immunology and Serology and Laboratory (4) (Formerly BIO 441, 441L). Theories of immunity and training in serological methods and procedures for immunization. Prerequisites: BIOL 3410, 3411. (Elective)

BIOL 4420, 4421 Virology and Laboratory (4) (Formerly BIO 442, 442L). Survey of bacterial, plant, and animal viruses with emphasis on their infectious cycles. Prerequisite: BIOL 3410, 3411. (Elective)

BIOL 4724 Student Teaching (9) (Formerly BIO 427S). 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.

\section*{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.

BIOL 3920 Scientific Communication (4) (Formerly BIO 392). Course designed to improve written, oral, and quantitative skills necessary to enhance career development in the sciences.
BIOL 4900, 4901 Cell Physiology and Laboratory (4) (Formerly BIO 490, 490L). Introduction to the interrelationships of biological, physical, and chemical aspects of the cell. Prerequisites: BIOL 1110, 1111, 1120, 1121, CHEM 1110, 1111, 1120, 1121.

BIOL 4911 Modern Scientific Methods (3) (Formerly BIO 491). Use and applications of modern laboratory equipment and techniques. Prerequisite: BIOL 4900, 4901.

BIOL 4920 Honors Undergraduate Research (4) (Formerly BIO 492). Intramural and extramural biomedical research experiences.

BIOL 4930 Current Biomedical Topics (0) (Formerly BIO 493). 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.

BIOL 4940, 4950 MARC Seminar Series (1-1\&2) (Formerly 494, 495). Exposure to current presentations by eminent scientists in biomedical research.

\title{
Department of Chemistry
}

\author{
Mohammad R. Karim, Ph.D., Head 201 Chemistry Building Telephone 615-963-5321
}

Faculty: M. Al-Masum, W. Boadi, D. Domin, T. Duello, S. Guha, J. Mensah, J. Moore, C. Okoro, N. Phambu, K. Vercruysse, M. Whalen.

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

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

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

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

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

Departmental Requirements
32-56 Semester Hours
For Bachelor of Science
Chemistry

\section*{Requirements for a Minor}

\section*{24 or More Semester Hours}

An undergraduate minor in chemistry must take a minimum of 24 hours of chemistry courses, 16 of which to be taken in sequence. These are CHEM 1110, 1111 (General Chemistry I and Lab), CHEM 1120, 1121 (General Chemistry II and Lab), CHEM 2010, 2011 (Organic Chemistry I and Lab), CHEM 2020, 2021 (Organic Chemistry II and Lab). Honors sections of these courses will also satisfy the requirement. The remaining 8 hours of the minor must be on the 3000 or 4000 level in consultation with the advisor.

\section*{General Education Core}

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II 6
(minimum grade of C in each)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2230 Sophomore Literature Course 3
Elective One course from approved list. 3
Elective One course from approved list. 3
Social and Behavioral Science (6 hours)
Elective One course from approved list. 3
Elective One course from approved list. 3

\section*{History (6 hours)}
\begin{tabular}{ll} 
HIST 2010 & American History I \\
HIST 2020 & American History II
\end{tabular}

Natural Science (8 hours)
CHEM 1110, 1111 General Chemistry I
CHEM 1120, 1121 General Chemistry II
MATH 1915
(Students will need lower level math if they are unprepared for 1915.)
Orientation (1 hour)
ASOR 1001 Orientation for Science Majors
(Teacher certification students should take EDCI 1010.)
Total General Education Hours with Orientation

\section*{Upper-division Admission}

For admission into the upper-division programs of the Chemistry major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level coursework, and completed the Rising Junior Examination. In addition, they must have earned a grade of C or better in CHEM 1110 or 1112, 1111 or 1113,1120 or 1122, 1121 or 1122, 2100, 2101, 2010 or 2012, 2011 or 2013, 2020 or 2022, and 2021,or 2023.

\section*{Curriculum 1-Professional Chemistry Curriculum 56 Hours}

This program requires 120 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 56 semester hours in Chemistry is required, 36 of which must be in 3000 - or 4000 -level courses. The required courses are 1112, 1113, 1122, 1123, 2100, 2101, 2012, 2013, 2022, 2023, 3210, 3211, 3220, 3221, 3410, 3420, 4100, 4200, 4201, 4210, 4320, 4321, 4505, 4506, 4910, and 4920, plus one additional course to be chosen from CHEM 4000, 4600, and 4830. CHEM 4600 is strongly recommended. MATH 2115 is also highly recommended during the sophomore year. This curriculum is based upon recommendations by the American Chemical Society.

\section*{Curriculum 2-Biochemistry Concentration}

49 Hours
This program requires 120 hours for graduation and is designed for students pursuing a professional career in medicine, dentistry, pharmacy, or veterinary medicine. Students following this curriculum will receive a minor in Biology.

A minimum of 49 semester hours in Chemistry is required, 29 of which must be in 3000- and 4000-level courses. The required courses are: 1112, 1113, 1122, 1123, 2100, 2101, 2012, 2013, 2022, 2023, 3000, 3210, 3220, 3410, 3411, 3420, 3421, 4100, 4505, 4506, 4700, 4701, 4910, and 4920.

\section*{Curriculum 3-Chemistry Concentration}

35 Hours
This program of study requires 120 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 3000and 4000 -level courses, and is designed for students whose career objectives are in fields where chemistry has indirect applications. The required courses are: 1110, 1111, 1120, 1121, 2100, 2101, 2010, 2011, 2020, 2021, 3000, 3210, 3211, 3220, 3221, 4100, 4910, and 4920.

\section*{Curriculum 4-Major in Chemistry with Teacher \\ 32 Hours Certification, Licensure for Grades 7-12}

All candidates for certification in secondary education must complete a minimum of 123 semester hours, which includes a general education core ( 42 hours), a professional education core (36 hours, including a 9 -hour course in enhanced student teaching), and a major concentration of content and knowledge courses (32 hours). The required courses in Chemistry are 1110, 1111, 1120, 1121, 2100, 2101, 2010, 2011, 2020, 2021, 3210, 3211, 3410, 3411,3710 , and 4910 . Successful completion of this program provides one with a license to teach Chemistry in grades 7-12 in Tennessee public schools.

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

\section*{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. The curriculum consists of joint programs between the two institutions and qualifies students for the bachelor's degree.

The first three years of this curriculum consist of the basic required courses for a Biochemical concentration and the pre-pharmacy requirements for Howard University. Required Chemistry courses are: 1112, 1113, 1122, 1123, 2100, 2101, 2012, 2013, 2022, 2023, 3210, 3211, 3220, 3221, 4100, 4910, and 4920. 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 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.

\section*{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.

\section*{Bachelor of Science Degree in Chemistry}

\section*{Curriculum 1-Professional Chemistry Curriculum \\ Suggested Four-Year Plan \\ FRESHMAN YEAR \\ \begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
CHEM 1112, 1113 & 4 & CHEM 1122, 1123 & 4 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
* MATH 1915 & 4 & MATH 1925 & 4 \\
HUMANITIES & 3 & SOC/BEH SCI & 3 \\
ASOR 1001 & 1 & COMM 2200 & 3 \\
SOC/BEH SCI & 3 & & -17
\end{tabular}}
*Students will have to begin with lower-level MATH if they are unprepared for this course.

\section*{SOPHOMORE YEAR}
\begin{tabular}{|c|c|c|c|}
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline CHEM 2100, 2101 & 4 & CHEM 2022, 2023 & 4 \\
\hline CHEM 2012, 2013 & 4 & HUMANITIES & 3 \\
\hline ENGL 2110 & 3 & HIST 2020 & 3 \\
\hline HIST 2010 & 3 & PHYS 2120, 2121 & 4 \\
\hline \multirow[t]{2}{*}{PHYS 2110/2111} & 4 & & \\
\hline & 18 & & 14 \\
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline CHEM 3210, 3211 & 4 & CHEM 3220, 3221 & 4 \\
\hline CHEM 4200, 4201 & 4 & CHEM 4100 & 2 \\
\hline MATH/SCIENCE ELECTIVE, & 3 & CHEM 4210 & 3 \\
\hline 3000-4000 LEVEL ELECTIVE, ANY LEVEL & 2 & MATH/SCIENCE ELECTIVE, 3000-4000 LEVEL & 3 \\
\hline & 13 & & 12 \\
\hline \multicolumn{4}{|c|}{SENIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline CHEM 3410 & 3 & CHEM 4320, 4321 & 4 \\
\hline CHEM 4505 & 2 & CHEM 4506 & 2 \\
\hline CHEM 4910 & 1 & CHEM 4920 & 1 \\
\hline ELECTIVE, 3000-4000 LEVEL & 6 & CHEM ELECTIVE, 3000-4000 CHEM 3420 & 6
3 \\
\hline & \(\overline{12}\) & & 16 \\
\hline
\end{tabular}

\section*{Bachelor of Science Degree in Chemistry}

Curriculum 2-Professional Biochemistry Concentration
Suggested Four-Year Plan

\section*{FRESHMAN YEAR}
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
CHEM 1112, 1113 & 4 & CHEM 1122, 1123 & 4 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
BIOL 1110, 1111 & 4 & BIOL 1120, 1121 & 4 \\
MATH 1915 & 4 & COMM 2200 & 3 \\
ASOR 1001 & 1 & & -14
\end{tabular}
*Students will have to begin with lower-level MATH if they are unprepared for this course.

\section*{SOPHOMORE YEAR}
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
CHEM 2100, 2101 & 4 & CHEM 2022, 2023 & 4 \\
CHEM 2012, 2013 & 4 & HUMANITIES & 3 \\
SOC/BEH SCI & 3 & HIST 2020 & 3 \\
ENGL 2110 & 3 & HUMANITIES & 3 \\
HIST 2010 & 3 & SOC/BEH SCI & -3 \\
& 17 & & 16 \\
& JUNIOR YEAR & \\
& & HR & SPRING SEMESTER
\end{tabular}

\section*{Bachelor of Science Degree in Chemistry}

Curriculum 3-Chemistry Concentration
Suggested Four-Year Plan

\section*{FRESHMAN YEAR}

FALL SEMESTER
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
4 & CHEM 1120, 1121 & 4 \\
3 & ENGL 1020 & 3 \\
3 & HIST 2020 & 3 \\
4 & SOC/BEH SCI & 3 \\
\(\frac{1}{15}\) & HUMANITIES & \(\frac{3}{16}\)
\end{tabular}
*Students will have to begin with lower-level MATH if they are unprepared for this course.

SOPHOMORE YEAR
\begin{tabular}{|c|c|c|c|}
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline CHEM 2100, 2101 & 4 & CHEM 2020, 2021 & 4 \\
\hline CHEM 2010, 2011 & 4 & SOC/BEH SCI & 3 \\
\hline COMM 2200 & 3 & HUMANITIES & 3 \\
\hline ENGL 2110 & 3 & BIOL 1120, 1121 & 4 \\
\hline BIOL 1110, 1111 & 4 & ELECTIVE, ANY LEVEL & 1 \\
\hline & 18 & & 15 \\
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline CHEM 3210, 3211 & 4 & CHEM 3220, 3221 & 4 \\
\hline PHYS 2010, 2011 & 4 & PHYS 2020, 2021 & 4 \\
\hline ELECTIVES, 3000/4000 LEVEL & 6 & CHEM 4100 & 2 \\
\hline & & ELECTIVES, 3000/4000 & 6 \\
\hline & 14 & & 16 \\
\hline \multicolumn{4}{|c|}{SENIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline CHEM 3000 & 3 & CHEM 4920 & 1 \\
\hline CHEM 4910 & 1 & ELECTIVES, 3000/4000 & L 12 \\
\hline ELECTIVES, 3000/4000 LEVEL & 6 & & \\
\hline ELECTIVES, ANY LEVEL & 3 & & \\
\hline & 13 & & 13 \\
\hline
\end{tabular}

\section*{Bachelor of Science Degree in Chemistry}

Curriculum 4-Major in Chemistry with Teacher Certification, Licensure for Grades 7-12
\begin{tabular}{lrlr}
\multicolumn{3}{c}{ Suggested Four-Year Plan } \\
& \multicolumn{1}{c}{ FRESHMAN YEAR } \\
& HR & SPRING SEMESTER & \\
FALL SEMESTER & 4 & CHEM 1120, 1121 & 4 \\
CHEM 1110, 1111 & 3 & ENGL 1020 & 3 \\
ENGL 1010 & 3 & HIST 2020 & 3 \\
HIST 2010 & 4 & ART 1010 & 3 \\
MATH 1915 & 3 & COMM 2200 & 3 \\
MUSC 1010 & \(\mathbf{1}\) & 3 \\
EDCI 1010 & \(\mathbf{1 8}\) & - \\
& & 16
\end{tabular}
*Students will have to begin with lower-level MATH if they are unprepared for this course.

\section*{SOPHOMORE YEAR}

\section*{FALL SEMESTER}

CHEM 2100, 2101
CHEM 2010, 2011
ENGL 2110
PHYS 2010, 2011
PSYC 2420
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
4 & CHEM 2020, 2021 & 4 \\
4 & SOCI 2010, & 3 \\
3 & EDCI 2010 & 3 \\
4 & SOC/BEH SCI & 3 \\
\(\frac{3}{18}\) & PHYS 2020, 2021 & \(\underline{4}\) \\
\hline 17
\end{tabular}

JUNIOR YEAR
FALL SEMESTER
HR
CHEM 3210, 3211
BIOL 1110, 1111
BIOL 3010, 3011

FALL SEMESTER
CHEM 3710
CHEM 4910
EDAD 4000
EDSE 3330
PSYC 3120
EDCI 4190

SENIOR YEAR
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
3 & CHEM 4720 & 9 \\
1 & EDCI 4705 & 3 \\
3 & & \\
3 & & \\
3 & & \\
\(\frac{2}{15}\) & & 12
\end{tabular}
\begin{tabular}{l} 
Bachelor of Science Degree in Chemistry \\
Curriculum 5-Cooperative Program In Pharmacy Concentration \\
Suggested Three-Year Plan \\
\multicolumn{4}{c}{ FRESHMAN YEAR } \\
FALL SEMESTER \\
CHEM 1112, 1113 \\
ENGL 1010 \\
* MATH 1915
\end{tabular}
*Students will have to begin with lower-level MATH if they are unprepared for this course.

\section*{SOPHOMORE YEAR}

FALL SEMESTER
CHEM 2100, 2101
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
4 & CHEM 2022, 2023 & 4 \\
4 & HUMANITIES & 3 \\
3 & HIST 2020 & 3 \\
3 & SOC/BEH SCI & 3 \\
\(\mathbf{3}\) & COMM 2200 & \(\underline{3}\) \\
\hline \(\mathbf{1 7}\) & &
\end{tabular}

JUNIOR YEAR
FALL SEMESTER
CHEM 3210, 3211
CHEM 4910
PHYS 2010, 2011
BIOL 2110, 2111
BIOL 2210, 2211
CHEM 2012, 2013
ENGL 2010
HIST 2010
SOC/BEH SCI
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
4 & CHEM 3220, 3221 & 4 \\
1 & CHEM 4100 & 2 \\
4 & CHEM 4920 & 1 \\
4 & PHYS 2020, 2021 & 4 \\
\(\frac{4}{17}\) & CHEM 3410, 3411 & \(\underline{4}\) \\
\hline 15
\end{tabular}

All of these courses must be completed before the student begins work at Howard University.

\section*{Course Descriptions}

\section*{(CHEM)}

CHEM 1000 (3) and 1001 (1) Basic Chemistry and Laboratory (Formerly CHEM 100 and 100L). A study of the fundamentals of chemistry. Topics include the metric system, atomic theory, inorganic nomenclature, chemical stoichiometry, properties of gases, liquids and solutions, and acid/base chemistry. Laboratory component emphasizes basic qualitative and quantitative measurements and data interpretation. Three lectures and one three-hour laboratory per week. Offered in fall and spring.

CHEM 1100 (3) and 1101 (1) Fundamentals of Organic and Biological Chemistry (Formerly CHEM 101 and 101L). A study of the fundamentals of organic chemistry, biochemistry and environmental chemistry. Topics include the nature of organic compounds, and the chemistry and metabolism of biochemical macromolecules and current environmental issues. Laboratory emphasizes principles learned in lecture. Three lectures and one three-hour laboratory per week. Prerequisites: high school chemistry or CHEM 1000/1001 and two years of high school algebra or MATH 1010. Offered in fall and spring.

CHEM 1110 (3) and 1111 (1) General Chemistry I and Laboratory (Formerly CHEM 1010 and 1011). A comprehensive study of chemical principles designed for students pursuing a career in chemistry or other
scientific areas. Topics include the metric system and scientific notation, compounds of matter, nomenclature, composition and reaction stoichiometry, types of chemical reactions, thermochemisty, atomic structure, theories of bonding, gases and the kinetic molecular theory, liquids, solids, and thermodynamics. Laboratory complements lecture topics and emphasizes qualitative and quantitative measurements and data interpretation. Prerequisites: high school chemistry or CHEM 1000, 1001, and two years high school algebra or MATH 1110. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 1112 (3) and 1113 (1) Honors General Chemistry I and Laboratory (Formerly CHEM 1012 and 121K). For Chemistry majors and University Honors Program students only. Topics covered are similar to CHEM 1110, 1111, but the depth of understanding expected is greater. Prerequisites: high school chemistry or CHEM 1000, 1001, and two years high school algebra or MATH 1110. Three lectures and one three-hour laboratory per week. Offered only in fall.
CHEM 1120 (3) and 1121 (1) General Chemistry II and Laboratory (Formerly CHEM 1020 and 1021). A continuation of CHEM 1110, 1111. Topics include solutions, acid/base reactions, chemical thermodynamics, chemical kinetics, gaseous equilibria, acid/base and solubility chemical equilibria, electrochemistry, nuclear chemistry, and descriptive organic and inorganic chemistry. Laboratory complements lecture topics and emphasizes qualitative and quantitative measurements, and data interpretation and manipulation. Prerequisites: CHEM 1110, 1111. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.
CHEM 1122 (3) and 1123 (1) Honors General Chemistry II and Laboratory (Formerly CHEM 1022 and 122K). A continuation of CHEM 1112, 1113. Topics covered are similar to CHEM 1120, 1121, but the depth of understanding expected is greater. Prerequisites: CHEM 1112, 1113. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 1030 (3) and 1031 (1) General Chemistry for Non-Science Majors I and Laboratory (Formerly CHEM 1030 and 1031). A course for non-science majors that focuses on the application of chemistry to society. Topics such as air and water pollution, ozone depletion, global warming, energy, acid rain, and other current environmental issues will be surveyed and implications for personal and societal decisions explored. Laboratory component focuses on the principles learned in lecture. Three lectures and one three-hour laboratory per week. Offered in fall and spring.
CHEM 1040 (3) and 1041 (1) General Chemistry for Non-Science Majors II and Laboratory). A continuation of CHEM 1030, 1031. Prerequisites: CHEM 1030, 1031. Three lectures and one three-hour laboratory per week. Offered in fall and spring.
CHEM 2010 (3) and 2011 (1) Organic Chemistry I and Laboratory (Formerly CHEM 211 and 211L). A systematic study of the physical and chemical properties of hydrocarbons and their derivatives. Topics include chemical bonding, structural formula and physical properties, nomenclature, stereochemistry, synthesis and reactions of alkanes, alkenes, alkynes, alkyl halides, and alcohols. Reaction mechanism is emphasized. Laboratory component focuses on reaction set-ups, recrystallization, melting point, distillation, extraction, chromatography, and reactions. Prerequisites: CHEM 1120, 1121, or CHEM 1122, 1123. Three lectures and one three-hour laboratory per week. Formerly CHEM 211, 211L. CHEM 2010, 2011 is required of all Chemistry majors. Offered in fall, spring, and summer.

CHEM 2012 (3) and 2013 (1) Honors Organic Chemistry I and Laboratory (Formerly CHEM 211H and 211K). For Chemistry majors and University Honors Program students only. Topics are similar to CHEM 2010, 2011, but covered in greater detail. Prerequisites: CHEM 1122, 1123. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 2020 (3) and 2021 (1) Organic Chemistry II and Laboratory (Formerly CHEM 212 and 212L). A continuation of CHEM 2010, 2011. Emphasis is on the synthesis, reactions, and spectroscopic identification of aromatic compounds, carbonyl compounds, and amines. Reaction mechanism is strongly emphasized. Laboratory component exposes students to multi-step synthesis, and spectroscopic and chromatographic characterization of reaction products. Prerequisites: CHEM 2010, 2011. Three lectures and one three-hour laboratory per week. Formerly CHEM 212, 212L. CHEM 2020, 2021 is required of all Chemistry majors. Offered in fall, spring, and summer.
CHEM 2022 (3) and 2023 (1) Honors Organic Chemistry II and Laboratory (Formerly CHEM 212H and 212K). A continuation of 2012, 2013. Topics covered are similar to CHEM 2020, 2021, but covered in greater de-
tail. Prerequisites: CHEM 2012, 2013. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 2100 (3) and 2101 (1) Introduction to Analytical Chemistry and Laboratory (Formerly CHEM 210 and 210L). Quantitative methods of chemical analysis. Topics include data manipulation, error analysis and statistical methods; chemical equilibria; acid/base, complexometric and precipitation titrimetry; spectrometric methods; chemical separations and chromatography; analytical glassware, equipment, and instrumentation; and use of computer spreadsheet programs. Laboratory component directly parallels lecture topics. Prerequisites: CHEM 1120, 1121, or CHEM 1122, 1123. Three lectures and one three-hour laboratory per week. Formerly CHEM 210, 210L. Required of all Chemistry majors. Offered in fall and spring.

CHEM 2500 (3) Introduction to Pharmacology (Formerly CHEM 250). An introductory study of mechanisms, dosages, and side effects of pharmacological classes of medication. Three lectures per week. Offered only in fall.

CHEM 3000 (3) Introduction to Inorganic Chemistry (Formerly CHEM 300). An introduction to descriptive inorganic chemistry. Emphasis is on periodicity in structure and reactivity. Topics include bonding, boron chemistry, catalysis, coordination compounds and reaction mechanisms, electronic spectroscopy, and bio-inorganic chemistry. Prerequisites: CHEM 1120, 1121. Offered only in the fall.

CHEM 3185, 3186, 3187 (3, 3, 3) Cooperative Education I, II, III (Formerly CHEM 318A, B, C). Supervised and approved program of learning experiences undertaken by students in governmental, business, or industrial setting. Formal proposals, project objectives, or learning plans are reviewed and approved by faculty. Student activities and progress are monitored, evaluated, and graded by a full-time faculty member. Prerequisite: permission of Department Head. Offered in fall, spring, and summer.

CHEM 3200 (3) and 3201 (1) Physiological Biochemistry and Laboratory (Formerly CHEM 320 and 320L). The fundamentals of human physiological chemistry. Required of majors in foods and nutrition. Prerequisites: CHEM 3600, 3601. Not available for students having credit for CHEM 4700. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 3210 (3) and 3211 (1) Physical Chemistry I and Laboratory (Formerly CHEM 321 and 321L). Topics covered include the laws of thermodynamics and their application to physical processes and chemical systems, ideal and real gases, single and multi-component phase equilibrium, solutions of non-electrolytes and electrolytes, and electrochemistry. Laboratory component emphasizes the material covered in lecture. Prerequisites: MATH 1925 CHEM 2100, 2101, and either CHEM 2020, 2021 or CHEM 2022, 2023. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 3220 (3) and 3221 (1) Physical Chemistry II and Laboratory (Formerly CHEM 322 and 322L). A continuation of CHEM 3210, 3211. Topics include kinetic molecular theory, transport processes, reaction kinetics, quantum mechanics, atomic structure, molecular electronic structure, spectroscopy, and photochemistry. Prerequisites: CHEM 3210, 3211. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 3410 (3) and 3411 (1) General Biochemistry I and Laboratory (Formerly CHEM 341 and 341L). A study of the chemical and physical properties and biological functions of proteins, carbohydrates, lipids, and nucleic acids. Topics include cell membranes, enzyme kinetics and mechanisms, replication, transcription, and translation. Prerequisites: CHEM 2010, 2011. Laboratory component emphasizes ionization of acids and bases, pH and buffers, important biochemical techniques, and the chemistry of the major classes of biological compounds. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 3420 (3) and 3421 (1) General Biochemistry II and Laboratory (Formerly CHEM 342 and 342L). A continuation of CHEM 3410, 3411. Study of the major catabolic and anabolic pathways, including their chemical reactions, energetics, and regulation. Additional topics include hormones, vitamins, and biochemical function of various organs. Prerequisites: CHEM 3410, 3411. Laboratory emphasizes biochemical and molecular techniques associated with the study of metabolism. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 3500 (3) Atmospheric Chemistry. A study of the chemical processes determining the composition of the Earth's atmosphere includ-
ing photochemistry, kinetics, themodynamics, and biogeochemical cycling. This knowledge is applied to the study of aerosois and their impacts on climate and visibility, stratospheric ozone and ozone depletion, oxidation chemistry, ozone air pollution and acid rain, and Artic atmopshperic chemistry. Prerequisites: CHEM 2020, 3210. Recommended: CHEM 2100. Offered on Demand.

CHEM 3600 (3) and 3601 (1) Organic Chemistry and Organic Survey Laboratory (Formerly CHEM 360 and 360L). Study of important classes of organic compounds. Emphasis is placed upon the study of hydrocarbons and their principal derivatives: carbohydrates, proteins, fats, oils, vitamins, and dyes. Designed for majors in Agriculture, Home Economics, and Allied Health. Prerequisites: CHEM 1120, 1121. Not available for students having credit for CHEM 2010, 2020. Three lectures and one threehour laboratory per week. Offered only in fall.
CHEM 3710 (3) Methods of Teaching High School Chemistry (Formerly CHEM 371). 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 4005 (3) Special Topics in Analytical Chemistry. Selective topics in Analytical Chemistry which are current and relevant to the discipline. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4006 (3) Special Topics in Biochemistry. Selective topics in Biochemistry which are current and relevant to the discipline. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4007 (3) Special Topics in Inorganic Chemistry. Selective topics in Inorganic Chemistry which are current and relevant to the discipline. Prerequisite: Permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4008 (3). Special Topics in Organic Chemistry. Selective topics in Organic Chemistry which are current and relevant to the discipline. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4009 (3). Special Topics in Physical Chemistry. Selective topics in Physical Chemistry which are current and relevant to the discipline. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4100 (2) Scientific Communications (Formerly CHEM 410). 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 2100, 2101, or 2020, 2021. Two onehour lectures per week. Offered only in spring.

CHEM 4200 (3) and 4201 (1) Inorganic Chemistry I and Laboratory (Formerly CHEM 420 and 420L). Topics include atomic and molecular structure, quantum mechanics, atomic and group theory, solid state chemistry, acid/base and oxidation/reduction chemistry, and the chemistry of metal complexes. Laboratory provides experience in the synthesis and characterization of inorganic compounds. Prerequisites: CHEM 2020, 2021. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 4210 (3) Inorganic Chemistry II (Formerly CHEM 421). A continuation of CHEM 4200. Course provides a systematic survey of the descriptive chemistry of the elements, building on the theories presented in CHEM 4200. Prerequisites: CHEM 4200, 4201. Offered only in spring.
CHEM 4320 (3) and 4321 (1) Instrumental Analysis and Laboratory (Formerly CHEM 432 and 432L). Principles and applications of analytical instrumentation, including electrometric, spectrometric, and chromatographic principles. Prerequisites: CHEM 2100, 2101, 3220, 3221. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 4400 (3) Organic Reaction Mechanisms (Formerly CHEM 440). A selective treatment of theoretical and mechanistic aspects of organic chemistry. Course includes an introduction to molecular orbital theory and its application to bonding. Aromatic, pericyclic elimination, and addition reactions are thoroughly treated. Emphasis is on reaction mechanism. Pre-
requisites: CHEM 2020, 2021, 3220, 3221. Three lectures per week. Offered only in fall.

CHEM 4505, 4506 (2, 2) Senior Project I, II (Formerly CHEM 450A, 450B). A special laboratory investigation carried out under the direction of the instructor. Emphasis is on scientific research and report writing. Must be taken in sequence. Students are expected to spend at least ten hours per week on their research project(s). Prerequisites: CHEM 3220, 3221 or 3320, 3321. Corequisites: CHEM 4910, 4920. CHEM 4505 offered only in fall, 4506 only in spring.
CHEM 4600 (3) Spectroscopic Methods in Chemistry (Formerly CHEM 460). 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 2020, 2021, 3220, 3221. Three lectures per week. Offered only in fall.

CHEM 4610, \(4620(3,3)\) and 4621 (1) Introduction to Polymer Chemistry I, II and Laboratory (Formerly CHEM 461, 462 and 462L). Organic chemical reactions leading to high polymers, physical properties and physical behavior of polymers, polymer processing, and end uses. Prerequisites: CHEM 2020, 2021, or permission of instructor. Three lectures and one three-hour laboratory per week. CHEM 4610 offered only in fall, 4620 and 4621 only in spring.
CHEM 4700 (3) and 4701 (1) Biochemical Analysis and Laboratory (Formerly CHEM 470 and 470L). Designed to familiarize the student with the principles and practices involved in the analysis of biological and biochemical materials. Topics include separation systems, molecular spectroscopy, radioactivity, ionic strength, and analysis of macromolecules. Laboratory component emphasizes the topics covered in the lectures. Prerequisites: CHEM 2100, 2101, 3320, 3321, 3420, 3421. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 4720 (9) Student Teaching in Chemistry (Formerly CHEM 472S). 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 4705, which is taken concurrently. Offered on demand.

CHEM 4830 (3) Advanced Physical Chemistry (Formerly CHEM 483). A systematic survey of classical transport processes, kinetic molecular theory, statistical mechanics, and absolute reaction rate theory. Prerequisites: CHEM 3220, 3221. Offered only in spring.
CHEM 4910, \(4920(1,1)\) Seminar (Formerly CHEM 491, 492). Required of all senior Chemistry majors. Must be taken in sequence. Prerequisites: CHEM 3220, 3221 or 3320,3321 . CHEM 4910 offered only in fall, 4920 only in spring.

\section*{Department of Communications}

\section*{Donald Page, Ph.D., Interim Head 105 Performing Arts Center Telephone 615-963-5741}

Faculty: V. Duncan, P. Foster, S. Holt, P. Idoye, H. Insignares, C. Jackson, L. James, K. LaMarque, J. Mitchell, D. Page, V. Sturgeon, L. Yan.

Professional Staff: M. Collino, G. Girton, C. Hooper, J. Richie, B. Scott

General Statement: The Department of Communications offers programs leading to the Bachelor of Arts and the Bachelor of Science degrees with a major in Speech Communication and Theatre. Within the major, the Department offers concentrations in Speech Communication, Speech and Theatre, Theatre, and Mass Communication journalism), as well as programs leading to teacher certification in Speech and in Theatre. A minor in Speech Communication and Theatre is also offered, with requirements varying by area of interest.

The programs for the Bachelor of Science and the Bachelor of Arts degrees require a minimum of 120 semester hours with 42 of these hours being courses numbered on the 3000 and 4000 levels. The Bachelor of Science degree with teacher certification requires, in addition to the general education core and major course requirements, additional courses in the professional education core.

The teacher certification program in Speech Communication yields licensure to teach in grades 7-12 in Tennessee public schools, and the certification program in Theatre yields licensure to teach in grades K-12 in Tennessee public schools. Students who are interested in acquiring teacher certification must apply in writing to the College of Education, usually in the sophomore year. They must have a 2.75 cumulative quality point average at the time of application and must pass the Praxis I Test, formerly the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the Praxis I/PPST and the CBT. Formal admission to the Teacher Education Program is a prerequisite to upperlevel certification courses. Students are required to complete the nine-semester-hour enhanced student teaching course, which includes a seven-week placement in middle school and an eightweek placement in secondary school. Students must pass the Praxis II before beginning student teaching. For a complete list of requirements for admission to, and retention in, the Teacher Education Program, see the College of Education section of this Catalog.

Majors in the Department of Communications are encouraged to pursue a second major or a minor.

Students must earn grades of \(C\) or better in all courses used to satisfy requirements for the major. This includes COMM 2000, COMM 2200 and THTR 1020. Students receiving D or F grades in major core courses must repeat those courses to obtain a C or better. In addition, students seeking certification in Teacher Education are required to maintain an average of 2.75 or better.

The Department encourages participation in co-curricular organizations and activities, including the National Broadcasting Society/Alpha Epsilon Rho, WTST Campus Radio, Tiger TV News, the Forensics team, Pi Kappa Delta, The Meter student newspaper, and annual theatre productions.

Accreditation: The teacher certification programs in Speech Communication and in Theatre are approved by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

\section*{Departmental Requirements For Bachelor of Arts \\ And Bachelor of Science}

\section*{Major Core Courses}

Speech and Theatre Emphasis: 47 Semester Hours
\begin{tabular}{lcc} 
COMM 2000 & Introduction to Mass Communication & 3 \\
COMM 3200 & Argumentation and Debate & 3 \\
COMM 3220 & Advanced Public Speaking & 3 \\
COMM 3540 & Oral Interpretation & 3 \\
COMM 3620 & Radio TV Communication & 3 \\
COMM 4210 & Small Group Communication & 3 \\
COMM 4500 & Senior Project & 3 \\
THTR 1110 or 1120 Theatre Practice I or II & 2 \\
THTR 2400 & Elementary Acting & 3 \\
THTR 3410 or 3420 Children's Theatre I or II & 3 \\
THTR 3510 or 3520 Modern Drama & 3 \\
THTR 4000 \(\quad\) Scene Design \& Stagecraft & 3
\end{tabular}

THTR \(4010 \quad\) History of Drama I 3
THTR \(4020 \quad\) Stage Lighting /Make-Up 3
THTR 4030
History of Drama II
Contemporary Black Drama
THTR 4220
Speech Communication Emphasis: 41 Semester Hours
THTR 1110 or 1120 Theater Practice
THTR \(2400 \quad 3\)
COMM 2000 Introduction to Mass Communication
SPTH \(3050 \quad\) Voice and Diction 3
COMM 3200 Argumentation and Debate
COMM 3220 Advanced Public Speaking 3
COMM \(3540 \quad\) Oral Interpretation 3
COMM 3620 Radio TV Communications 3
COMM 4210 Small Group Communication 3
COMM 4220 Persuasion 3
COMM \(4300 \quad\) Psychology of Speech Communication 3
COMM 4340 Contemporary Black Speakers 3
COMM \(4480 \quad\) Principles of Public Relations 3
COMM \(4500 \quad\) Senior Project
Theatre Emphasis: 44 Semester Hours
THTR 1110 or 1120 Theatre Practice
THTR 2400 Elementary Acting 3
COMM 2000 Introduction to Mass Communication 3
SPTH \(3050 \quad\) Voice and Diction 3
THTR \(3000 \quad\) Play Production 3
THTR 3030 Directing 3
THTR \(3040 \quad\) Playwriting 3
THTR 3520 Modern Drama
THTR \(4000 \quad\) Scene Design and Stagecraft
THTR \(4010 \quad\) History of Drama I
THTR 4020 Stage Lighting and Makeup 3
THTR \(4030 \quad\) History of Drama II 3
THTR \(4900 \quad\) Performance Seminar 3
COMM \(3540 \quad\) Oral Interpretation 3
COMM 4500 Senior Project 3
Mass Communication Emphasis: 35 Semester Hours
COMM 2000 Introduction to Mass Communication 3
COMM 3000 Mass Communication Seminar 2
COMM 3011 Survey of Journalism 3
COMM \(3020 \quad\) News writing 3
COMM \(3600 \quad\) Broadcasting in America 3
COMM 3640 Radio-TV Production 3
COMM 3700 or 3040 Radio-TV Writing (for broadcasting) or Advanced Reporting (for journalism)
Practicum course COMM 3900, Newspaper Workshop, or
COMM 3910, Communication Lab, or
Practicum course COMM 3900, Newspaper Workshop, or
COMM 3910, Communication Lab, or COMM 4420, Internship
Any three of: \(\quad\) For Journalism: COMM 4050, 4100, 4200, 4310, 4415, 4460, 4480, 4520, 4530, 4540, 4580, 4600
For Radio-TV: COMM 4200, 4240, 4380, 4400, 4440, 4460, 4480, 4520, 4580, 46009
COMM \(4500 \quad\) Senior Project 3

\section*{General Education Course Requirements}

For general education courses, students may take any of the courses listed in this catalog in the section on University General Education Requirements as satisfying that category requirement, except that the Department does require that THTR 1020, Appreciation of Drama, be one of the required Humanities courses. An orientation course, preferably ASOR 1002, is also required and must be taken in the student's first semester at Tennessee State University.

Students seeking the B.A. degree must include 12 semester-hours of a single foreign language in their 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 collegelevel hours of credit in the language and complete course work at least through the intermediate level \((2010,2020)\).

\section*{General Education Core}

Communications (9 hours)

ENGL 1010, \(1020 \begin{aligned} & \text { Freshman English I, II } \\ & \text { (minimum grade of } C \text { in each) }\end{aligned}\)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2230 Sophomore Literature Course 3
THTR 1020 Appreciation of Drama 3
Elective One course from approved list.
6

Typically, MUSC 1010, ART 1010, or PHIL 1030
Social and Behavioral Science ( 6 hours)
Elective One course from approved list. 3
Elective One course from approved list. 3
\(\begin{array}{ll}\text { History ( } 6 \text { hours) } & \\ \text { HIST } 2010 & \text { American History I }\end{array}\)
HIST 2020 American History II 3
HIST 2030 may be taken in place of either HIST 2010 or HIST 2020
Natural Science (8 hours)
Elective One course from approved list 4
Elective One course from approved list 4
Typically, BIOL 1010, 1011; 1020, 1021; CHEM 1030, 1031;
1040, 1041; ASTR 1010, 1020
Mathematics (3 hours)
Elective One course from approved list.
Typically, MATH 1013 or 1110
Orientation (1 hour)
ASOR 1002 Orientation for Social Science Majors
(Teacher certification students should take EDCI 1010.)
Total General Education Hours

\section*{Electives, Minor, Second Major}

In addition to the general education core courses and required major courses, students must take additional courses to make a total of at least 120 semester-hours. These may be electives taken inside or outside of the department, a minor outside the department plus electives, or a second major. A minor or second major is encouraged.

\section*{Upper Division Hours}

At least 42 of the 120 hours required for graduation must be taken at the junior-senior level - courses numbered in the 3000-4000 range.

\section*{Teacher Education}

Students interested in pursuing teacher's certification must consult the catalog and the teacher education advisor.

\section*{Upper-Division Admission}

For admission into the upper-division programs of the Speech Communication and Theatre major, students must complete all of the requirements listed under the General Education Core. In addition, they must have removed all high school deficiencies, passed all required 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 grades of C or better in COMM 2000, 2200, and THTR 1020. Students pursuing the B.A. degree must have completed the foreign language requirement before applying for upper-level admission.

Most 3000-4000 level courses are offered only once a year. Therefore, in consultation with an advisor, students will need to plan ahead in order to graduate in a timely fashion.

\section*{Minor}

The Department offers a minor in Speech Communication and Theatre, requiring 18 semester hours. A minor with a concentration in Speech Communication includes SPTH 3050, COMM 3200 or 4210, 3540, 4220, 3220, or COMM 3011 or 3020. A minor with
a concentration in Speech Communication and Theatre includes COMM 3600; COMM 3220, 3540; THTR 2400, 3030, 3410. The requirements for a minor in Mass Communication include COMM 2000, 3011, 3020, 3040; 3600, 3640. A minor with a concentration in Theatre includes THTR 2400, 3000, 3030, 3520, 4000 or 4020, 4010 or 4030.

\section*{B.A. Degree}

Students pursuing the BA Degree (recommended) must include 12 hours of a single foreign language. It is possible to test out of up to six hours; 120 total hours are still required for graduation.

\section*{Bachelor of Science Degree in Speech Communication and Theatre \\ Suggested Four-Year Plans}

\section*{Option 1}

SPEECH COMMUNICATION AND THEATER

\section*{FRESHMAN YEAR}

\section*{Fall Semester}

ASOR 1002
ENGL 1010
MATH 1013 or 1110
BIOL 1010, 1011
COMM 2000
Spring Semester
ENGL 1020
BIOL 1020, 1021
COMM 2200
THTR 1020
THTR 1110 or 1120

\section*{SOPHOMORE YEAR}

\section*{Fall Semester}

Sophomore Literature
Any elective
HIST 2010
Social/Behavior Science I
THTR 2400

\section*{Fall Semester}

SPTH 3050
COMM 3620
THTR 4000
THTR 4010
Any electives

\section*{Spring Semester}

ART 1010, MUSC 1010, PHIL 2010 or RELS 2010

COMM 3220
COMM 3200
15

\section*{JUNIOR YEAR}
\(\longrightarrow \quad 16\)

\section*{SENIOR YEAR}

\section*{Fall Semester}

THTR 4030
Any electives
cong Semester
3 COMM 45003
12 THTR 42203
Any electives
Spring Semester
THTR 3410 or 3420
COMM 3540
THTR 3510 or 3520
THTR 4020
COMM 4210
\[
15
\]

\section*{Option 2}

SPEECH COMMUNICATION

\section*{FRESHMAN YEAR}

Fall Semester
ASOR 1002
ENGL 1010
MATH 1013 or 1110
BIOL 1010, 1011
Any electives

Spring Semester
ENGL 1020
BIOL 1020, 1021
COMM 2200
THTR 1020
THTR 1110 or 1120

\section*{SOPHOMORE YEAR}

Fall Semester
Sophomore Literature

\section*{COMM 2000}

HIST 2010
Social/Behavior Science I
THTR 2400

\section*{Spring Semester}

ART 1010, MUSC 1010, PHIL 2010
Or RELS 20103
HIST 20203
Social/Behavior Science II 3
Any electives

JUNIOR YEAR

\section*{Fall Semester}

SPTH 3050
Elective 3000-4000 level
COMM 3620
COMM 4220
COMM 4340

\section*{SENIOR YEAR}
\begin{tabular}{lrlr} 
Fall Semester & & Spring Semester & \\
COMM 4300 & 3 & COMM 4500 & 3 \\
COMM 4480 & 3 & Elective 3000-4000 level & 3 \\
Elective 3000-4000 level & 3 & Any electives & 9 \\
Any electives & \(\underline{6}\) & & \(\overline{15}\)
\end{tabular}

Option 3
THEATER

\section*{FRESHMAN YEAR}

Fall Semester
ASOR 1002
ENGL 1010
MATH 1013 or 1110
BIOL 1010, 1011
Any electives

Spring Semester
ENGL 10203
BIOL 1020, 1021
COMM 2200
THTR 1020
Elective

Option 4
MASS COMMUNICATION - Journalism

\section*{SOPHOMORE YEAR}

\section*{Fall Semester}

Sophomore Literature
COMM 2000
HIST 2010
Social/Behavior Science I 3
Foreign Language III or elective*
Elective 3000-4000 level 3
Any electives 9 15
COMM 42103
COMM 3220
Any elective

\section*{Spring Semester}

COMM \(3200 \quad 3\)
COMM \(3540 \quad 3\)
Fall Semester
COMM 3011
COMM 3020
COMM 3600
COMM 3640
Any electives*

COMM 3011
COMM 3020
COMM 3600
COMM 3640
Any electives*夫

Fall Semester
Journalism 4000-level \({ }^{\star \star \star}\) Journalism 4000-level \({ }^{* * *}\) Elective 3000-4000 level Any elective

Spring Semester
COMM 3040
COMM 3900 or \(4420 \quad 3\)
Journalism 4000-level*** 3
Electives 3000-4000 level 6
\(\frac{4}{16}\)

\section*{SENIOR YEAR}

\section*{Spring Semester}

ART 1010, MUSC 1010, PHIL 2010
or RELS 20103
HIST 20203
Social/Behavior Science II 3
COMM 30002
Foreign Language III or elective*

\section*{JUNIOR YEAR}
\begin{tabular}{rlr}
\multicolumn{3}{l}{ Spring Semester } \\
3 & COMM 3040 & 3 \\
3 & COMM 3900 or 4420 & 3 \\
3 & Journalism 4000-level \({ }^{\star \star *}\) & 3 \\
3 & Electives \(3000-4000\) level & 6 \\
\(\frac{4}{16}\) & & \(\overline{15}\)
\end{tabular}

\section*{Spring Semester}

3 COMM \(4500 \quad 3\)
3 Elective 3000-4000 level 3

\section*{SOPHOMORE YEAR}

Fall Semester
Sophomore Literature
COMM 2000
HIST 2010
Social/Behavior Science I
THTR 1110 or 1120

Spring Semester
ART 1010, MUSC 1010, PHIL 2010
Or RELS 20103
HIST 2020
Social/Behavior Science II 3
THTR 2400
Elective
14
JUNIOR YEAR

Fall Semester
THTR 3000
THTR 3040
THTR 3520
THTR 4010
Any elective

Fall Semester
THTR 4020
THTR 4030
COMM 4500
3000-4000 level electives

Spring Semester
THTR 4000
SPTH 3050
COMM 3540
Any electives

\section*{SENIOR YEAR}

Spring Semester
THTR 3030
THTR 4900
Any electives

FRESHMAN YEAR
\begin{tabular}{lll} 
MASS COMMUNICATION — Journalism \\
\multicolumn{3}{c}{ FRESHMAN YEAR } \\
Fall Semester & \multicolumn{2}{c}{ Spring Semester } \\
ASOR 1002 & 1 & ENGL 1020 \\
ENGL 1010 & 3 & BIOL 1020, 1021
\end{tabular}

\footnotetext{
6
}
\(\overline{15} \overline{15}\)
**A minor or a second major is recommended.
***Choose from: COMM 4050, 4100, 4200, 4300, 4400, 4460, 4480, 4520, \(4530,4540,4580,4600\) (if a journalism topic).
Suggested electives include further journalism, radio-TV, and other Communication courses, SPTH 3050, ENGL 3000, 3110, 3120, ART 3260, po-
litical science, foreign language.
MASS COMMUNICATION Radio-TV (Note: "B" deleted)

\section*{FRESHMAN YEAR}

Fall Semester
ASOR 1002
ENGL 1010
MATH 1013 or 1110
BIOL 1010, 1011
Foreign Language I or elective \({ }^{\star} \frac{3}{14}\) Foreign Language II or elective \({ }^{\star} \frac{3}{16}\)

\section*{Spring Semester}

ENGL 1020
3
BIOL 1020, 10214
COMM 22003
THTR 1020
3
\(\frac{3}{16}\)

\section*{SOPHOMORE YEAR}
\begin{tabular}{lr} 
Fall Semester & \\
Sophomore Literature & 3 \\
COMM 2000 & 3 \\
HIST 2010 & 3 \\
Social/Behavior Science I & 3 \\
Foreign Language III or elective* & 3
\end{tabular}

Spring Semester
ART 1010, MUSC 1010, PHIL 2010
or RELS 20103
HIST 20203
Social/Behavior Science II 3
COMM 30002
Foreign Language III or elective*

\section*{JUNIOR YEAR}
Fall Semester
COMM 3011
COMM 3020
COMM 3600
COMM 3640
Any electives**

\section*{Fall Semester}

Radio-TV 4000-level \({ }^{* * *}\)
Radio-TV 4000-level***
Electives 3000-4000 level Any electives

Spring Semester
COMM 3700
COMM 3910 or 4420
Radio-TV 4000-level***
Electives 3000-4000 level
3
3
6
-15

\section*{SENIOR YEAR}
**A miner or a second major is \(\frac{\overline{15}}{15}\)
**A minor or a second major is recommended.
***Choose from: COMM 4200, 4240, 4380, 4400, 4440, 4460, 4480, 4520, 4580, 4600 (if a radio-TV topic),
Suggested electives include further radio-TV, journalism, and other Communication courses, THTR 1110 or 1120, 2400, 3000, 3030, 3040, 3520, 4000, 4020, 4220, SPTH 3050, 3760, ENGL 3000, 3110, 3120, ART 3260, foreign language.

Bachelor of Science Degree in Speech Communication and Theatre
Speech Communication Emphasis
With Teacher Certification
Licensure for Grades 7-12

\section*{Suggested Four-YEAR Plan \\ FRESHMAN YEAR}

Fall Semester
EDCI 1010
COMM 2200
MATH 1013 or 1110
ENGL 1010
HIST 2010
BIOL 1010, 1011

\section*{SOPHOMORE YEAR}

\section*{Fall Semester}

SPTH 3050
ENGL 2010 or 2020
ART 1010 or MUSC 1010
POLI 2010
PSYC 2420
\begin{tabular}{|c|}
\hline 3 \\
\hline 3 \\
\hline 3 \\
\hline 3 \\
\hline 15 \\
\hline
\end{tabular}

Spring Semester
COMM 20003
THTR \(1020 \quad 3\)
ENGL 10203
HIST 20203
BIOL 1020, \(1021 \quad 4\)
\(\overline{16}\)

Spring Semester
COMM 3540
3
COMM 3600
EDCI 2010
PSYC 3120
HPSS 1510
15

\section*{JUNIOR YEAR}

Fall Semester
COMM 3640
COMM 4300
EDCI 3870
EDSE 3330
Communications elective

Spring Semester
COMM 3220 COMM 4210
COMM 3200
EDRD 4910

\section*{SENIOR YEAR}

\section*{Fall Semester}

COMM 3710
COMM 4320
COMM 4500
Communications elective
EDAD 4000
EDCI 4190

Spring Semester
COMM 4720 12
EDCI 4700

Bachelor of Science Degree in Speech Communication and Theatre
Theatre Emphasis
With Teacher Certification
Licensure for Grades K-12
Fall Semester
COMM 2200
MATH 1013 or 1110
ENGL 1010
HIST 2010
BIOL 1010, 1011
EDCI 1010
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BIOL 1020, }102

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\section*{SOPHOMORE YEAR}

\section*{Fall Semester}

THTR 2400
POLI 2010
ENGL 2010 or 2020
ART 1010 or MUSC 1010
PSYC 2420

Fall Semester
THTR 3000
THTR 4010
THTR 4020
EDCI 3870
Elective
Fall Semester
COMM 3710
COMM 4490
COMM 4500
Communications elective
EDAD 4000
EDCI 4190

\section*{SENIOR YEAR}

\section*{JUNIOR YEAR}

\section*{Spring Semester}
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THTR 3030

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\section*{EDRD 4910}

EDSE 3330

\section*{Spring Semester}

COMM 4720
EDCI 4700

\section*{Course Descriptions}

\section*{Communications (COMM)}

COMM 2000 Introduction to Mass Communication (3). A survey of the mass media and their impact on the ideas, attitudes, and impressions of society. Formerly SPCH 200.
COMM 2100 Fundamentals of Speech Communication (3). Fundamentals of the various types of speech communication, including interpersonal, small group, and non-verbal communication process. Formerly SPCH 210.

COMM 2200 Public Speaking (3). Principles of speech composition and delivery with emphasis on preparing and presenting the various forms of oral communication. Formerly SPCH 220.

COMM 2202 Honors Public Speaking (3). Honors section of COMM 2200. Enrollment limited to students in University Honors Program. Formerly SPCH 220 H .

COMM 2300 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 communications. Formerly SPCH 230.

COMM 3000 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. Formerly RTV 300.
COMM 3011 Survey of Journalism (3). Emphasis upon the organization and function of daily and weekly newspapers, community publicity, school publications, and news writing. Formerly JOUR 301.

COMM 3020 Newswriting (3). Introduction to reporting techniques, with emphasis on news writing. Formerly JOUR 302.

COMM 3040 Advanced Reporting (3). Practice in advanced newswriting with emphasis on news features and beat reporting. Formerly JOUR 304. Prerequisite: COMM 3020 (JOUR 302).

COMM 3060 Investigative Reporting (3). Special problems and assignments in in-depth investigative reporting. Formerly JOUR 306. Prerequisite: COMM 3020 (JOUR 302).

COMM 3200 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. Formerly SPCH 320.

COMM 3220 Advanced Public Speaking (3). Study of standards of criticism and techniques involved in effective public address. Formerly SPCH 322. Prerequisite: COMM 2200 (SPCH 220).

COMM 3540 Oral Interpretation (3). Understanding of and appreciation for literature through the oral re-creation or performance of poetry, prose, and drama. Recommended for prospective teachers of literature. Formerly SPCH 354.
COMM 3560 Forensics Practicum (3). Practical experience through active class participation in individual events and performance activities. Formerly SPCH 356. Prerequisite: COMM 2200 (SPCH 220).

COMM 3580 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. Formerly SPCH 358. Prerequisite: COMM 3540 (SPCH 354).
COMM 3600 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. Formerly RTV 360.

COMM 3620 Radio and Television Communication (3). A course covering all types of non-dramatic broadcast performance, with practical application in a laboratory situation. Formerly RTV 362.

COMM 3640 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. Formerly RTV 364.
COMM 3700 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. Formerly RTV 370. Prerequisite: COMM 3640 (RTV 364) or permission of instructor.

COMM 3710 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. Formerly SPCH 371. Prerequisite: official admission to the Teacher Education Program.
COMM 3900 Newspaper Workshop (3). Practical experience in writing, editing, photography, layout, and advertising sales for the TSU Meter (student newspaper). Formerly JOUR 390. Prerequisite: upper-level status or permission of instructor. May be taken three times for credit.
COMM 3910 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. Formerly RTV 391. Prerequisite: COMM 3620 (RTV 362) or permission of instructor. May be taken twice for credit.

COMM 4050 News Editing (3). Editing copy, writing headlines, designing newspaper layout. Formerly JOUR 405. Prerequisite: COMM 3020 (JOUR 302).

COMM 4100 Editorial Writing (3). Critical analysis of structure and content of newspaper editorials. Course also includes practice in writing editorials and columns. Formerly JOUR 410.

COMM 4200 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. Formerly JOUR 420. Prerequisites: COMM 3020 and COMM 3640 (JOUR 302 and RTV 364), or permission of instructor.

COMM 4210 Small Group Communication (3). Communication in small groups, emphasizing principles, practices, and patterns in practical situations. Formerly SPCH 420.

COMM 4220 Persuasion (3). Psychology of attitude formation and change, including theories of persuasion and principles of persuasive communication. Formerly SPCH 422. Prerequisite: COMM 2200 (SPCH 220).

COMM 4240 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. Formerly RTV 424. Prerequisite: COMM 3640 (RTV 364).

COMM 4300 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 and purposes of speech are analyzed. Formerly SPCH 430.

COMM 4310 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. Formerly JOUR 430.
COMM 4320 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. Formerly SPCH 432.
COMM 4340 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. Formerly SPCH 434. Prerequisite: COMM 2200 (SPCH 220).

COMM 4380 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. Formerly RTV 438. Prerequisite: COMM 3600 (RTV 360) or permission of instructor.

COMM 4400 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. Formerly RTV 440. Prerequisite: COMM 3600 (RTV 360) or permission of instructor.

COMM 4415 Feature Writing (3). Instruction and practice in writing feature articles. Formerly JOUR 440. Prerequisite: COMM 3020 (JOUR 302) or permission of instructor.

COMM 4420 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. Formerly SPCH 442. Prerequisites: introductory courses in area related to internship (COMM 3600/RTV 360 and COMM 3640/RTV 364 for electronic media, COMM 3011/JOUR 301 and COMM 3020/JOUR 302 for journalism, and two junior-senior-level course is area of internship for students in other areas of the Department) and permission of instructor.

COMM 4425 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 fulltime faculty member. Formerly SPCH 442A. Prerequisite: permission of Department Head.

COMM 4440 Advanced Television Production (3). In-depth experience in producing and directing television programs. Formerly RTV 444. Prerequisite: COMM 3640 (RTV 364).

COMM 4460 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. Formerly SPCH 446.

COMM 4480 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. Formerly SPCH 448.

COMM 4490 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. Formerly SPCH 449. Prerequisite: admission to Teacher Education Program.

COMM 4500 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. Formerly SPCH 450.
COMM 4520 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. Formerly SPCH 452. Prerequisite: COMM 3600 (RTV 360) or COMM 3011 (JOUR 301), or permission of instructor.

COMM 4530 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. Formerly JOUR 452. Prerequisite: COMM 3020 (JOUR 302).

COMM 4540 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. Formerly JOUR 454. Prerequisite: COMM 3020 (JOUR 302).
COMM 4580 Advanced Public Relations (3). Practical exercises in public relations, stressing campaigns, schedules, budgets, and media strategies. Formerly SPCH 458. Prerequisite: COMM 4480 (SPCH 448).

COMM 4600 Special Topics (3). Scope of subject matter to be determined by instructor. Formerly JOUR 460. Prerequisite: Permission of instructor.

COMM 4720 Enhanced Student Teaching (9). 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. Formerly SPCH 472S. Prerequisite: successful completion of all certification courses except EDCI 4700, which is taken concurrently.

COMM 4800 Independent Study (3). Individual study and research under faculty guidance. May be taken twice for up to six hours of credit. Formerly SPCH 480.

\section*{Theatre (THTR)}

Prerequisite to all upper-division (3000- or 4000-level) Theatre courses (excluding THEA 3440) without stated prerequisites: THTR 1110 or 1120 (THEA 111 or 112) and THTR 1020.

THTR 1010 Introduction to Drama (3). Elements of theory and practical experience in the drama, through study of representative plays and dra-
matic 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.

THTR 1020 Appreciation of Drama (3). Introduction to dramatic principles though the study of major periods and representative plays from the Greek period to the present. Course may be used toward satisfying University humanities requirement.

THTR 1021 Honors Appreciation of Drama (2). Honors section of THTR 1020. Enrollment limited to students in University Honors Program. Course may be used toward satisfying University humanities requirement.

THTR 1110 Theatre Practice (2). Introduction to theatre technology, stage terms, building of scenery. Laboratory experience. Formerly THEA 111.

THTR 1120 Theatre Practice (2). Fundamentals of floor plans and perspective drawings, introduction to make-up, and continuation of theatre technology. Laboratory experience. Formerly THEA 112.

THTR 2400 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. Formerly THEA 240.

THTR 3000 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. Formerly THEA 300.
THTR 3030 Directing (3). Analyzing scripts and directing one-act plays, with attention to casting, blocking, and rehearsal styles through practicum. Formerly THEA 303. Prerequisites: THTR 2400 and 3000 (THEA 240 and 300).

THTR 3040 Playwriting (3). Theory and practice of writing one-act plays for the stage. Formerly THEA 304. Prerequisite: THTR 3510 or 3520 (THEA 351 or 352).

THTR 3410 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. Formerly THEA 341.
THTR 3420 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. Formerly THEA 342.

THTR 3430 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. Formerly THEA 343.

THTR 3440 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. Formerly THEA 344.

THTR 3510 Classical Drama (3). Study of western world's masterpieces from the Greeks to the Restoration. Readings and reports. Formerly THEA 351.

THTR 3520 Modern Drama (3). Extensive study of world-famous plays from 1880"s to the present day. Readings and reports. Formerly THEA 352.

THTR 4000 Scene Design and Stagecraft (3). Advanced scene design and advanced stagecraft. Construction of three-dimensional scenery required. Practicum with current productions. Formerly THEA 400. Prerequisite: THTR 1110 or 1120 (THEA 111 or 112).

THTR 4010 History of Drama I (3). Development, literature, and staging practices of the theatre from the Egyptians to the Restoration Period. Formerly THEA 401.
THTR 4020 Stage Lighting and Make-up (3). Advanced make-up and lighting practicum in major productions and laboratory productions.

Formerly THEA 402. Prerequisites: THTR 1110 or 1120 (THEA 111 or 112); THTR 1020.

THTR 4030 History of Drama II (3). Development, literature, and staging practices of the theatre from the Restoration through the nineteenth century. Formerly THEA 403.

THTR 4200 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. Formerly THEA 420. Prerequisite: THTR 2400 (THEA 240), or permission of instructor.
THTR 4220 Contemporary Black Drama (3). Study of dramas by representative contemporary black playwrights. Formerly THEA 422.
THTR 4900 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. Formerly THEA 490. Prerequisites: Any two of THTR 2400, 3000, 3030 (THEA 240, 300, 303). Required of students with a concentration in Theatre.

\title{
Department of Criminal Justice
}

\section*{Deborah Burris-Kitchen, Ph.D. 308 Hubert Crouch Hall (Graduate Building) Telephone 615-963-5571}

Faculty: D. Burris-Kitchen, R. Craig, G. Kakoti, M. Montgomery, R. Smith, 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 45 Semester Hours For Bachelor of Science Criminal Justice

General Education Core
Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II (minimum grade of C in each)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2230 Sophomore Literature Course 3
Elective One course from approved list. 3
Elective One course from approved list. 3
Social and Behavioral Science ( 6 hours)
PSYC \(2010 \quad\) General Psychology
SOCI 2010 Introduction to Sociology
History (6 hours)
HIST 2010 American History I
HIST 2020 American History II
Natural Science (8 hours)
BIOL 1010/1011 Introductory Biology I 4
BIOL 1020/1021 Introductory Biology II 4
Mathematics (3 hours)
MATH \(1110 \quad\) College Algebra I
Orientation (1 hour)
ASOR 1002 Orientation for Social Science Majors
Total General Education Hours

\section*{Upper-division Admission}

For admission into the upper-division program of the Criminal Justice major, students must complete all of the requirements listed above under General Education Core and Other Requirements. 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 CRMJ 2000, 2010, 2020, and 2030.

Major Core: A minimum of 45 semester hours with at least 33 hours at the 3000-4000 level. The required courses in the major core are:
CRMJ 2000 Introduction to Criminal Justice 3
CRMJ 2010 Introduction to Law Enforcement 3
CRMJ 2020 The American Legal System 3
CRMJ 2030 Introduction to Corrections 3
CRMJ 3000 Research Methods 3
CRMJ \(4000 \quad\) Senior Practicum 12
CRMJ 4500 Senior Project 3
Students must also complete a minimum of 15 hours of CRMJ electives at the 3000-4000 level. Police or correctional officers who have completed basic training at a city or state academy receive credit for the Senior Practicum (CRMJ 4000) by registering for it and completing a research paper. All other students must complete a semester of work in a criminal justice agency to gain practical experience. Students must earn at least a C in all 45 hours used to complete the major.

Minor Requirements: All majors may earn a minor in Psychology by completing PSYC 2010 and 18 additional hours of 3000 and 4000 level psychology courses. See minor requirements in Psychology Department section of this catalog.

\section*{Bachelor of Science Degree in Criminal Justice}

\section*{Suggested Four-Year Plan}

\section*{FRESHMAN YEAR}

FALL SEMESTER
HR SPRING SEMESTER HR
CRMJ 2000
PSYC 2010
ENGL 1010
ENGL 1020
HIST 2010
HIST 2020
MATH 1110
BIOL 1020, 10214
HUMANTIES ELECTIVE
ASOR 1002
\(\frac{1}{17}\)

\section*{SOPHOMORE YEAR}

\section*{FALL SEMESTER}

HR
CRMJ 2010
SOCI 2010
ENGL 2010
COMM 2200
PSYC 2100

\section*{CRMJ ELECTIVE, 3000/4000}

\section*{PSYC 2180}

PSYC 3210
PSYC 3410 or 3510
SOCI ELECTIVE, 3000/4000

SPRING SEMESTER
CRMJ 2030
ENGL 3107
HUMANTIES ELECTIVE
COMP 2010

\section*{JUNIOR YEAR}

\section*{FALL SEMESTER HR SPRING SEMESTER HR}
\(\square \frac{3}{15}\)
CRMJ 3000
SOCI 3300
SOCI ELECTIVE, 3000/4000
PSYC ELECTIVE, 3000/4000

\section*{SENIOR YEAR}

FALL SEMESTER
CRMJ 4000
CRMJ 4500

12 CRMJ ELECTIVES, 3000/4000 12 PSYC ELECTIVE

HR 3 15

\section*{Course Descriptions}

\section*{(CRMJ)}

CRMJ 2000 Introduction to Criminal Justice Studies (3) (Formerly CJ 200). 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.

CRMJ 2010 Introduction to Law Enforcement (3) (Formerly CJ 201). 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.

CRMJ 2020 The American Legal System (3) (Formerly CJ 202). 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.

CRMJ 2030 Introduction to Corrections (3) (Formerly CJ 203). 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.

CRMJ 3000 Research Methods (3) (Formerly CJ 300). An intensive survey of the various methods appropriate to criminal justice studies. Special emphasis is given to the consideration of logic, design, and importance of research for correctional practitioners. In addition to the development of research skills, a purpose of this course is to develop the student's ability to read critically and to evaluate proposals for change. Prerequisites: MATH 1010 and PSY 2180 or SOC 300.

CRMJ 3010 Court Procedure and Methods (3) (Formerly CJ 301). 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)

CRMJ 3020 Constitutional and Criminal Law (3) (Formerly CJ 302). 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)

CRMJ 3030 Incidence of Crime (3) (Formerly CJ 303). 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)

CRMJ 3040 Criminal Typology (3) (Formerly CJ 304). 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).

CRMJ 3050 Deviance and Control (3) (Formerly CJ 305). 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)

CRMJ 3060 Introduction to the Philosophy of Law (3) (Formerly CJ 306). The philosophical development of the concept of law from the PreGreek 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)

CRMJ 3070 Introduction to the Study of Law (3) (Formerly CJ 307). 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)

CRMJ 3080 Police and Patrol Service (3) (Formerly CJ 308). 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)

CRMJ 3090 Traffic Investigation and Control (3) (Formerly CJ 309). A study of the need for and development of traffic laws with primary attention focused 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)
CRMJ 3100 Criminal Theory (3) (Formerly CJ 310). 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)
CRMJ 3130 Counseling (3) (Formerly CJ 313). 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)

CRMJ 3210 Juvenile Delinquency (3) (Formerly CJ 321). 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)

CRMJ 3220 Penal Institutions and Treatment Methods (3) (Formerly CJ 322). 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)

CRMJ 3230 Community-Based Treatment Methods (3) (Formerly CJ 323). 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)

CRMJ 3300 Police Administration I (3) (Formerly CJ 330). 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)

CRMJ 3310 Police Administration II (3) (Formerly CJ 331). 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)
CRMJ 4000 Senior Practicum (12) (Formerly CJ 400). 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.

CRMJ 4010 Independent Study (3) (Formerly CJ 401). 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)
CRMJ 4050 Introduction to Criminalistics (3) (Formerly CJ 405). 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)

CRMJ 4100A, 4100B Cooperative Education I, II (3, 3) (Formerly CJ 410A, 410B). Supervised and approved program of learning experiences undertaken by students in governmental, business, or industry setting.

Formal proposals, project objectives, or learning plans are reviewed and approved by faculty. Student activity and progress are monitored, evaluated, and graded by a full-time faculty member. Prerequisite: permission of Department Head. (Electives)

CRMJ 4200 Seminar in Law Enforcement (3) (Formerly CJ 420). 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)

CRMJ 4220 White Collar Crime (3) (Formerly CJ 422). 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)

CRMJ 4300, 4310, 4320 Special Topics I, II, III (3, 3, 3) (Formerly CJ 430, 431, 432). 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)

CRMJ 4500 Senior Project (3) (Formerly CJ 450). 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.

\title{
Department of History, Geography, and Political Science
}

\author{
Joel H. Dark, Ph.D., Head \\ 216 Hubert Crouch Hall (Graduate Building) Telephone 615-963-5471
}

Faculty: G. Bekele, M. Bertrand, S. Browne, J. Burchett, T. Corse, E. Dachowski, D. Gibran, J. Haney, H. King, B. Lovett, E. McClain, J. Miglietta, A. Oyebade, D. Padgett, J. Paruchuri, E. Schmeller.

General Statement: The Department of History, Geography, and Political Science seeks to expand students' awareness of their world, its history, and its political institutions. The Department offers general education courses for all students of the University, minor concentrations in each of its three disciplines, and full undergraduate degree programs in History and Political Science.

The undergraduate degree in History is a Bachelor of Arts degree, which means that History majors complete at least one foreign language at the intermediate level. The undergraduate degree in Political Science is a Bachelor of Science degree and does not include the requirement of a foreign language. Students pursuing either degree must obtain a grade of C or better in all courses used to satisfy major requirements. The minor in Geography consists of 18 hours including physical, systematic, and regional geography courses.

Majors in History and Political Science who wish to seek teacher licensure for middle and secondary education should apply in writing to the College of Education for admission to the Teacher Education Program, usually during their sophomore year. Applicants must have a cumulative grade point average of 2.75 or better and must pass the Praxis Series Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessment Tests (CBT). Students who have previously earned a score of 21 on the ACT, a score of 22 on the Enhanced ACT, or a combined score of 990 on the verbal and mathematical portions of the SAT are exempt from the PPST and the CBT. Admission to the Teacher Education Program is a prerequisite to all upper-level courses in the professional education curriculum. For a complete description of admission and retention requirements for the Teacher Education Program, see the College of Education section.

Accreditation: The teacher licensure programs in the Department are approved by the Tennessee Department of Education. The University's teacher education program is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

\section*{History}

Departmental Requirements
39 Semester Hours

\section*{For Bachelor of Arts History}

The major in History is designed to familiarize students with important events, developments, and themes of the human past while also training them in the skills of history as an intellectual discipline. While students are welcome to focus their studies regionally or topically, the curriculum and degree requirements reflect the goal of providing students with a broad understanding of their field at the local, national, and international levels.

\section*{Degree Competencies}

Students awarded a Bachelor of Arts in History should be able to:
(1) recognize the characteristic features of history as an academic discipline;
(2) evaluate claims about the past critically with sensitivity to the importance of historical and cultural contexts;
(3) conduct thorough historical research with recourse to both primary and secondary sources;
(4) advance original historical arguments in well-written essays with appropriate citation of sources;
(5) identify the major periods of the human past and recognize alternative approaches to periodization;
(6) compare patterns of continuity and change in the history of world civilizations;
(7) explain major themes and events in the history of the North America and the United States; and
(8) explore the differences and relationships between political, social, economic, and cultural history.

\section*{General Education Core}

The following courses are recommended in order to satisfy the requirements of the General Education Core. For a complete listing of all courses satisfying these requirements, please refer to the General Education section of the catalog.
Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II
(minimum grade of \(C\) in each)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2124 Sophomore Literature Course 3
Elective One course from approved list. 3
Elective One course from approved list. 3
Social and Behavioral Science (6 hours)
Elective One course from approved list. 3
Elective One course from approved list. 3
\(\begin{array}{ll}\text { History (6 hours) } & \\ \text { HIST } 2010 & \text { American History I }\end{array}\)
\(\begin{array}{lll}\text { HIST 2010 } & \text { American History I } & 3 \\ \text { HIST } 2020 & \text { American History II } & 3\end{array}\)
Natural Science (8 hours)
Two courses with labs from the approved list. 8
Mathematics ( 3 hours)
\(\begin{array}{lll}\text { MATH 1013, or } & \text { Contemporary Mathematics } \\ \text { MATH 1110 } & \text { College Algebra I }\end{array}\)
Orientation (1 hour)
ASOR 1001 Orientation for Science Majors
(Teacher certification students should take EDCI 1010.)
Total General Education Hours

Other Requirements: Six hours in a single foreign language; French, German, or Spanish through the intermediate level (2010, 2020)

\section*{Upper-level Admission}

For admission to the upper-level program of the History major, students must complete all of the requirements listed above under General Education Core and Other Requirements. In addition, they must have removed all high school deficiencies, passed all required 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 1210 and 1220.

\section*{Major Core}

The requirements for a major in History include HIST 1210 and 1220, World History I, II (6 hours); GEOG 1010 and 1020, World Regional Geography I, II (6 hours); two 3000 or 4000 -level United States history courses ( 6 hours); at least 6 hours at the 3000 or 4000 level in non-U.S. history; HIST 3500, History Workshop (3 hours); HIST 4500, Senior Project (3 hours); and 9 additional upper-level hours in History. All History courses must be completed with a grade of C or better.

Minor Requirements: A minimum of 18 semester hours in History, including HIST 2010 and 2020.

\section*{Political Science}

\section*{Departmental Requirements For Bachelor of Science Political Science}

39 Semester Hours

The major in Political Science is designed to familiarize students with both American and international politics while also training them in the skills of political science as an intellectual discipline. The program's upper-level curriculum encourages a broad exposure to the discipline while also allowing students to specialize in areas such as international relations, public policy, and the American legal system.

\section*{Degree Competencies}

Students awarded a Bachelor of Science in Political Science should be able to:
(1) recognize the characteristic features of Political Science as an academic discipline;
(2) conduct thorough research according to the standard methods of political scientists;
(3) advance original arguments in well-written essays with appropriate citation of sources;
(4) explain and distinguish between alternative philosophies of government;
(5) describe and compare different political systems and forms of government;
(6) describe the American political systems, including the federal government, state and local governments, and the relationships among branches and levels of government;
(7) explain the institutions and processes through which governments interact with one another across international political boundaries; and
(8) describe the ways in which individuals organize to influence politics and effect political change.

\section*{General Education Core}

The following courses are recommended in order to satisfy the requirements of the General Education Core. For a complete listing of all courses satisfying these requirements, please refer to the General Education section of the catalog.
Communications ( 9 hours)
ENGL 1010, 1020 Freshman English I, II
(minimum grade of \(C\) in each)
COMM \(2200 \quad\) Public Speaking
6

Humanities and/or Fine Arts (9 hours)
ENGL 2110-2124 Sophomore Literature Course
Elective One course from approved list. 3
Elective One course from approved list. 3
Social and Behavioral Science (6 hours)
Elective One course from approved list.
Elective One course from approved list. 3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
Two courses with labs from the approved list. 8
Mathematics (3 hours)
\(\begin{array}{lll}\text { MATH 1013, or } & \text { Contemporary Mathematics } & \\ \text { MATH 1110 } & \text { College Algebra I }\end{array}\)
Orientation (1 hour)
ASOR 1001 Orientation for Science Majors
(Teacher certification students should take EDCI 1010.)
Total General Education Hours

\section*{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 a minimum grade of C in POLI 1010 and POLI 2010.

Major Core: The requirements for a major in Political Science include POLI 1010, Introduction to Political Science (3 hours); POLI 2010, American National Government (3 hours); POLI 2200, Introduction to International Politics; POLI 2220, State and Local Government (3 hours); POLI 3100, Research Methodology (3 hours); POLI 4500, Senior Project (3 hours); and 21 additional upper-level hours in Political Science. All Political Science courses must be completed with a grade of C or better.

\section*{Pre-Law Studies}

The Political Science program provides pre-law courses both for Political Science majors and for students in other disciplines considering law school. The following fifteen hours are recommended as the Political Science portion of a pre-law curriculum: POLI 2010, American National Government; POLI 4300, Introduction to American Law; POLI 4310, 4320 Constitutional Law I, II; and POLI 4340, Legal Research and Writing. Students interested in law school should take courses from a variety of disciplines that help to develop their analytical and communication skills. Upper-level courses in English, History, and Business are highly recommended, as are PHIL 2500,Logic and Critical Thinking, and PHIL 4300, Philosophy of Law.
Minor Requirements: A minimum of 18 semester hours in Political Science, including POLI 2010.

\section*{Departmental Requirements \\ Bachelor's Degree with Teacher Certification \\ History, Government, and Geography}

Students majoring in History or Political Science may pursue teaching licensure for grades 7-12 in History, Government, and Geography. The curriculum for this program includes the University's general education requirements, the requirements for the major, and series of professional education courses culminating in a student teaching internship during the second semester of the senior year. Students wishing to participate in the program should declare History or Political Science as their major field and apply during their sophomore year for admission to the teacher education program. For a complete description of the teacher education program, including admission requirements, please refer to the College of Education section of the catalog.

\section*{Geography}

\section*{Departmental Requirements For Minor in Geography}

The Department provides an opportunity for students to enrich their education by obtaining a minor in Geography, composed of 18 semester hours of courses, including two semesters of World Regional Geography (GEOG 1010 and 1020) and a minimum of one course from each of the three components of the program: physical geography, systematic geography, and regional geography.
\begin{tabular}{llr} 
World Geography & World Regional Geography I & 6 HRS \\
GEOG 1010 & Worl \\
GEOG 1020 & World Regional Geography II & 3
\end{tabular}

Students must select at least one course from each of the following areas.

\section*{A. Physical Geography \\ 3-6 HRS}

GEOG 3010
Physical Geography I
GEOG 3020
Physical Geography II
GEOG \(3500 \quad\) Weather and Climate
GEOG 4990
Special Topics in Geography

\section*{B. Systematic Geography}

3-6 HRS
GEOG 4300
Social Geography
3
GEOG \(4440 \quad\) Cultural Geography
3
GEOG 4640 Environmental Geography 3
GEOG \(4700 \quad 3\)
GEOG \(4750 \quad 3\)
GEOG \(4850 \quad 3\)
GEOG 4990 Special Topics in Geography 3
C. Regional Geography 3-6 HRS

GEOG 3710
Geography of the United States and Canada
GEOG 3720 Geography of Mexico and the Caribbean 3
GEOG 3730
Geography of South America
Geography of Latin America
3
GEOG 4000
GEOG 4100
Geography of Asia 3

GEOG 4120
Geography of Africa
GEOG \(4250 \quad\) Historical Geography of the United States and Canada
GEOG 4990 Special Topics in Geography

\section*{Bachelor of Arts Degree in History}

Suggested Four-Year Plan
FRESHMAN YEAR
FALL SEMESTER
ENGL 1010
Natural Science
HIST 1210
ASOR 1002
Foreign Language 1010
Natural Science
HIST 1220
Humanities
Foreign Language 1020
14

\section*{SOPHOMORE YEAR}
FALL SEMESTER
Sophomore Literature
HIST 2010
GEOG 1010
MATH 1013 or 1110
Foreign Language 2010

\section*{HR} SPRING SEMESTER HR

\section*{Sophomore Literature}

HIST 2010
Humanities
HIST 2020
GEOG 1020
COMM 2200
Foreign Language 2020
Foreign Language 2010
15

\section*{JUNIOR YEAR}

FALL SEMESTER

\section*{HR}

HIST 3500
Upper-Div. U.S. History
Upper-Div. Non-U.S. History
Elective
Elective
SPRING SEMESTER
HR
3 Upper-Div. U.S. History 3
3 Upper-Div. Non-U.S. History 3
Elective
Elective
Elective
15

\section*{SENIOR YEAR}

\section*{FALL SEMESTER}

Upper-Div. History
Upper-Div. History
Upper Division Elective
Upper Division Elective
Upper Division Elective

HR SPRING SEMESTER HR

\section*{HIST 4500}

Upper-Div. History
Upper Division Elective
Upper Division Elective
Upper Division Elective

\section*{Bachelor of Arts Degree in History} With Teacher Certification Licensure for Grades 7-12

\section*{Suggested Four-Year Plan}

\section*{FRESHMAN YEAR}

FALL SEMESTER HR SPRING SEMESTER HR
ENGL 10103 ENGL 1020
NATURAL SCIENCE
NATURAL SCIENCE
HIST 1220
HUMANITIES ELECTIVE
* Foreign Language 2020

HIST 1210
EDCI 1010
* Foreign Language 2010
*Students not prepared for the sophomore level of foreign language must
begin at the level for which they are prepared, but must complete the language through 2020.

\section*{SOPHOMORE YEAR}

FALL SEMESTER
SOPHOMORE LITERATURE
HIST 2010
GEOG 1010
MATH 1013 or 1110
EDCI 2010

HR
SPRING SEMESTER
HR
HUMANITIES ELECTIVE 3
HIST 2020
GEOG 1020
COMM 2200
PSYC 2420

FALL SEMESTER
HIST 3500
Upper-Div. U.S. History
Upper-Div. Non-U.S. History
PSYC 3120
EDCI 3870

FALL SEMESTER
Upper-Div. History
Upper-Div. History
HIST 3710
EDCI 4190
HIST 4500
EDRD 4910
ELECTIVE

\section*{JUNIOR YEAR}

Optional endorsement in Government requires 15 additional hours including American Government, International Politics, State and Local Government, Contemporary Political Philosophy, and an upper-division Political Science elective.

Optional endorsement in Geography requires 12 additional hours including Physical Geography, Geography of North America, either Social, Political, or Cultural Geography, and an upper division Geography elective.

Bachelor of Science Degree in Political Science
Suggested Four-Year Plan
FRESHMAN YEAR
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
NATURAL SCIENCE & 4 & NATURAL SCIENCE & 4 \\
POLI 1010 & 3 & POLI 2010 & 3 \\
ASOR 1002 & 1 & HUMANITIES ELECTIVE & 3 \\
HUMANITIES ELECTIVE & 3 & MATH 1013 or 1110 & \(\frac{3}{16}\)
\end{tabular}

SOPHOMORE YEAR
\begin{tabular}{lrl} 
FALL SEMESTER & HR & SPRING SEMESTER \\
SOPHOMORE LITERATURE & 3 & HIST 2020 \\
HIST 2010 & 3 & POLI 2220 \\
POLI 2200 & 3 & SOC SCI \\
COMM 2200 & 3 & ELECTIVE \\
ELECTIVE & \(\frac{3}{15}\) & \\
& &
\end{tabular}

HR
SOPHOMORE LITERATURE 3 HIST 2020 - 3
HIST 2010
POLI 2200
ELECTIVE

JUNIOR YEAR
FALL SEMESTER
POLI 3100
Upper-Div. Political Science
Upper-Div. Political Science
ELECTIVE
ELECTIVE

HR
Upper-Div. Political Science 3 Upper-Div. Political Science 3 ELECTIVE ELECTIVE
15
\(\frac{1}{18} \quad \overline{12}\)

HR
Upper-Div. U.S. History 3
Upper-Div. Non-U.S. History 3
EDSE 3330
3
EDAD 4000
Upper-Div. History Elective
3
\(\frac{3}{15}\)
SENIOR YEAR
\(\begin{aligned} \text { HR } & \text { SPRING SEMESTER } \\ 3 & \text { HIST } 4720\end{aligned}\)
of coastlines. Included are the cause and distribution of these elements and their impact on humanity.

GEOG 3100 Cartography (3) (Formerly GEOG 310). 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 3500 Weather and Climate (3) (Formerly GEOG 350). 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 3710 Geography of the United States and Canada (3) (Formerly GEOG 371). The physical and cultural geography of the regions of AngloAmerica, with recognition, analysis, and interpretation of the landforms, resources, and human adjustments that are made within its several regions.
GEOG 3720 Geography of Mexico and the Caribbean (3) (Formerly GEOG 372). 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 3730 Geography of South America (3) (Formerly GEOG 373). 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 4000 Geography of Latin America (3) (Formerly GEOG 400). 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 4100 Geography of Asia (3) (Formerly GEOG 410). 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 4120 Geography of Africa (3) (Formerly GEOG 412). The regions, resources, and peoples of the African continent with special attention to Africa south of the Sahara desert, its development and potential.
GEOG 4250 Historical Geography of the United States and Canada (3) (Formerly GEOG 425). The changing physical and cultural geography of Anglo-America during four centuries of settlement and development.

GEOG 4300 Social Geography (3) (Formerly GEOG 430). 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 4440 Cultural Geography (3) (Formerly GEOG 444). 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 4640 Environmental Geography (3) (Formerly GEOG 464). 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 4700 Political Geography (3) (Formerly GEOG 470). 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 4750 Economic Geography (3) (Formerly GEOG 475). An examination of the geography of world economic systems, including an analysis of the principles of resource utilization and location theory.
GEOG 4850 Urban Geography (3) (Formerly GEOG 485). 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 4990 Special Topics in Geography (3) (Formerly GEOG 499). An in-depth examination of selected areas of geography through readings, research projects, and oral and written presentations. Prerequisites: GEOG 1010 and 1020, or permission of instructor.

\section*{History (HIST)}

HIST 1210, 1220 World History I, II (3, 3) (Formerly HIST 121, 122). A survey of the major societies and civilizations of Asia, Africa, the Middle East, and the West-their geography, major economic and social structures, political systems, religions, and philosophies. The first semester covers from pre-history to about 1500 CE, and the second semester covers from 1500 to the present. Required of all History majors.

HIST 2010, 2020 American History I, II (3, 3). 3A study of the development of cultural, economic, and political institutions in America from preColumbian times to the present. HIST 2010 covers the period from pre-Columbian times to 1877. HIST 2020 covers the period from 1877 to the present. Both courses are required to satisfy the History requirement of the General Education Core, with the exception that HIST 2030 may be substituted for either course.

HIST 2011, 2021 Honors American History I, II (3, 3). A study of American history from pre-Columbian times to the present. Limited to students in University Honors Program. Both courses may be used to satisfy the History requirement of the General Education Core.

HIST 2030 History of Tennessee (3). A study of the state from neolithic time until the present day. It includes a survey of social, cultural, economic, and political developments which have influenced Tennessee's growth and development. Course may be substituted for either HIST 2010 or 2020 in satisfying the History requirement of the General Education Core.
HIST 2040 Introduction to Public History (3) (Formerly HIST 203). 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 3010 Europe, 1648-1789 (3) (Formerly HIST 301). A survey of early modern Europe from the end of the Thirty Years' War to the beginning of the French Revolution. Themes include the rise of the modern state system in Europe, the creation of colonial empires, the development of global commerce, and the impact of scientific revolution and the Enlightenment.
HIST 3020 Europe, 1789-1871 (3) (Formerly HIST 302). A survey of European history from the French Revolution to the unification of Italy and Germany. This course examines the transformation of Europe through the influence of revolutionary movements and modern ideologies as well as the social and economic forces of urbanization and industrialization.

HIST 3030 Europe, 1871-1945 (3) (Formerly HIST 303). A survey of Europe from the height of its power and influence to the crisis of its civilization in the First and Second World Wars. The course examines the nature of European imperialism, the growth of international rivalry, the history of fascism and communism, and the great military conflicts of the early twentieth century.

HIST 3040 Europe since 1945 (3) (Formerly HIST 304). A survey of European history during and after the Cold War. This course examines the end of European empire, the division of Europe in the struggle between the Soviet Union and the United States, and quest for European unity, the collapse of communism, and the challenges of the new century.

HIST 3100 American Women's History to 1890 (3). An introduction to American women's history and historiography from the colonial period to 1890 focusing on the diversity of women's experiences. The course analyzes the connections between gender, race, class, and sexuality in various cultural, economic, legal, and political contexts.

HIST 3110 American Women's History 1890 to the Present (3). An introduction to American women's history and historiography from 1890 to the present day focusing on the diversity of women's experiences. The course analyzes the connections between gender, race, class, and sexuality in various cultural, economic, legal, and political contexts.

HIST 3185, 3186 Cooperative Education (3, 3) (Formerly HIST 318A, B). 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 3200 History of Mexico (3). An introduction to the social, cultural, economic, and political history of Mexico, primarily since independence, with a background on the colonial and Pre-Columbian periods.
HIST 3310 American Colonial History (3) (Formerly HIST 331). A study of the economic, social, cultural, and political history of North America and the early United States from 1492 to 1789.

HIST 3320 The Early Republic, 1789-1836 (3) (Formerly HIST 332). An in-depth study of the American Republic from its beginnings under George Washington through the presidency of Andrew Jackson.
HIST \(\mathbf{3 3 3 0}\) The Late Republic, 1836-1860 (3) (Formerly HIST 333). The history of the United States during the mid-nineteenth century. Topics include territorial expansion, sectional conflict, the debate over slavery, and the coming of the Civil War.
HIST 3340 Civil War and Reconstruction (3) (Formerly HIST 334). 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 3350 United States 1877 to 1920 (3) (Formerly HIST 335). 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 3360 United States 1920 to 1945 (3) (Formerly HIST 336). 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, and the New Deal.
HIST 3370 America Since 1945 (3) (Formerly HIST 337). An investigation of the American nation since World War II. Topics include domestic politics, America's involvement in post-war world affairs, and economic, cultural, and social developments.
HIST 3380 The Cultural History of the United States (3) (Formerly HIST 338). 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 3500 History Workshop (3) (Formerly HIST 350). An introduction to history as an academic discipline and professional vocation. The course traces the development of history as specialized field, explores its philosophical foundations, and introduces students to the methods, practices, and career opportunities of professional historians. Students should typically take the course during the fall semester of their junior year. Required of all History majors.
HIST 3630 History of Science and Technology (3) (Formerly HIST 363). 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 3690 Economic History of the United States (3) (Formerly HIST 369). 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 multinational organizations.

HIST 3710 Teaching of History and Social Science (3) (Formerly HIST 371). 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 fieldbased 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 3840 Ancient History (3) (Formerly HIST 384). 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 3860 The Middle Ages and Renaissance (3) (Formerly HIST 386). 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 4210, 4220 Diplomatic History of the United States (3, 3) (Formerly HIST 421, 422). An analysis of American foreign affairs, 1776 to the present. HIST 4210 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 4220 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 4240 History of Feminism (3). An exploration of historical developments and variations in feminist thought. Through the critical analysis of historical and literary texts, the course examines ideas about gender and sexuality, their intersections with concepts of race, class, and nation, and their changing role in constructions of identity. Prerequisite: HIST 3500 or WMST 2000.

HIST 4250, 4260 American Social and Intellectual History (3, 3) (Formerly HIST 425, 426). 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 4260 covers the period from 1865 to the present.

HIST 4320, 4325, 4326 Vital Topics in History (3, 3, 3) (Formerly HIST 432A, 432B, 432C). 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 4500 Senior Project (3) (Formerly HIST 450). A one-semester research and writing project for seniors majoring in History. The course represents the culmination of the undergraduate program in History and should be taken during the fall or spring semester of a student's senior year. Students wishing to enroll under other circumstances must seek prior approval by the Department. Required of all History majors. Prerequisite: HIST 3500.

HIST 4510, 4520 Latin American History I, II (3, 3) (Formerly HSIT 451, 452). An examination of the general history of the civilization of Latin America to the present. HIST 4510 covers Indian times through the Por-tuguese-Spanish colonization period. HIST 4520 covers the period from 1800 to the present, including revolution, independence, nationhood, and international relations.

HIST 4580 Public History Administration Internship (3) (Formerly HIST 458). 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 2040.

HIST 4720 Student Teaching (9) (Formerly HIST 472S). A semesterlong, 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 4705, which is taken concurrently.

HIST 4810, 4820 Asian Civilizations I, II (3, 3) (Formerly HIST 481, 482). 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 4840 History and Literature of the British Empire (3). A survey of the major social, cultural, and political developments associated with the British Empire from 1850 to the present. The course explores the impact of Empire on the British, colonized peoples, and the development of postcolonial cultures and identities. Students may not earn credit in both HIST 4840 and ENGL 4840. Prerequisite: admitted to upper division courses.

HIST 4850, 4860 History of Africa I, II (3, 3) (Formerly HIST 485, 486). 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 4880 Africa and the Trans-Atlantic Slave Trade (3) (Formerly HIST 488). A study of the trans-Atlantic slave trade from its beginnings in the fifteenth century to its suppression in the 1800s. The course examines the origins of the slave trade, its extent, and its impact on the African continent and the African diaspora.
HIST 4890 Modern Africa, 1960-Present (3) (Formerly HIST 489). A study of Africa in the post-independence period. Topics include the challenges of economic development, issues of the environment and population, the dilemmas of democratic nation building, and the impact of international politics on emerging African states.

HIST 4910, 4920 Afro-American History I, II (3, 3) (Formerly HIST 491, 492). A study of the integral role and contributions of African-Americans to the history and development of the United States. HIST 4910 covers the period from the history of African kingdoms to the end of American slavery. HIST 4920 covers the period from 1865 to the present.

HIST 4930 The Civil Rights Movements in the United States (3) (Formerly HIST 493). A study of movements in America from 1900 to the present, including African-American, Mexican-American, Native American, and women's organizations.

\section*{Political Science (POLI)}

POLI 1010 and POLI 2010 are prerequisites to all upper-level Political Science courses.

POLI 1010 Introduction to Political Sciences (3) (Formerly PISI 101). 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. POLI 1010 is a prerequisite for all upper-level Political Science courses. Course does not satisfy the Social Science requirement of the General Education Core.

POLI 2010 American National Government (3) (Formerly PISI 2010). 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 citizen. Required of all Political Science majors. POLI 2010 is a prerequisite for all upper-level Political Science courses. Course may be applied toward the Social Science requirement of the General Education Core.

POLI 2200 Introduction to International Politics (3) (Formerly PISI 220). 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 power, nation-state, sovereignty, nationalism, interdependence, and integration are explored in depth. Required of all Political Science majors.

POLI 2220 State and Local Government (3) (Formerly PISI 222). 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 form Tennessee. Required of all Political Science majors.
POLI 2700 Introduction to Intelligence Studies (3). This is a lower division Political Science course open to all students. The course focuses on Intelligence as an academic area of study and explores issues relating to definition, the history of U.S. Intelligence, the intelligence cycle, components and coordination of the intelligence community, and the intelligence process and relationships with the policymaker. It is subsumed under the larger theoretical framework of U.S. national security.

POLI 3000 History of Political Philosophy (3) (Formerly PISI 300). Selected political philosophers from classical Greece to 1900, including Plato, Aristotle, Machiavelli, Locke, and Rousseau.

POLI 3010 Contemporary Political Philosophy (3) (Formerly PISI 301). Twentieth-century works on the central issues in political philosophy, economic justice, rights, and political authority.

POLI 3060 Model United Nations (1). The central component of this course is participation in the National Model United Nations conference held every spring in New York City. Students learn about the United Nations and international politics by researching a different country every semester. This course focuses on research, writing, negotiation, and public speaking skills associated with preparing and participating for this confer-
ence. The course may be repeated with faculty approval for up to 3 hours of credit. Prerequisite: permission of instructor.

POLI 3100 Research Methodology (3) (Formerly PISI 310). An introduction to social science research methodology, which involves data collection and processing procedures, computer usage, surveys, statistical analysis, and research design. This course is a prerequisite to POLI 4500. Required of all Political Science majors.
POLI 3150 Public Opinion and Voting Behavior (3) (Formerly PISI 315). 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.

POLI 3600 Introduction to Comparative Government and Politics (3) (Formerly PISI 360). Theoretical frameworks which have been used to compare different types of political systems. Course focuses on the issue of what constitutes a valid comparison.
POLI 3630 International Organizations (3) (Formerly PISI 363). 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).
POLI 3650 International Relations (3) (Formerly PISI 365). Contemporary relations and problems among states of the world and the major factors which underlie and influence these relations.

POLI 3670 American Foreign Policy (3) (Formerly PISI 367). The forces and factors involved in American foreign policy and the processes through which it is developed.
POLI 3680 Third World Politics (3) (Formerly PISI 368). An introduction to political and economic change in the Third World to provide an understanding of some of the major problems confronting these nations and the various tools and strategies that their political leaders can use in dealing with those problems. Course investigates some of the major avenues toward political development and assesses the costs and benefits of the approaches discussed.
POLI 3690 Theoretical Approaches to International Relations (3) (Formerly PISI 369). 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.

POLI 3700 International Security Studies (3) (Formerly PISI 370). 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.

POLI 3910 Urban Politics (3) (Formerly PISI 391). 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.

POLI 3930 International Political Economy (3) (Formerly PISI 393). 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.

POLI 4055, 4056, 4057, 4058, 4059 Special Topics (3) (Formerly PISI 405, 405A, 405B, 405C). Student- or faculty-generated courses. Scope of subject matter is determined by students and instructor. POLI 4055 examines black political thought from 1850 to 1920, and 4057 examines the philosophy of Dr. Martin Luther King, Jr.
POLI 4200 Legislative Process (3) (Formerly PISI 420). The structure and methods of transacting business in the American Congress and state legislatures: the role of legislatures in the American political system.

POLI 4220 Parties and Elections (3) (Formerly PISI 422). The structure and functions of the party system, including nominations, campaigns, and elections. The course examines the role of parties in the political process.
POLI 4230 The Presidency (3) (Formerly PISI 423). 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.
POLI 4240 Government, Public Opinion, and the Press (3) (Formerly PISI 424). 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.

POLI 4300 Introduction to American Law (3) (Formerly PISI 430). 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.

POLI 4310 Constitutional Law: The Federal Government and Separation of Powers (3) (Formerly PISI 431). 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.

POLI 4320 Constitutional Law: The Bill of Rights (3) (Formerly PISI 432). 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.

POLI 4340 Legal Research and Writing (3) (Formerly PISI 434). 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.
POLI 4350 International Law (3) (Formerly PISI 435). 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.

POLI 4360 Middle East Politics (3). An introduction to the politics of the modern Middle East. Topics include the history and influence of Islam, the legacy of imperialism, the formation of modern nation-states, the rise of nationalism, political reform, and the role of religion in the politics of the region. In addition, the international politics of the Middle East are also examined.
POLI 4400 Introduction to Public Administration (3) (Formerly PISI 440). 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 POLI 4400 series.

POLI 4460 Intergovernmental Relations and Regionalism (3) (Formerly PISI 446). 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: POLI 2220 and 4400.

POLI 4480 Internship (3-12) (Formerly PISI 448). A supervised internship allowing students to experience firsthand the workings of government and private agencies involved in legal and political processes. Students may receive up to 12 hours of credit for the internship. Only 3 hours, however, may be counted toward the requirements for a major in Political Science. Prerequisites: Junior or Senior standing and at least 12 hours of upper-level Political Science courses.
POLI 4500 Senior Project (3) (Formerly PISI 450). 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: POLI 3100.

POLI 4510 Independent Study (3) (Formerly PISI 451). A supervised project of research or course of guided readings. Topics are selected by
enrolled students in consultation with the supervising faculty member. The course may be repeated with faculty approval for up to 6 hours of credit. Prerequisites: Junior or Senior standing and at least 12 hours of upperlevel Political Science courses.

POLI 4700 U.S. National Security Policy (3). The course covers the fundamental concepts of security and the varied attributes of American security policy. Students will examine and evaluate the evolution of U.S. national security, an analytical framework for examining national interest, the role of the military in the national security process, intelligence, and security, and contemporary issues relating to national strategy.

POLI 4920 Black Politics (3) (Formerly PISI 492). 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.

\section*{Department of Languages, Literature, and Philosophy}

\section*{Warren B. Westcott, Ph.D., Head 104 Humanities Building Telephone 615-963-5641}

Faculty: D. Daniels, R. Dixon, S. Etheridge-Logan, W. Hardy, J. Head, W. Hennequin, H. Houston, M. Hull, J. Irby, G. Johnson, C. Konkobo, L. Lewis, C. Maddux, M. Mazzone, C. Mojica-Diaz, J. Montmarquet, S. Morgan-Curtis, E. Orlando, N. Pearson, E. Phillips, L. Powers, T. Quain, A. Rueda-Garcia, E. Smith, A. Springfield, G. Valencia-Serna, W. Westcott.

General Statement: The Department of Languages, Literature, and Philosophy contains the University's degree programs in English and Foreign Languages; it also offers courses in Philosophy and Religious Studies. Since all of these disciplines have distinct programs, they are discussed under separate headings, but each provides a broad, sound education in the humanities, those studies specifically designed to cultivate one's full humanity.
Accreditation: The teacher education programs in English and foreign languages are approved by the Tennessee Department of Education. In addition, the University's teacher education program is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

\section*{English}

General Statement: The program provides an education in literature and in the English language. A student who majors in English should gain an understanding of the use of the language for both aesthetic and practical purposes, and should therefore be able to use language effectively and recognize its effective use. Through the study of literature, the student also becomes familiar with some of the great minds in history and the cultures of which they were a part.

Students must earn at least a grade of \(C\) in all classes required to complete the English major. English majors are also expected to take ENGL 2310 and 2320, World Literature I and II (or ENGL 2312 and 2322, Honors World Literature I and II), as part of the general education core. Since English offers only the B.A. degree, students must complete at least twelve semester hours of work in a single foreign language. This number of hours cannot be reduced by advanced placement in the language. For example, if a student is initially placed in the sophomore level because of competence in the language, he or she must take twelve hours at the sophomore, junior, and/or senior level of the language. (Students are not allowed to take freshman-level courses in the language once they have earned at least a C in the sophomore level of that language.) Ideally these hours should build upon the foreign lan-
guage learned in high school, in order for the student to develop a high level of proficiency in a language other than English. Other requirements for the major are listed in the four-year curriculum.

Students may earn secondary school certification in English by completing the requirements of the general education and professional education cores, as well as ENGL 3710, Methods of Teaching High School English, and ENGL 3720, Adolescent Literature. The other certification requirements are spelled out in the fouryear curriculum. Successful completion of the certification program results in licensure for grades 7-12. Students ordinarily enter the certification program in their sophomore year. They must pass the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT), as well as have a cumulative quality point average of 2.75 , before they are officially admitted and become eligible to enroll in upper-level certification courses. Students who have previously earned a 21 on the ACT, a 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. Students must apply in writing to the College of Education for formal admission to the certification program. Certification candidates in English are required to complete twelve semester hours of enhanced student teaching with an eight-week placement at the secondary level and seven weeks at the middle school level. For a complete list of admission and retention requirements in the Teacher Education Program, see College of Education section.

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.

\section*{Departmental Requirements For Bachelor of Arts English}

\section*{General Education Core}

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II
(minimum grade of C in each)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2310 World Literature I
ENGL 2320 World Literature II
Minimum arade
Elective One course from approved list.
Social and Behavioral Science ( 6 hours)
Elective One course from approved list.
Elective One course from approved list.
History (6 hours)
HIST 2010 American History I
HIST 2020 American History II
Natural Science (8 hours)
Two courses with labs from the approved list.
Mathematics (3 hours)
One course from approved list
Orientation (1 hour)
ASOR 1003 Orientation for Humanities Majors
(Teacher certification students should take EDCI 1010.)
Total General Education Hours

\section*{OTHER REQUIREMENTS:}

FOREIGN
12 hours of a single language
12
LANGUAGE (See statement above about the level of
COMP 1210 these courses.)
Introduction to Computing

\section*{Upper-division Admission}

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

\section*{Major Core}
\begin{tabular}{lll} 
ENGL 3010 & Critical Approaches to Literature & 3 \\
ENGL 4000 & Senior Seminar & 3
\end{tabular}

ENGL 4310 or 4320 Shakespeare Comedies or 3 Shakespeare Tragedies
American Literature
6 hours from ENGL 3610, 3620, 3630, 3640, 3680, 3690, 4600, 4810
British Literature 6 hours, 3 hours before 1800 (ENGL 3290, 3310, 3320, 3330, or 4230) and 3 hours after 1800 (ENGL 3300, 3410, 3420, 3510, 3530, or 4210, 4410, 4510, or 4840)
Literature and 6 hours from ENGL 3150, 3640, 3650, 3720, 3730,
Culture \(\quad 3800,3810,3820,3860,4600,4810,4840\), 3800,3810,
4850,4860
Genre \(\quad 3\) hours from genre courses (ENGL 3530, 3630,
or Major Author 3650, 3680, 3670, 3690, 4210, 4220, 4410, 4510) or major author courses (ENGL 4200, 4310, 4320, 4340)
Language
and Theory 3 hours from ENGL 3900, 4100, 4110, 4120, 4130, 4800
Writing \(\quad 3\) hours from ENGL 3000, 3100, 3110, 3120, 4140, 4150, 4160, 4910, 4920, 4950

No course can satisfy more than one of the above requirements: e.g., ENGL 4310 can be used to satisfy the requirement in either Shakespeare or a major author, but cannot satisfy both.

Teacher education students take EDCI 1010 instead of ASOR 1003, they are not required to take COMP 1210, and they must include these specific courses in their curriculum: ART 1010 or MUSC 1010, PSYC 2420, ENGL 3710, ENGL 3720, ENGL 4724, EDCI 2010, EDCI 3870, EDCI 4190, PSYC 3120, EDAD 4000, EDSE 3330, EDRD 4910, EDCI 4700. ENGL 3720 satisfies the "Literature and Culture" requirement. Students should work closely with their advisors to ensure that they meet all of the requirements for the major and secondary certification.

Requirements for Minor: A minimum of 18 upper-level semester hours including ENGL 3010, 3610 or 3620, 4120 or 4130,4310 or 4320.

\section*{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 concentrations in French and Spanish. C is the lowest acceptable grade for the departmental major and minor in any required Foreign Languages course. Courses in which students receive D or below must be repeated and the grade raised to at least a C .

Students who wish to be certified to teach French or Spanish must be officially admitted to the Teacher Education program through the College of Education, ordinarily in the sophomore year. Admission to this program requires a 2.75 cumulative quality point aver-
age 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 teacher education courses. Students are required to complete twelve semester hours of enhanced student teaching, with an eight-week placement in secondary school and seven-week placement in middle school. For a complete list of requirements for admission to and retention in Teacher Education Program, see the College of Education section. Successful completion of the program earns licensure to teach grades 7-12.

The program offers a minor in French, Spanish, or German.

\section*{Departmental Requirements \\ For Bachelor of Arts \\ Foreign Languages (French or Spanish)}

\section*{General Education Core}

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II 6
(minimum grade of \(C\) in each)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2310 World Literature I
ENGL 2320 World Literature II
Elective One course from approved list.
Social and Behavioral Science (6 hours)
Elective One course from approved list.
Elective One course from approved list.
3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
Two courses with labs from the approved list.
Mathematics ( 3 hours)
MATH 1110, or College Algebra I, or
MATH 1710 Pre-Calculus Mathematics I
Orientation (1 hour)
ASOR 1003 Orientation for Humanities Majors
(Teacher certification students should take EDCI 1010.)
Total General Education Hours

\section*{OTHER REQUIREMENTS:}

Foreign Language (6-12 hours) French or Spanish through intermediate level (Number of hours may be reduced through advanced status.) (minimum grade of C in all courses)
Computer Science (3 hours) COMP 1210 Introduction to Computing

\section*{Upper-division Admission}

For admission into the upper-division program of either the French or Spanish concentration of the Foreign Language major, students must complete all of the requirements listed above under the General Education Core and Other Requirements. In addition, they must have removed all high school deficiencies, passed all required developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination.

\section*{Major Core: French Concentration}

FREN 3000 French Phonetics and Phonology 3
FREN 3010, 3020, 3030 Advanced French Grammar, French 6 Pronunciation and Conversation, Reading and Pronunciation (Students must take two of the three.)
FREN 3100 Introduction to Literary Studies


French Minor: Eighteen hours in French courses at the 3000/4000 level. FREN 3000, 3010, 3020, 3030, and 3100 required.

\section*{Major Core: Spanish Concentration}

SPAN \(3000 \quad 3\)
SPAN 3100 Introduction to Literary Studies 3
SPAN 3010, 3020, 3030 Advanced Spanish Grammar, Spanish 6 Pronunciation and Conversation, Reading and Composition (Students must take two of the three.)
SPAN \(3120 \quad\) Culture and Civilization of Spain
SPAN \(3130 \quad\) Culture and Civilization of Latin America 3
SPAN 3200 or 3210 Survey of Peninsular Literature or 3
Survey of Latin American Literature
SPAN 4010 or 4020 Literary Masterpieces of Spain or Topical 3
Readings in the Literature of Spain
SPAN 4100 or 4110 Masterpieces of Latin American Literature or Topical Readings in Latin American Literature
MFLA 4500 Senior Seminar
Students seeking teacher certification in Spanish must take only one of SPAN 4010, 4020, 4100, or 4110. In addition, they must take the following courses:
SPAN 3110 Introduction to Spanish Linguistics 3
MFLA 3710 Methods of Teaching Foreign Languages 3
MFLA 4724 Student Teaching in the Secondary Schools

Spanish Minor: Eighteen hours in Spanish courses at the 3000/4000 level. SPAN 3000, 3010, 3020, 3030, and 3100 required.

\section*{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 3100, 3110, 3120) and Logic and Critical Thinking (PHIL 2500). Other courses should be selected in consultation with a Philosophy advisor.

\section*{Departmental Requirements \\ For Minor in}

18 Semester Hours
Philosophy
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.

\section*{Bachelor of Arts Degree in English}

\section*{Suggested Four-Year Plan}

\section*{FRESHMAN YEAR}
\begin{tabular}{|c|c|c|c|}
\hline FALL SEMESTER HR & HR & SPRING SEMESTER & HR \\
\hline ENGL 1010 & 3 & ENGL 1020 & 3 \\
\hline FREN, GERM, or SPAN & 3 & FREN, GERM, or SPAN & 3 \\
\hline HIST 2010 & 3 & HIST 2020 & 3 \\
\hline HUMANITIES ELECTIVE & 3 & HUMANITIES ELECTIVE & 3 \\
\hline MATH 1110, 1013, or 1710 & 3 & COMP 1210 & 3 \\
\hline ASOR 1003 & 1 & & \\
\hline & 16 & & 15 \\
\hline \multicolumn{4}{|c|}{SOPHOMORE YEAR} \\
\hline FALL SEMESTER HR & HR & SPRING SEMESTER & HR \\
\hline ENGL 2310 or 2312 & 3 & ENGL 2320 or 2322 & 3 \\
\hline WRITING, UPPER-LEVEL & 3 & COMM 2200 & 3 \\
\hline FREN, GERM, or SPAN & 3 & FREN,GERM, or SPAN & 3 \\
\hline BIO/CHEM/PHY & 4 & BIO/CHEM/PHY & 4 \\
\hline AND LAB & & AND LAB & \\
\hline SOCIAL/BEHAV SCI & 3 & SOCIAL/BEHAV SCI & 3 \\
\hline & 16 & & 16 \\
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline FALL SEMESTER HR & HR & SPRING SEMESTER & HR \\
\hline ENGL 3010 & 3 & AMERICAN LITERATURE & 3 \\
\hline LANGUAGE AND THEORY & 3 & BRITISH LITERATURE & 3 \\
\hline BRITISH LITERATURE & 3 & LITERATURE AND CULTURE & 3 \\
\hline AMERICAN LITERATURE & 3 & ELECTIVES, ANY LEVEL & 6 \\
\hline ELECTIVE, ANY LEVEL & 3 & & \\
\hline & 15 & & 15 \\
\hline \multicolumn{4}{|c|}{SENIOR YEAR} \\
\hline FALL SEMESTER HR & HR & SPRING SEMESTER & HR \\
\hline ENGL 4000 & 3 & GENRE OR MAJOR AUTHOR & 3 \\
\hline ENGL 4310 or 4320 & 3 & LITERATURE AND CULTURE & 3 \\
\hline ELECTIVES, 3000/4000 LEVEL & & ELECTIVES, 3000/4000 LEVEL & \\
\hline & 15 & & 12 \\
\hline
\end{tabular}

\section*{Bachelor of Arts Degree in English With Teacher Certification Licensure for Grades 7-12}

\section*{Suggested Four-Year Plan}

FRESHMAN YEAR
FALL SEMESTER HR SPRING SEMESTER HR
ENGL 1010
ENGL 1020
FREN, GERM, or SPAN
FREN, GERM, or SPAN
HIST 2010
MATH 1110, 1013, or 1710
HIST 2020
MUSC 1010 or ART 1010
EDCI 1010
COMM 2200
15 15

\section*{SOPHOMORE YEAR}
\begin{tabular}{|c|c|c|c|}
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline ENGL 2310 or 2312 & 3 & ENGL 2320 or 2322 & 3 \\
\hline FREN, GERM, or SPAN & 3 & FREN, GERM, or SPAN & 3 \\
\hline \[
\begin{aligned}
& \text { BIO/CHEM/PHY } \\
& \text { AND LAB }
\end{aligned}
\] & 4 & \[
\begin{aligned}
& \text { BIO/CHEM/PHY } \\
& \text { AND LAB }
\end{aligned}
\] & 4 \\
\hline EDCI 2010 & 3 & SOCIAL/BEHAV SCI & 3 \\
\hline SOC/BEHAV SCI & 3 & PSYC 2420 & 3 \\
\hline & 16 & & 16 \\
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline ENGL 3010 & 3 & ENGL 3710 & 3 \\
\hline AMERICAN LITERATURE & 3 & AMERICAN LITERATURE & 3 \\
\hline LANGUAGE AND THEORY & 3 & BRITISH LITERATURE & 3 \\
\hline BRITISH LITERATURE & 3 & PSYC 3120 & 3 \\
\hline ENGL 3720 & 3 & EDCI 3870 & 3 \\
\hline GENRE/MAJOR AUTHOR & 3 & & \\
\hline & 18 & & 15 \\
\hline \multicolumn{4}{|c|}{SENIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline ENGL 4000 & 3 & ENGL 4724 & 9 \\
\hline ENGL 4310 or 4320 & 3 & EDCI 4700 & 3 \\
\hline WRITING & 3 & & \\
\hline EDCI 4190 & 2 & & \\
\hline EDRD 4910 & 3 & & \\
\hline EDSE 3330 & 3 & & \\
\hline & 17 & & 12 \\
\hline
\end{tabular}

\section*{Bachelor of Arts Degree in Foreign Languages Concentration in French}

Suggested Four-Year Plan

\section*{FRESHMAN YEAR}
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
* FREN 2010 & 3 & * FREN 2020 & 3 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
HIST 2010 & 3 & HIST 2020 & 3 \\
MATH 1110, 1013 or 1710 & 3 & COMP 1210 & 3 \\
HUMANITIES ELECTIVE & 3 & HUMANITIES ELECTIVE & 3 \\
ASOR 1003 & \(\mathbf{1}\) & & -15
\end{tabular}
*Students need not take these courses if they demonstrate equivalent proficiency. Additional credits must be earned to replace hours for these language courses. A minimum of 120 hours must be earned.

SOPHOMORE YEAR
FALL SEMESTER
FREN 3000
FREN 3010, 3020, or 3030
ENGL 2310 or 2312
BIOL/CHEM/PHYS
AND LAB
COMM 2200
\begin{tabular}{lrlr}
\multicolumn{3}{c}{ JUNIOR YEAR } \\
& HR & SPRING SEMESTER & HR \\
FALL SEMESTER & 3 & FREN 3130 & 3 \\
FREN 3100 & 3 & FREN 3200 or 3210 & 3 \\
FREN 3120 & \(\underline{9}\) & ELECTIVES, 3000/4000 LEVEL & \(\mathbf{9}\) \\
ELECTIVES, ANY LEVEL & \(\mathbf{9}\) & & \(\mathbf{1 5}\)
\end{tabular}
\begin{tabular}{lrlr}
\multicolumn{4}{c}{ SENIOR YEAR } \\
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
FREN 4010 or 4020 & 3 & MFLA 4500 & 3 \\
FREN 4100 or 410 & 3 & ELECTIVES, 3000/4000 LEVEL & 9 \\
ELECTIVES, 3000/4000 LEVEL & 9 & & \(\overline{12}\)
\end{tabular}

\section*{Bachelor of Arts Degree in Foreign Languages Concentration in French With Teacher Certification Licensure for Grades 7-12}

Suggested Four-Year Plan
\begin{tabular}{lrlr}
\multicolumn{3}{c}{ FRESHMAN YEAR } \\
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
* FREN 2010 & 3 & * FREN 2020 & 3 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
HIST 2010 & 3 & HIST 2020 & 3 \\
MATH 1110, 1013, or 1710 & 3 & COMP 1210 & 3 \\
SOC/BEHAV SCI & 3 & ART 1010 or MUSC 1010 & 3 \\
EDCI 1010 & \(\mathbf{1}\) & HUMANITIES ELECTIVE & \(\frac{3}{18}\)
\end{tabular}
*Students need not take these courses if they demonstrate equivalent proficiency. Additional credits must be earned to replace hours for these language courses. A minimum of 120 hours must be earned.

\section*{SOPHOMORE YEAR}

FALL SEMESTER
FREN 3000
FREN 3010, 3020, or 3030
BIO/CHEM/PHY AND LAB COMM 2200 EDCI 2010

FALL SEMESTER
FREN 3100
FREN 3110
FREN 3120
MFLA 3710
EDAD 4000

HR
RING SEMESTER
FREN 3010, 3020, or 3030 GEOG 1010 or 1020
BIO/CHEM/PHY
4 AND LAB PSYC 2420 HPSS 1510
\(\frac{3}{6}\)

SENIOR YEAR
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
FREN 4010, 4020, 4100, or 4110 3 & MFLA 4724 & 9 \\
MFLA 4500 & 3 & EDCI 4705 & 3 \\
EDRD 4910 & 3 & & \\
EDSE 3330 & 3 & & \\
ENGL 2310 or 2312 & \(\underline{3}\) & & \(\overline{12}\)
\end{tabular}

\section*{Bachelor of Arts Degree in \\ Foreign Languages Concentration in Spanish}

Suggested Four-Year Plan

\section*{FRESHMAN YEAR}
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
* SPAN 2010 & 3 & * SPAN 2020 & 3 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
HIST 2010 & 3 & HIST 2020 & 3 \\
MATH 1110, 1013, or 1710 & 3 & COMP 1210 & 3 \\
HUMANITIES ELECTIVE & 3 & HUMANITIES ELECTIVE & 3 \\
ASOR 1003 & \(\mathbf{1}\) & & -15
\end{tabular}
*Students need not take these courses if they demonstrate equivalent proficiency. Additional credits must be earned to replace hours for these language courses. A minimum of 120 hours must be earned.

\section*{SOPHOMORE YEAR}
\begin{tabular}{|c|c|c|c|}
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline SPAN 3000 & 3 & SPAN 3010, 3020, or 3030 & 3 \\
\hline SPAN 3010, 3020, or 3030 & 3 & GEOG 1010 or 1020 & 3 \\
\hline ENGL 2310 or 2312 & 3 & ENGL 2320 or 2322 & 3 \\
\hline BIOL/CHEM/PHYS & 4 & BIOL/CHEM/PHYS & 4 \\
\hline AND LAB & & AND LAB & \\
\hline COMM 2200 & 3 & SOC/BEHAV SCI & 3 \\
\hline & 16 & & 16 \\
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline SPAN 3100 & 3 & SPAN 3130 & 3 \\
\hline SPAN 3120 & 3 & SPAN 3200 or 3210 & 3 \\
\hline ELECTIVES, ANY LEVEL & 9 & ELECTIVES, ANY LEVEL & 9 \\
\hline & 15 & & 15 \\
\hline \multicolumn{4}{|c|}{SENIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline SPAN 4010 or 4020 & 3 & ELECTIVES, 3000/4000 LEV & 12 \\
\hline SPAN 4100 or 4110 & 3 & MFLA 4500 & 3 \\
\hline ELECTIVES, 3000/4000 LEVEL & -6 & & \\
\hline & 12 & & 15 \\
\hline
\end{tabular}

\section*{Bachelor of Arts Degree in Foreign Languages Concentration in Spanish With Teacher Certification Licensure for Grades 7-12}

\section*{Suggested Four-Year Plan}

\section*{FRESHMAN YEAR}

FALL SEMESTER
* SPAN 2010

HR
ENGL 1010
HIST 2010
MATH 1110, 1013, or 1710
SOC/BEHAV SCI
EDCI 1010

SEMESTER
* SPAN 20203

ENGL 10203
HIST 20203
COMP 12103
ART 1010 or MUSC 1010
3
GEOG 1010
research paper. Those students who do not demonstrate satisfactory performance in the use of grammar and mechanics are required to attend the Writing Center. Prerequisite: successful completion of English 1010. All degree-seeking students must earn at least a C in this course.

ENGL 1012, 1022 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.

ENGL 2000 Advanced Composition (1-3) (Formerly ENG 200). 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.

All of the following 2110-2322 courses satisfy the sophomore literature and/or Humanities requirement of the General Education Core.
ENGL 2110, 2120 American Literature (3, 3) (Formerly ENGL 2010, 2020). A survey of American literature from the first European settlements to the present time. The first semester covers from the beginning to the Civil War, and the second covers the period since the Civil War.

ENGL 2310, 2320 World Literature (3, 3) (Formerly ENGL 2011, 2021). 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), and the second treats the Renaissance to the present.
ENGL 2012, 2022 Literary Genres (3, 3). An approach to literature from the point of view of the genre, or type, of work to be studied. The first semester takes up the short story and the novel, the second poetry and drama.
ENGL 2013, 2023 Black Arts and Literature (3, 3). A study of the contributions of black artists and writers to world culture, especially American culture. The first semester treats oral tradition, poetry, drama, and music; the second semester covers the short story, essay, and novel.
ENGL 2210, 2230 Survey of English Literature I, II (3, 3) (Formerly ENGL 2014, 2024). 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.

ENGL 2312, 2322 Honors World Literature I, II (3, 3) (Formerly ENGL 2018, 2028). 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.
ENGL 3000 Expository Writing (3) (Formerly ENG 300). 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.

ENGL 3010 Critical Approaches to Literature (3) (Formerly ENG 301). A writing-intensive introduction to major critical theories with emphasis on application to interpretation of literary works. Students interpret a number of literary works drawn from different genres and periods, applying several different theoretical perspectives, such as feminism, new historicism, Marxism, psychoanalysis, and cultural and gender studies. Prerequisites: ENG 1010, 1020, 2011 (or 2018), and 2021 (or 2028). The course is required of all English majors and is a prerequisite or co-requisite for English majors to all upper-division courses in literature.
ENGL 3105, 3106, 3107 Technical Report Writing (3) (Formerly ENG 310E, 310C, 310S). 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. 3105 focuses on reports required in professional engineering. 3106 is the study and preparation of forms and reports required of students majoring in Criminal Justice. 3107 is the study and preparation of forms and reports required of social workers. Acquaintance with documents of various agencies is stressed.

ENGL 3110 Creative Writing: Short Story (3) (Formerly ENG 311). 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.

ENGL 3120 Creative Writing: Poetry (3) (Formerly ENG 312). 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.

ENGL 3150 The Film (3) (Formerly ENG 315). A study of films: their makers, their message, and their appeal. Students not only view films but also read articles and books about movies.

ENGL 3290 Survey of British Literature I (3) (Formerly ENG 329). A survey of important British writers beginning with the Old English tradition and continuing to the Romantic Period.

ENGL 3300 Survey of British Literature II (3) (Formerly ENG 330). A continuation of ENG 3290 beginning with the Romantic Period and concluding with the twentieth century.

ENGL 3310 British Literature from the Renaissance to the Restoration (3) (Formerly ENG 331). A study of representative selections from 1500 to 1660 with concentration on non-dramatic literature.

ENGL 3320 Poetry and Drama of the Restoration and Eighteenth Century (3) (Formerly ENG 332). A study of selected poetry, prose, and drama from the ages of Dryden, Pope, and Johnson.

ENGL 3330 Prose of the Eighteenth Century (3) (Formerly ENG 333). 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.

ENGL 3410 Literature of the Romantic Movement (3) (Formerly ENG 341). A study of representative selections from 1798 to 1832 . Attention is given both to poetry and prose.
ENGL 3420 The Victorian Era (3) (Formerly ENG 342). 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.
ENGL 3510 Twentieth-Century British Literature (3) (Formerly ENG 351). A study of the major trends in poetry, drama, and the novel of the twentieth century. Emphasis is placed on themes, techniques, and social criticism. Representative British, Irish, and Commonwealth writers are included.

ENGL 3530 Modern British Poetry (3) (Formerly ENG 353). Selections from works of Hopkins, Yeats, Eliot, Thomas, and others.

ENGL 3610 American Literature I (3) (Formerly ENG 361). 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.

ENGL 3620 American Literature II (3) (Formerly ENG 362). 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 and such movements as realism, naturalism, modernism, and postmodernism.
ENGL 3630 The American Novel (3) (Formerly ENG 363). A study of representative works designed to reflect formal developments in the novel, as well as intellectual and moral concerns of the American people.

ENGL 3640 Literature of Black Life in America (3) (Formerly ENG 364). 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.

ENGL 3650 The Contemporary Black Novel (3) (Formerly ENG 365). 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.

ENGL 3670 The Short Story (3) (Formerly ENG 367). Emphasis on the origin and growth of the short story as a literary form.

ENGL 3680 Contemporary American Poetry (3) (Formerly ENG 368). Poetry from 1960 to the present.

ENGL 3690 Contemporary American Fiction (3) (Formerly ENG 369). Novels, short stories, and experimental fiction, 1950 to present, by such authors as Ellison, Barth, Heller, Nabokov, and Pynchon.
ENGL 3710 Methods of Teaching High School English (3) (Formerly ENG 371). 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.

ENGL 3720 Adolescent Literature (3) (Formerly ENG 372). A survey of literature relevant to the interest and concerns of young adults. Required of English majors enrolled in the Teacher Education Program.
ENGL 3730 Children's Literature (3) (Formerly Eng 373). 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.

ENGL 3800 African and West Indian Literature (3) (Formerly ENG 380). 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.
ENGL 3810 Greek and Roman Literature (3) (Formerly ENG 381). Studies of major writers of classical civilization from Homer to fifth-century Athens to Augustan Rome. Extensive readings in the lliad, the Odyssey, the Greek tragedies and comedies, and the Aeneid.
ENGL 3820 The Literature of the English Bible (3) (Formerly ENG 382). The Bible considered as literature, with attention to historical backgrounds and textual problems.

ENGL 3860 Women in Literature (3) (Formerly ENG 386). 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.

ENGL 3900 Languages and Linguistics (3) (Formerly ENG 390). 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 MFLA 3900.

ENGL 4000 Senior Seminar (3) (Formerly ENG 400). 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.

ENGL 4010 Special Topics (3) (Formerly ENG 401). Student- or facultygenerated course, with subject matter to be determined by students and instructor.

ENGL 4100 History of the English Language (3) (Formerly ENG 410). 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.
ENGL 4110 Current English (3) (Formerly ENG 411). 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.

ENGL 4120 Modern English Grammar (3) (Formerly ENG 412). An introduction to the recent theories as a tool for analyzing literature and composition.
ENGL 4130 Advanced English Grammar (3) (Formerly ENG 413). Traditional approaches to grammar. The course addresses the needs of student writers and student teacher interns who need review of traditional grammar in light of their present and future professional goals.
ENGL 4140 Software Technical Writing I (3) (Formerly ENG 414). A basic course in the writing of computer software manuals. ENG 310E is recommended as preparation. Prerequisite: permission of instructor.

ENGL 4150 Software Technical Writing II (3) (Formerly ENG 415). Advanced documentation techniques for computer software. Prerequisite: successful completion of ENG 4140.
ENGL 4160 Writing for Publication (3) (Formerly ENG 416). A workshop in the various forms of writing that are marketable.
ENGL 4200 Chaucer (3) (Formerly ENG 420). An introduction to the works of Chaucer, with emphasis on the background of the age and on development of Chaucer as a literary artist.

ENGL 4210 The English Novel (3) (Formerly ENG 421). A selection of English novels from the eighteenth century to the present.

ENGL 4220 The Continental Novel (3) (Formerly ENG 422). A study of selected Continental novels with attention to the social background in which they were written.
ENGL 4230 Literature of the Middle Ages (3) (Formerly ENG 423). Studies in prose and poetry of the Middle Ages, including Beowulf and works of the Pearl poet, Langland, and Malory.

ENGL 4310 Shakespeare Comedies (3) (Formerly ENG 431). A study of the principal comedies of Shakespeare, with attention to the cultural background of the Elizabethan Period. ENG 4310 or 4320 is required of all English majors.

ENGL 4320 Shakespeare Tragedies (3) (Formerly ENG 432). A study of the principal tragedies of Shakespeare, with some attention to the history plays. ENG 4310 or 4320 is required of all English majors.

ENGL 4340 Milton and Bunyan (3) (Formerly ENG 434). 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.

ENGL 4410 Nineteenth-Century English Novel (3) (Formerly ENG 441). A selection from the major writers of the period, such as Scott, Dickens, Eliot, Thackeray, Trollope, the Brontes, Hardy, and Galsworthy.
ENGL 4510 The English Novel: Twentieth Century (3) (Formerly ENG 451). Selections from the works of Conrad, Forster, Lawrence, Joyce, Woolf, and others.

ENGL 4600 African-American Women Writers (3). A course examining African-American women's literary tradition with primary focus on fiction writing in the 20th and 21st centuries, but will include writing from other periods, as well as poetry, drama, essays and criticism.

ENGL 4724 Student Teaching in the Secondary Schools (9) (Formerly ENG 472). 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 4705, which is taken concurrently.

ENGL 4800 Introduction to Literary Criticism (3) (Formerly ENG 480). Major critical doctrines from antiquity to the present, with emphasis on twentieth-century movements.

ENGL 4810 Southern Literature (3) (Formerly ENG 481). Survey of Southern literature from William Byrd to the Fugitives to more recent figures such as Eudora Welty, Flannery O'Connor, and Walker Percey.
ENGL 4840 History and Literature of the British Empire, 1850-Present (3). Introduces students to some of the major social, cultural, and political developments associated with the British Empire from 1850 to the present and asks them to think critically and analytically about the relationships between these developments. Through lecture, film, and discussion of literature and other primary sources of the period, the course explores the impact of Empire on both the British and the societies under their control. Also focuses on the challenges of developing post-colonial cultures and identities in the aftermath of foreign rule. Prerequisites: ENGL 1010, 1020 and admission to upper division English courses. Cross-listed with HIST 4840. Limited to 25 students.

ENGL 4850 Masterpieces of African World Literature (3) (Formerly ENG 485). 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.

ENGL 4900 Undergraduate Readings and Research (3) (Formerly ENG 490). Individual study and research under faculty guidance. May be repeated once, for a total of six hours.
ENGL 4910 Advanced Story Writing (3) (Formerly ENG 491). 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.

ENGL 4920 Advanced Poetry Writing (3) (Formerly ENG 492). 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.
ENGL 4950 Research Writing (3) (Formerly ENG 495). 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 writingintensive course.

ENGL 4994 Internship in Professional Writing (3-9) (Formerly ENG 499). 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.

\section*{French (FREN)}

FREN 1010 Elementary French I (3). A beginning course in French. The four skills of listening comprehension, speaking, reading, and writing are taught, with an emphasis on oral proficiency in everyday situations. For students with no previous knowledge of the language. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

FREN 1020 Elementary French II (3). Continuation of FREN 1010, with further development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis is on oral proficiency in everyday situations. Prerequisite: FREN 1010 or an equivalent placement examination score. Course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

FREN 1210 Intensive French Review (3) (Formerly FR 121). Intensive review of the language to continue the development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis is on oral proficiency in everyday situations. Prerequisite: two years of high school French or equivalent placement examination score.

FREN 2010 Intermediate French I (3). Development of vocabulary, syntax, grammar, and oral and writing skills to incorporate these elements into a satisfactory intermediate level of performance in the language. Prerequisite: FREN 1020, 1210, or equivalent placement examination score.

FREN 2020 Intermediate French II (3). Further development of the listening comprehension and speaking skills with an emphasis on reading and writing. Course incorporates vocabulary, syntax, and grammar to bring the student to an intermediate level of performance in French. Prerequisite: FREN 2010 or equivalent placement examination score.
FREN 3000 French Phonetics and Phonology (3) (Formerly FR 300). An introduction to the study of French sounds in isolation and in connected speech. Primary focus is on the development of good articulatory habits through an understanding of the physiology of speech organs, the description of speech sounds, and the system underlying natural speech of native speakers of French. Prerequisite: FREN 2020 or equivalent placement examination score. Required of all students with a concentration in French.

FREN 3010 Advanced French Grammar (3) (Formerly FR 301). An intensive review of French grammar with emphasis on the application of grammar rules to the four skills needed in the acquisition of the French language. Prerequisite: FREN 2020 or equivalent placement examination score. Course may be taken concurrently with FREN 3020 or 3030.

FREN 3020 French Pronunciation and Conversation (3) (Formerly FR 302). Intensive practice in the development of oral skills in French through discussion of a wide variety of topics and common situations. Prerequisite:

FREN 2020 or equivalent placement examination score. Course may be taken concurrently with FREN 3000, 3010, or 3030.

FREN 3030 Reading and Composition (3) (Formerly FR 303). Further development of reading and writing skills through the use of authentic cultural and literary texts aimed at improving the student's mastery of written French. Prerequisite: FREN 2020 or permission of the instructor. Course may be taken concurrently with FREN 3000, 3010, or 3020.
FREN 3040 French for Specific Purposes (3) (Formerly FR 304). An intensive course with emphasis on grammar and vocabulary as it applies to a profession. Specific topics are announced in advance. Prerequisite: FREN 2020 or permission of the instructor.
FREN 3100 Introduction to Literary Studies (3) (Formerly FR 310). Introduction to the techniques and theories of literary analysis, with application to all genres and selected literary texts. Prerequisite: FREN 3010, 3020, 3030, or permission of the instructor. Required of all students with a concentration in French.
FREN 3110 Introduction to French Linguistics (3) (Formerly FR 311). Introduction to linguistic analysis of the French language. Prerequisite: FR 300 or permission of instructor. Required of all students seeking teacher certification in French.
FREN 3120 Culture and Civilization of France (3) (Formerly FR 312). A study of the development of the culture and civilization of metropolitan France, examining art, geography, history, customs, music, and politics. Prerequisite: FREN 3010, 3020, 3030, or permission of the instructor. Required of all students with a concentration in French.

FREN 3130 Francophone Culture and Civilization (3) (Formerly FR 313). A study of the development of the cultures and civilizations of Francophone areas outside metropolitan France, examining art, geography, history, customs, music, and politics. Prerequisite: FREN 3120. Required of all students with a concentration in French.

FREN 3200 Survey of French Literature (3) (Formerly FR 320). A chronological overview of the main periods in French literature, from the Middle Ages to the present. Prerequisite: FREN 3100 or permission of the instructor.

FREN 3210 Survey of Francophone Literature (3) (Formerly FR 321). A chronological overview of the development of Francophone literature outside metropolitan France, covering the period from the Seventeenth Century to the present. Prerequisite: FREN 3100 or permission of the instructor.

FREN 4010 Literary Masterpieces of France (3) (Formerly FR 401). An introduction to the major works of French literature through selected texts and authors. Prerequisite: FREN 3100, 3200, or permission of the instructor.

FREN 4020 Topical Readings in the Literature of France (3) (Formerly FR 402). A specific author, genre, period, or theme is chosen for study. Topic is announced in advance. Prerequisite: FREN 4010 or permission of instructor.

FREN 4100 Literary Masterpieces of Francophone Literature (3) (Formerly FR 410). An introduction to the major works of Francophone literature through selected texts and authors. Prerequisite: FREN 3100, 3200, or permission of the instructor.

FREN 4110 Topical Readings in Francophone Literature (3) (Formerly FR 411). A specific author, genre, period, or theme is chosen for study. Topic announced in advance. Prerequisite: FR 4100 or permission of instructor.

FREN 4300 Special Topics on the Contemporary French World (3) (Formerly FR 430). Rotating topics of special interest relating to the French world. Specific topics announced in advance. Usually taught in English. Prerequisites: FREN 3120, 3130.

FREN 4310 Special Topics in Language (3) (Formerly FR 431). Rotating topics of special interest relating to the French language. Specific topics announced in advance (e.g., history of the French language, dialects in the French-speaking world, sociolinguistics, etc.) Prerequisites: FREN 3000, 3010.

FREN 4900 On-Site(s) French Culture (3-7) (Formerly FR 490). Cultural and linguistic enrichment through travel and study in a French-speaking country.

\section*{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 1010, 1020, 1030, 1040, 1050, 1060 Student Exchange Program (3, 3, 3, 3, 3, 3) (Formerly ISEP 101, 102, 103,104, 105, 106.)

\section*{Modern Foreign Languages (MFLA)}

MFLA 3710 Methods of Teaching Foreign Languages (3) (Formerly MFL 371). 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.
MFLA 3900 Languages and Linguistics (3) (Formerly MFL 390). 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 ENGL 3900.
MFLA 4500 Senior Project (3) (Formerly MFL 450). 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.
MFLA 4700 Independent Study (3) (Formerly MFL 470). 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. May be repeated once, for a total of six hours.
MFLA 4724 Student Teaching in the Secondary Schools (9) (Formerly MFL 472). 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 4705 , which is taken concurrently.

\section*{Philosophy (PHIL)}

PHIL 1030 Introduction to Philosophy: Moral Issues (3) (Formerly PHIL 2010). A course addressing many of the most pressing ethical issues we face, such as euthanasia, abortion, preferential hiring, sex, animal rights, mass starvation, punishment, violence, pacifism, and civil disobedience. May be used toward satisfying University humanities requirement.
PHIL 2020 Introduction to Philosophy-Enduring Problems (3). A course including historical and recent sources on the perennial issues in philosophy, including the justification and significance of religious beliefs; knowledge and truth; materialism; human nature; free-will and determinism. May be used toward satisfying University humanities requirement.
PHIL 2021 Introduction to Film (3). Aesthetic and philosophical issues in film theory and criticism; principles of film criticism; film and other art forms; and the relation of the audience to film. Course aims toward understanding and appreciation of a major art form. Films exemplifying particular techniques and movements are viewed and discussed.

PHIL 2022 History of Film (3). An historical study of the development of film as an art medium.

PHIL 2500 Logic and Critical Thinking (\#) (Formerly PHIL 250). Informal fallacies in ordinary life, e.g., politics, editorials, advertising; language and its uses; analyzing extended arguments; introduction to deductive logic.

PHIL 2510 Symbolic Logic (3) (Formerly PHIL 251). Modern deductive logic, propositional and quantificational; philosophy of logic.

PHIL 3100 History of Philosophy, Ancient (3) (Formerly PHIL 310). Development of philosophic thought from the Greeks to the thirteenth century.
PHIL 3110 History of Philosophy, Modern (3) (Formerly PHIL 311). Modern philosophy from Descartes through Kant.

PHIL 3120 History of Philosophy, Contemporary (3) (Formerly PHIL 312). Philosophy from Hegel to the present.

PHIL 3300 Ethical Theory (3) (Formerly PHIL 330). Traditional and contemporary ethical theories; the meaning and justification of ethical language.

PHIL 3350 Business Ethics (3) (Formerly PHIL 335). 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 3360 Medical Ethics (3) (Formerly PHIL 336). 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 3600 African-American Philosophy (3) (Formerly PHIL 360). Issues in ethics and social philosophy, including foundational arguments of the civil rights movement, cultural diversity, and African-American approaches to philosophy.
PHIL 4100 Philosophy of Religion (3) (Formerly PHIL 410). The rationality of religious beliefs and practices, religious experience, the role of faith, religious language.

PHIL 4200 Philosophy of Law (3) (Formerly PHIL 420). Problems in the nature and justification of legal systems; natural law and legal positivism; theory of punishment.
PHIL 4400 Special Topics (3) (Formerly PHIL 440). Student- or facultygenerated course, with scope of subject matter to be determined by students and instructor.

PHIL 4500 Undergraduate Readings and Research (3) (Formerly PHIL 450). Individual study and research under faculty guidance. Prerequisites: 12 hours of upper-level philosophy and permission of instructor.

\section*{Religious Studies (RELS)}

RELS 2010 Introduction to Religious Studies (3). Current issues in religious studies: ethics, theology, and history of religion. May be used toward satisfying the University humanities requirement.

RELS 2011 World Religions (3). Introduction to selected themes in world religions. May be used toward satisfying the University humanities requirement.
RELS 3100 The Old Testament (3) (Formerly RS 310). 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.

RELS 3110 The New Testament (3) (Formerly RS 311). 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.

RELS 3300 Religion in America (3) (Formerly RS 330). The role of religious institutions and practices in American history.

RELS 4100 Contemporary Religious Thought (3) (Formerly RS 410). Major themes, issues, and thinkers.

RELS 4200 African Roots in Christianity (3) (Formerly RS 420). The literary, historical, cultural, philosophical, and biblical contributions from the African continent to Christianity. Prerequisite: RELS 3100, or RELS 3110, or permission of instructor.

\section*{Spanish (SPAN)}

SPAN 1010 Elementary Spanish I (3). A beginning course in Spanish. The four skills of listening comprehension, speaking, reading, and writing are taught with emphasis on oral proficiency in everyday situations. For students with no previous knowledge of the language. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

SPAN 1020 Elementary Spanish II (3). Continuation of Spanish 1010. The four skills of listening comprehension, speaking, reading, and writing are taught with emphasis on oral proficiency in everyday situations. Pre-
requisite: two years of high school Spanish or equivalent placement examination score. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

SPAN 1210 Intensive Spanish Review (3) (Formerly SPN 121). Intensive review of the language to continue the development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis on oral proficiency in everyday situations. Prerequisite: two years of high school Spanish or equivalent placement examination score.

SPAN 2010 Intermediate Spanish I (3). Development of vocabulary, syntax, grammar, and oral and writing skills to incorporate these elements into a satisfactory intermediate level of performance in the language. Prerequisite: SPAN 1020, 1210, or equivalent placement examination score.

SPAN 2020 Intermediate Spanish II (3). Further development of listening comprehension and speaking skills with emphasis on reading and writing. Course incorporates vocabulary, syntax, and grammar to bring the students to an intermediate level of performance in Spanish. Prerequisite: SPAN 2010 or equivalent placement examination score.
SPAN 3000 Spanish Phonetics and Phonology (3) (Formerly SPN 300). An introduction to the study of Spanish sounds in isolation and in connected speech. Primary focus is on development of good articulatory habits through an understanding of the physiology of speech organs, the description of speech sounds, and the system underlying natural speech of native speakers of Spanish. Prerequisite: SPAN 2020 or equivalent placement examination score. Required of all students with a concentration in Spanish.

SPAN 3010 Advanced Spanish Grammar (3) (Formerly SPN 301). An intensive review of Spanish grammar with emphasis on the application of grammar rules to the four skills needed in the acquisition of the Spanish language. Prerequisite: SPAN 2020 or equivalent placement examination score. Course may be taken concurrently with SPN 3020 or 3030.
SPAN 3020 Spanish Pronunciation and Conversation (3) (Formerly SPN 302). Intensive practice in the development of oral skills in Spanish through discussion of a wide variety of topics and common situations. Prerequisite: SPAN 2020 or equivalent placement examination score. Course may be taken concurrently with SPN 3000, 3010, or 3030.

SPAN 3030 Reading and Composition (3) (Formerly SPN 303). Further development of reading and writing skills through the use of authentic cultural and literary texts aimed at improving the student's mastery of written Spanish. Prerequisite: SPAN 2020 or equivalent placement examination score. Course may be taken concurrently with SPAN 3000, 3010, or 3020.

SPAN 3040 Spanish for Specific Purposes (3) (Formerly 304). An intensive course with emphasis on grammar and vocabulary as it applies to a profession. Specific topics are announced in advance. Prerequisite: SPAN 2020 or equivalent placement examination score.

SPAN 3100 Introduction to Literary Studies (3) (Formerly SPN 310). Introduction to the techniques and theories of literary analysis, with application to all genres and selected literary texts. Prerequisite: SPAN 3010, 3020,3030 , or permission of the instructor.

SPAN 3110 Introduction to Spanish Linguistics (3) (Formerly SPN 311). Introduction to linguistic analysis of the Spanish language. Prerequisite: SPAN 3000 or permission of instructor. Course required of all candidates for teacher certification in Spanish.

SPAN 3120 Culture and Civilization of Spain (3) (Formerly SPN 312). A study of the development of the culture and civilization of Spain, examining art, geography, history, customs, music, and politics. Prerequisite: SPAN 3010, 3020, 3030, or permission of the instructor. Course required of all students with a concentration in Spanish.

SPAN 3130 Culture and Civilization of Latin America (3 (Formerly SPN 313). A study of the development of the culture and civilization of Latin America, examining art, geography, history, customs, music, and politics. Prerequisite: SPAN 3120 or permission of the instructor. Course required of all students with a concentration in Spanish.
SPAN 3200 Survey of Peninsular Literature (3) (Formerly SPN 320). A chronological overview of the main periods in Spanish literature, from the Middle Ages to the present. Prerequisite: SPAN 3100 or permission of instructor.
SPAN 3210 Survey of Latin American Literature (3) (Formerly SPN 321). A chronological overview of the main periods in Latin American liter-
ature, from pre-Columbian times to the present. Prerequisite: SPAN 3100 or permission of instructor.

SPAN 4010 Literary Masterpieces of Spain (3) (Formerly SPN 401). An introduction to the major works of Spanish literature through selected texts and authors. Prerequisite: SPAN 3100, 3200, or permission of instructor.
SPAN 4020 Topical Readings in the Literature of Spain (3) (Formerly SPN 402). A specific author, genre, period, or theme is chosen for study. Topic announced in advance. Prerequisite: SPAN 4010 or permission of instructor.

SPAN 4100 Masterpieces of Latin American Literature (3) (Formerly SPN 410). An introduction to the major works of Latin American literature through selected texts and authors. Prerequisite: SPAN 3100, 3210, or permission of instructor.

SPAN 4110 Topical Readings in Latin American Literature (3) (Formerly SPN 411). A specific author, genre, period, or theme is chosen for study. Topic announced in advance. Prerequisite: SPAN 4100 or permission of instructor.

SPAN 4300 Special Topics in the Contemporary Hispanic World (3) (Formerly SPN 430). Rotating topics of special interest relating to the Hispanic U.S., Latin America, or Spain. Specific topics (e.g., African influences in Latin American music, art, food) announced in advance. Prerequisite: SPAN 3120, 3130, or permission of instructor.

SPAN 4310 Special Topics in Language (3) (Formerly SPN 431). Rotating topics of special interest relating to the Spanish language. Specific topics (e.g., history of the Spanish language, dialects in the Spanish-speaking world, sociolinguistics) announced in advance. Prerequisite: SPAN 3000, 3110, or permission of instructor.

SPAN 4900 On-Site(s) Hispanic Culture (3-7) (Formerly SPN 490). Cultural and linguistic enrichment through travel and study in a Spanishspeaking country.

\title{
Department of Music
}

> Robert L. Elliott, D.M.A., Head 104 Performing Arts Center Telephone 615-963-5341

Faculty: M. Crawford, T. Davis, O. Dismuke, C. Gafford, E. Graves, R. McDonald, D. Nettles, C. Perkey, D. Poe, P. Reeves, J. Sexton, G. Simpson, R. Todd.

General Statement: The objectives of this nationally accredited program are (1) to equip the music major with basic skills, techniques, pedagogical and technological concepts and perspectives needed to succeed as an artist or teacher of music in K-12 schools; (2) to interpret, maintain and create the highest level of individual and group performance; and (3) to enhance the cultural and aesthetic climate for the general student by providing artistic experiences and a dynamic program of music education.

The Department offers a Bachelor of Science in Music Education with teacher certification. The minimum number of semester hours required for this degree is 128 . The minimum number of semester hours required in Music courses is 60, 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 120 semester hours each. The concentrations in the Liberal Arts require two semesters of foreign language.

Accreditation: The Department of Music is accredited by the Na tional Association of Schools of Music, the official accrediting agency for schools of music in the United States. The teacher certification programs in Music are approved by the Tennessee De-
partment of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the teacher certification program of the University.

\section*{Departmental Requirements60 Semester Hours for Bachelor of Science in Music degree}

\section*{General Education Core}

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II 6
(minimum grade of \(C\) in each)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2230 Sophomore Literature
ART 1010 Art Appreciation 3
MUSC \(1010 \quad 3\)
Social and Behavi (Minimum grade of C.)
and Behavioral Science (6 hours)
SOCI 2010 Introduction to Sociology 3
PSYC 2010 General Psychology 3
History ( 6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
Two courses with labs from the approved list. 8
Mathematics (3 hours)
MATH 1110, or College Algebra I, or
MATH 1710 Pre-Calculus Mathematics I
Orientation (1 hour)
ASOR \(1003 \quad\) Orientation for Humanities Majors 1
(Teacher certification students should take EDCI 1010.) -
Total General Education Hours

\section*{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 MUSC 1100, 1101, 2100, 2101, 1210, 1211, 1250, 1260, 2211, 2212, four semesters of the applied major, and four semesters of ensemble.

\section*{Major Core}

All music majors must take a minimum of 60 semester hours in the discipline, including MUSC 1100, 1101, 2100, 2101; 1210, 1211, 1250, 1260; 2211, 2212; 3020; 3110, 3111, 3120, 3130, 3140; 3370, 3380, 4210, 4220, 4310, 4510; eight semesters of applied voice or instrument for Liberal Arts and Commercial Music students, seven for Music Education students. Within the 60 hours, students with a concentration in instrumental music must take 7 hours from 0041 and 2010; students concentrating in vocal/piano music must take 7 hours of 3070. Teacher certification candidates must also take MUSC 3711, 3712 or 3713 , and 4720 . Music majors must earn at least a C in all Music courses used to satisfy departmental requirements.

\section*{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. 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

\section*{SOPHOMORE YEAR}

FALL SEMESTER HR SPRING SEMESTER HR
Applied Major Instrument III
MUSC 2211
Applied Major Instrument IV
1
MUSC 2212
MUSC 3020
MUSC 3020
Major Ensemble
Major Ensemble
EDCI 2010
Techniques Class
Sophomore Literature
Social/Behavioral Sciences
Natural Sciences
PSYC 2420
History
COMM 2200
Humanities

\section*{JUNIOR YEAR}
achieved prior to entering the University. A senior project is required of students in Commercial Music.
2. Each music major is required to participate in a primary ensemble: seven semesters for Music Education majors, eight semesters for Liberal Arts majors, and two semesters for Commercial Music majors. Membership is not limited to one ensemble, but instrumental students must participate in University Band, and vocal students must participate in University Choir.

\section*{Bachelor of Science in Music}

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 at the end of the sophomore year. They must have a minimum 2.75 cumulative quality point average at the time of application and must pass the PreProfessional 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 is required of all candidates for certification. Placement for Enhanced Student Teaching is at both the elementary and secondary school levels. For a complete list of requirements for admission to and retention in the Teacher Education Program, see College of Education section.

It is mandatory that students confer with departmental advisors prior to registering each semester. The degree with teacher certification requires completion of the general education requirements, the above major core, plus the following courses.
EDAD \(4000 \quad\) Professional Rights \& Responsibilities 3
EDCI \(2010 \quad\) History and Foundations of Education 3
PSYC 2420
Human Growth and Learning
Music Education
Vocal Methods or
Instrumental Methods
Educational Seminar, Secondary 3
Enhanced Student Teaching
9

Minor Requirements: A minimum of 18 semester hours including MUSC 1200, 1250, 3380, 3710; two hours of applied voice or instrument ensemble; MUSC 1210, 1260 or 3050-3060, or MUSC \(3100,3110,3120,3130\), or 3140; or four semesters of ensemble participation.

\section*{Bachelor of Science Degree in Music Education Concentration in Instrumental Music Licensure for Grades K-12}

Suggested Four-Year Plan

\section*{FRESHMAN YEAR}
\begin{tabular}{lrlr} 
& \multicolumn{2}{l}{ FRESHMAN YEAR } \\
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
Applied Major Instrument I & 1 & Applied Major Instrument II & 1 \\
* MUSC 1210 & 3 & MUSC 1211 & 3 \\
* MUSC 1250 & 1 & MUSC 1260 & 1 \\
MUSC 3020 & 0 & MUSC 3020 & 0 \\
MAJOR ENSEMBLE & 1 & MAJOR ENSEMBLE & 1 \\
EDIC 1010 & 1 & Techniques Class & 1 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
MATH & 3 & MUSC 1010 & 3 \\
Social Behavioral Sciences & \(\mathbf{3}\) & Natural Sciences & 4 \\
& 16 & & 17
\end{tabular}
\begin{tabular}{lrlr} 
& \multicolumn{2}{l}{ FRESHMAN YEAR } \\
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
Applied Major Instrument I & 1 & Applied Major Instrument II & 1 \\
* MUSC 1210 & 3 & MUSC 1211 & 3 \\
* MUSC 1250 & 1 & MUSC 1260 & 1 \\
MUSC 3020 & 0 & MUSC 3020 & 0 \\
MAJOR ENSEMBLE & 1 & MAJOR ENSEMBLE & 1 \\
EDIC 1010 & 1 & Techniques Class & 1 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
MATH & 3 & MUSC 1010 & 3 \\
Social Behavioral Sciences & \(\underline{3}\) & Natural Sciences & \(\underline{4}\) \\
& 16 & & 17
\end{tabular}
*Students must pass the theory entrance examination or pass MUSC 1011 before enrolling in these classes. 3
MUSC 3712 or
MUSC 3713
EDCI 4705
MUSC 4720

FALL SEMESTER
Applied Major Instrument V
MUSC 4210
MUSC 3020
Major Ensemble
MUSC 3370
MUSC 3011
Techniques Class
History

SPRING SEMESTER HR
Applied Major Instrument VI 1 MUSC 3020
Major Ensemble
MUSC 3380
MUSC 3050
MUSC 4211
Techniques Class
MUSC 3711
15

\section*{SENIOR YEAR}

\section*{FALL SEMESTER}

Applied Major Instrument VII
MUSC 4510
HR

MUSC 3020
EDIC 4705
MUSC 4720
Major Ensemble
Techniques Class
MUSC 3060
3060
MUSC 4220
1

MUSC 3713
EDSE 3330
1

EDAD 4000
-
*Technique classes must be outside applied major.

\section*{Bachelor of Science Degree in Music Education Concentration in Voice or Piano Licensure for Grades K-12}

\section*{Suggested Four-year Plan}

Piano majors must take 8 hours of piano; Voice majors must take 8 hours of voice. MUSC 3120-Vocal Techniques must be included in technique class choices for piano majors.

\section*{FRESHMAN YEAR}

FALL SEMESTER
HR SPRING SEMESTER HR
MUSC 1400
MUSC 1401
MUSC 1210
MUSC 1211
MUSC 1250
MUSC 1260
MUSC 3020
MUSC 3020
MUSC 3070
MUSC 3070
EDCI 1010
ENGL 1020
ENGL 1010
MUSC 1010
MATH 3 Natural Sciences
Social/Behavioral Sciences
\(\overline{16}\)
*Students must pass the theory entrance examination or pass MUS 1011 before enrolling in these classes.

SOPHOMORE YEAR

FALL SEMESTER
MUSC 2400
MUSC 2211
MUSC 3020
MUSC 3070
EDCI 2010
Sophomore Literature
Social/Behavioral Sciences

HR SPRING SEMESTER
MUSC 2401
MUSC 2212
MUSC 3020
MUSC 3070
Techniques Class
PSYC 2420
History
COMM 2200
Humanities
18

HR

\section*{JUNIOR YEAR}

FALL SEMESTER
MUSC 3400
\begin{tabular}{rl} 
HR & SPRING SEMESTER \\
1 & MUSC 3401 \\
3 & MUSC 4310 \\
0 & MUSC 3020 \\
1 & MUSC 3070 \\
3 & MUSC 3380 \\
3 & MUSC 3050 \\
1 & MUSC 4211 \\
1 & Techniques Class \\
\(\frac{3}{17}\) & MUSC 3711
\end{tabular}

MUSC 4210
MUSC 3020
MUSC 3070
MUSC 3370
MUSC 3011
MUSC 3145
Techniques Class History

FALL SEMESTER
MUSC 4400
MUSC 4510
MUSC 3020
MUSC 3070
Techniques Class
MUSC 3060
MUSC 4220
MUSC 3712
EDSE 3330
EDAD 4000
\begin{tabular}{rlr}
\multicolumn{2}{l}{ SENIOR YEAR } & \\
HR & SPRING SEMESTER & HR \\
1 & EDCI 4705 & 3 \\
0 & MUSC 4720 & 9 \\
0 & & \\
1 & & \\
1 & & \\
2 & & \\
2 & & \\
3 & & \\
3 & & 12
\end{tabular}

FALL SEMESTER
MUSC 2100
MUSC 2211
MUSC 2400
MUSC 3020
MUSC 3070
MUSC 1010
ENGL 2012-2322 (Choose 1)
COMM 2200

SOPHOMORE YEAR
*Techniques classes must be outside applied major.

\section*{Bachelor of Science Degree in Liberal Arts Concentration in Vocal or Piano Music}

\section*{Suggested Four-Year Plan}

FRESHMAN YEAR
FALL SEMESTER
MUSC 3020
MUSC 1100
HR SPRING SEMESTER
MUSC 3020
HR
* MUSC 1400
* MUSC 1210

MUSC 1250
MUSC 3070
ASOR 1002
ENGL 1010
HIST 2010
```

                                MUSC }110
    ```
                                MUSC 1401
                                MUSC 1211
                                MUSC 1260
                                MUSC 3070
                        MATH 1013
                                ENGL 1020
                                HIST 2020
\begin{tabular}{r} 
\\
HR \\
0 \\
1 \\
1 \\
3 \\
1 \\
1 \\
3 \\
3 \\
3 \\
\hline 16
\end{tabular}
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
1 & MUSC 2101 & 1 \\
3 & MUSC 2212 & 3 \\
1 & MUSC 2401 & 1 \\
0 & MUSC 3020 & 0 \\
1 & MUSC 3070 & 1 \\
3 & ART 1010 & 3 \\
3 & SOCI 2010 & 3 \\
\(\frac{3}{15}\) & PSYC 2010 & \(\underline{3}\) \\
15 & & 15 \\
depplied major.
\end{tabular}
*Technique class must be outside applied major.
JUNIOR YEAR
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
MUSC 3020 & 0 & MUSC 3020 & 0 \\
MUSC 3070 & 1 & MUSC 3050 & 2 \\
MUSC 3370 & 3 & MUSC 3070 & 1 \\
MUSC 3400 & 1 & MUSC 3380 & 3 \\
MUSC 2350 & 3 & MUSC 3401 & 1 \\
FOREIGN LANGUAGE & 3 & MUSC 3110-3140 (Techniques) & 1 \\
BIOL 1010, 1011 & 4 & FOREIGN LANGUAGE & 3 \\
& & & BIOL1020, 1021 \\
\multicolumn{4}{c}{ *Technique class must be outside applied major instrument. }
\end{tabular}

Technique class must be outside applied major instrument.

\section*{SENIOR YEAR}
\begin{tabular}{|c|c|c|c|}
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline MUSC 3060 & 2 & MUSC 3110-3140 & 1 \\
\hline MUSC 3020 & 0 & MUSC 3020 & 0 \\
\hline MUSC 3070 & 1 & MUSC 3070 & 1 \\
\hline MUSC 4210 & 3 & MUSC 4220 & 3 \\
\hline MUSC 4400 & 1 & MUSC 4310 & 3 \\
\hline MUSC 4522 & 3 & MUSC 4401 & 1 \\
\hline *MUSC 3110-3140 (Techniques) & ) 1 & MUSC 4510 & 2 \\
\hline ELECTIVE, LIB ARTS & 4 & ELECTIVE, LIB ARTS & 3 \\
\hline \multicolumn{3}{|c|}{15} & 14 \\
\hline
\end{tabular}

\section*{Bachelor of Science Degree in Liberal Arts Concentration in Instrumental Music}

\section*{Suggested Four-Year Plan}

\section*{FRESHMAN YEAR}
FALL SEMESTER
MUSC 3020
MUSC 1100
* MUSC 1210
* MUSC 1250
* MUSC 2010
MAJOR INSTRUMENT
ASOR 1002
ENGL 1010
HIST 2010
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
0 & MUSC 3020 & 0 \\
1 & MUSC 1101 & 1 \\
1 & MUSC 1211 & 3 \\
3 & MUSC 1260 & 1 \\
1 & MUSC 0041 & 1 \\
1 & MAJOR INSTRUMENT & 1 \\
1 & ENGL 1020 & 3 \\
3 & HIST 2020 & 3 \\
\(\frac{3}{14}\) & MATH 1013 & 3 \\
\hline
\end{tabular}
*Students must pass the theory entrance examination or pass MUS 1011 before enrolling in these classes.

\section*{SOPHOMORE YEAR}
FALL SEMESTER
MUSC 2100
MUSC 2211
MUSC 3020
MUSC 2010
MUSC 1010
MAJOR INSTRUMENT
ENGL 2012-2322 (Choose 1)
COMM 2200
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
1 & MUSC 2101 & 1 \\
3 & MUSC 2212 & 3 \\
0 & MUSC 3020 & 0 \\
1 & MUSC 0041 & 1 \\
3 & MAJOR INSTRUMENT & 1 \\
1 & PSYC 2010 & 3 \\
3 & SOCI 2010 & 3 \\
\(\frac{3}{15}\) & ART 1010 & \(\frac{3}{15}\)
\end{tabular}
*Students must pass the theory entrance examination or pass MUS 1011 before enrolling in these classes.

JUNIOR YEAR
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
MUSC 2010 & 1 & MUSC 0041 & 1 \\
MUSC 3020 & 0 & MUSC 3020 & 0 \\
MUSC 3060 & 2 & MUSC 3050 & 2 \\
MUSC 3370 & 3 & MUSC 3380 & 3 \\
* MUSC 3110-3140 (Techniques) & 1 & VOCAL TECHNIQUE & 1 \\
MAJOR INSTRUMENT & 1 & MAJOR INSTRUMENT & 1 \\
BIOL 1010, 1011 & 4 & BIOL 1020, 1021 & 4 \\
FOREIGN LANUAGE & 3 & FOREIGN LANGUAGE & 3 \\
& \(\mathbf{1 5}\) & & 15
\end{tabular}
\begin{tabular}{lrlr} 
& \multicolumn{2}{c}{ SENIOR YEAR } & \\
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
MUSC 2010 & 1 & MUSC 0041 & 1 \\
MUSC 3020 & 0 & MUSC 3020 & 0 \\
MUSC 2350 & 3 & MUSC 4220 & 3 \\
MUSC 4210 & 3 & MUSC 4310 & 3 \\
MUSC 4520 & 3 & MUSC 4510 & 2 \\
MAJOR INSTRUMENT & 2 & MAJOR INSTRUMENT & 1 \\
* MUSC 3110-3150 (Techniques) & 1 & * MUSC 3110-3150 & 1 \\
ELECTIVES (Liberal Arts) & \(\mathbf{3}\) & ELECTIVES (Liberal Arts) & \(\frac{3}{14}\)
\end{tabular}
*Technique classes must be outside applied major.

\section*{Bachelor of Science Degree in Commercial Music Concentration in Vocal or Piano Music}

\section*{Suggested Four-Year Plan}

FRESHMAN YEAR
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
MUSC 1100 & 1 & MUSC 1101 & 1 \\
Applied Major Inst./Voice I & 1 & Applied Major Inst./Voice II & 1 \\
MUSC 1210 & 3 & MUSC 1211 & 3 \\
MUSC 1250 & 1 & MUSC 1260 & 1 \\
MUSC 3030 & 1 & MUSC 2020 & 1 \\
MUSC 1510 & 1 & MUSC 1510 & 1 \\
ASOR 1002 & 1 & ENGL 1020 & 3 \\
ENGL 1010 & 3 & MUSC 1010 & 3 \\
MATH & 3 & Social/Behavioral Sciences & 3 \\
& 15 & & 17
\end{tabular}
*Students must pass the theory entrance examination or pass MUS 1011 before enrolling in these classes.

\section*{SOPHOMORE YEAR}

FALL SEMESTER
MUSC 2100
Applied Major Inst./Voice III
MUSC 2211
MUSC 3030
MUSC 1510
MUSC 3711
Sophomore Literature
Natural Sciences

FALL SEMESTER
Applied Major Inst./Voice V
MUSC 3190
MUSC 3030
MUSC 3510
MUSC 2711
History
Social/Behavioral Sciences
Humanities

HR
MUSC 2101
Applied Major Inst./Voice IV
MUSC 2212
MUSC 30301
MUSC 3510
History
COMM 2200
Natural Sciences

\section*{JUNIOR YEAR}

HR
1
RING SEMESTER
Applied Major Inst./Voice VI
MUSC 4310
MUSC 3020
MUSC 3510 MUSC 3380 MUSC 3610 Elective

FALL SEMESTER
MUSC 3030
MUSC 4011
MUSC 4310
MAJOR APPLIED
ELECTIVES (3000-4000 Level)

HR SPRING SEMESTER HR
FALL SEMESTER
Applied Major Inst./Voice VII
MUSC 4010
MUSC 3030
Applied Major Instt./Voice VII MUSC 4011
MUSC 3710
MUSC 4520
Elective
\(\frac{3}{12}\)

\section*{Bachelor of Science Degree in} Commercial Music
Concentration in Instrumental Music
Suggested Four-Year Plan
FRESHMAN YEAR
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
MUSC 1100 & 1 & MUSC 1101 & 1 \\
* MUSC 1210 & 3 & MUSC 1211 & 3 \\
* MUSC 1250 & 1 & MUSC 1260 & 1 \\
MAJOR APPLIED & 1 & MAJOR APPLIED & 1 \\
MUSC 1010 & 3 & ART 1010 & 3 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
HIST 2010 & 3 & HIST 2020 & 3 \\
ASOR 1002 & 1 & & -15
\end{tabular}
*Students must pass the theory entrance examination or pass MUSC 1011 before enrolling in these classes.

\section*{SOPHOMORE YEAR}
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
MUSC 2100 & 1 & MUSC 2101 & 1 \\
MUSC 2211 & 3 & MUSC 2212 & 3 \\
MUSC 2010 & 1 & MUSC 2710 & 3 \\
MUSC 3030 & 1 & MUSC 0041 & 1 \\
MAJOR APPLIED & 1 & MAJOR APPLIED & 1 \\
BIOL 1010, 1011 & 4 & MUSC 3030 & 1 \\
ENGL 2010-2014 (Choose 1) & 3 & BIOL 1020, 1021 & 4 \\
& & MUSC 2711 & 2 \\
& 14 & & 16
\end{tabular}

\section*{JUNIOR YEAR}

FALL SEMESTER
MUSC 2350
HR SPRING SEMESTER HR

MUSC 2610
MUSC 3030

MUSC 3030
MUSC 3190
MUSC 3380
MUSC 3710
MUSC 3610
MAJOR APPLIED
PSYC 2010
MATH 1013
COMM 2200

SENIOR YEAR

\section*{Course Descriptions}

\section*{(MUSC) 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.
MUSC 1000, 1001, 2000, 2001, 3000, 3001, 4000, 4001 Applied Percussion I-VIII (1). An intensive study of elements of percussion techniques. Accent is on snare drum rudiments, bass drum and timpani, solo and ensemble materials for percussion, tuned percussion instruments, and recital literature in preparation for Senior Recital. One full-hour lesson or two halfhour lessons per week. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00 /\) course.

MUSC 1100, 1101, 2100, 2101, 3100, 3101, 4100, 4101 Applied Piano I-VIII (1). Some of the 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, exacting materials requiring excellent musicianship, skills, and techniques. The study of advanced piano materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).

MUSC 1200, 1201, 2200, 2201, 3200, 3201, 4200, 4201, Applied Organ I-VIII (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. Two one-half-hour periods each. Prerequisites: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1300, 1301, 2300, 2301, 3300, 3301, 4300, 4301 Applied Violin I-VIII (1). Instruction with standard, intermediate, advanced violin or viola materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1305, 1306, 2305, 2306, 3305, 3306, 4305, 4306 Applied Viola I-VIII (1). Instruction with standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1307, 1308, 2307, 2308, 3307, 3308, 4307, 4308 Applied Cello I-VIII (1). Instruction with standard, intermediate, advanced violin or viola materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1315, 1316, 2315, 2316, 3315, 3316, 4315, 4316 Applied String Bass I-VIII (1). Instruction with standard, intermediate, and advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1400, 1401, 2400, 2401, 3400, 3401, 4400, 4401 Applied Voice I -VIII (1). The study of breath control and voice placement in tone production study of voice drills in voice placement, intonation, breathing, phrasing, and diction vocal techniques, and appropriate repertoire. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).

MUSC 1500, 1501, 2500, 2501, 3500, 3501, 4500, 4501 Applied Trumpet I-VIII (1). Instruction with standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).

MUSC 1505, 1506, 2505, 2506, 3505, 3506, 4505, 4506 Applied French Horn I-VIII (1). Instruction with standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1590, 1591, 2590, 2591, 3590, 3591, 4590, 4591 Appied Guitar I-VIII (1). Instruction with standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1600, 1601, 2600, 2601, 3600, 3601, 4600, 4601 Applied Trombone I-VIII(1). Instruction with standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1605, 1606, 2605, 2606, 3605, 3606, 4605, 4606 Applied Euphonium I-VIII (1). Instruction with standard, intermediate, advanced materi-
als. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).

MUSC 1607, 1608, 2607, 2608, 3607, 3608, 4607, 4608 Applied Tuba I-VIII (1). Instruction with standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).

MUSC 1700, 1701, 2700, 2701, 3700, 3701, 4700, 4701 Applied Clarinet I-VIII (1). Instruction with standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).

MUSC 1705, 1706, 2705, 2706, 3705, 3706, 4705, 4706 Applied Flute I-VIII (1). Instruction with standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\)

MUSC 1800, 1801, 2800, 2801, 3800, 3801, 4800, 4801 Applied Oboe I -VIII (1). The study of standard, intermediate, advanced materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1805, 1806, 2805, 2806, 3805, 3806, 4805, 4806 Applied Bassoon I-VIII (1). The study of standard, intermediate, and advanced materiald. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 1900, 1901, 2900, 2901, 3900, 3901, 4900, 4901 Applied Saxophone I, II (1). The study of standard, intermediate, and advance materials. Two one-half-hour periods each. Prerequisite: follow course sequence. Laboratory fee \(\$ 100.00\).
MUSC 3020 Performance Seminar (0). Required of Music Education and Liberal Arts majors only. A satisfactory grade \((\mathrm{P})\) is obtained by attending a minimum of \(75 \%\) of all faculty and student recitals in a given semester, and by at least two performances in the seminar for upperclassmen. Open to Music majors only.

MUSC 3050 Instrumental Conducting (2). A study of the techniques 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 Music Education and Liberal Arts majors and most MusicCommercial Music majors.

MUSC 3060 Choral Conducting (2). A study of the techniques 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 Music Educ/Lib Arts majors only.
MUSC 3110 Brass Techniques (1). Fundamentals of care, construction, minor repair, and performance. Not for brass majors. Prerequisite: MUSC 1210.

MUSC 3111 Woodwind Techniques (1). Fundamentals of tone production, techniques, care, construction, and minor repair. Not for woodwind majors. Prerequisite: permission of instructor. Two one-hour periods.
MUSC 3120 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.

MUSC 3130 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.
MUSC 3140 Percussion Techniques (1). Fundamentals of care and minor repair; study of techniques of performance on most percussion instruments with emphasis on the snare drum. Not for percussion majors. Two one-hour periods.
MUSC 3145 Introduction to Vocal Diction (1). Augmentation of applied voice study. Phonetics and diction for singers of English, Italian, German, and French vocal literature. Prerequisite: MUSC 1400, Applied Voice I. 1 hour.

MUSC 3160 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.

MUSC 4211 20TH/21ST Century Music (2). The study and analysis of 20th and 21st Century art music, its major trends, composers, and compositional devices. Begins with traditional tonality, continues with NeoClassicism, atonal and serial works, electronic and avant garde styles, and post-minimalism. Also examines the importance of jazz, and accomplishments of African-Americans, and women composers. Keeps abreast of current developments in 21st Century music. Music forms to be studied include symphony, string quartet, opera, performance art, and film scores. Two lectures. Required of Music Education and Liberal Arts majors. Prerequisite: MUSC 2212.

\section*{Major Ensembles (Fall Semester)}

MUSC 2010 University Marching Band (1). Admission by audition and permission of the Director of Bands. The study and performance of marching routines and performance styles designed for live, film, and televised performances. Meets daily 6:00-8:00pm. Extra rehearsals as called. May be used to satisfy University's Physical Education requirement. All instrumental majors must have a combination of 7 semesters of MUSC 2010 and 0041. 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)

MUSC 0041 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. All instrumental majors must have a combination of 7 semesters of MUSC 2010 and 0041. Course may be repeated for up to 4 hours of credit. (Fall and Spring Semesters)

MUSC 3070 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. Requirements for vocal or piano majors are as follows: Commercial Music majors (2) semesters, Music Education majors (7) semesters, and Liberal Arts majors must have (8) semesters of MUSC 3070.

MUSC 3090 Show Choir (1). The show choir, of the university performs literature from Broadway shows and popular music styles with fully staged choreography. The official name is TSU Showstoppers. The group performs frequently and tours in the spring semester. Students are selected by audition only. Class meets four days per week for two hours. Prerequisite: audition, and permission of instructor.

MUSC 3078 Jazz Vocal Ensemble (1). Course intended for vocal majors and student with proficiency in voice. Students are exposed to vocal literature of various jazz styles. Admission by permission of the instructor. Emphasis is place on public performance of material. Course may be used for vocal ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is on credit hour.

MUSC 3850 Percussion Ensemble (1). Course intended for percussion majors, and students with proficiency on percussion. Students are exposed to percussion literature from all periods and cultures. Emphasis is placed on public performance material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated for up to 4 hours of credit. Class is on hour credit.

MUSC 3870 Jazz Ensemble (1). Membership open to all University students by audition. Ensemble performs traditional and contemporary jazz. This course may not be used for large ensemble requirements. May be repeated for up to 4 hours of credit. Class is one hour credit.

MUSC 3875 Jazz Combo (1). Membership open to all University students by audition. Ensemble performs traditional and contemporary jazz composed specifically for small jazz group. The course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

MUSC 3890 String Ensemble (1). Open to students with proficiency on a string instrument and permission of instructor. Required of string majors. Course included the study and performance of literature for string ensemble and small orchestra. This course may be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to eight hours of credit. Class one hour credit.

MUSC 3898 Guitar Ensemble (1). Course intended for guitar majors, and student with proficiency on guitar. Students are exposed to guitar chamber literature from various periods and cultures. Admission by permission of the instructor. Emphasis is place on public performance of material. This course may not be used for large ensemble requirements. Rehearsals are
to be arranged. May be repeated up to four hours of credit. Class is one credit hour.

MUSC 2095 Wind Ensemble (1). Admission by permission of the Director of Bands. Ensemble consists of top wind, percussion, and string instrumentalists within the TSU Music Department who exhibit outstanding musicianship and an interest in performing the finest of symphonic literature. Course may be repeated up to 4 hours of credit, and may be used to meet large ensemble requirements. Rehearsal are to be arranged. One hour credit.

MUSC 3810 Flute Ensemble (1). Course intended for flute majors, and students with proficiency on flute. Students are exposed to flute chamber literature form all periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

MUSC 3835 Horn Ensemble (1). Course intended for French horn majors, ands students with proficiency on French horn. Students are exposed to trombone chamber literature from all periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

MUSC 3837 Tuba Ensemble (1). Course intended for tuba majors and students with proficiency on tuba. Students are exposed to tuba literature from all periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

\section*{Music Education}

MUSC 3711 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.

MUSC 3712 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.

MUSC 3713 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.

MUSC 4720 Enhanced Student Teaching in Elementary and Secondary Schools (9). 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 4705, which is taken concurrently.

\section*{Theory and Composition}

MUSC 1011 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 MUSC 1210 by passing the entrance examination in theory. This course does not count towards the degree.

MUSC 1210, 1211 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: MUSC 1010 or passing score on entrance examination in theory.

MUSC 1250 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 MUSC 1210. Prerequisite: MUSC 1011 or passing score on entrance examination in theory.

MUSC 1260 Freshman Aural Skills II (1). Continuation of MUSC 1250, to be taken concurrently with MUSC 1211. Prerequisite: MUSC 1250.

MUSC 2210, 2212 Sophomore Theory I, II (3, 3). Aural and written harmony; keyboard harmony; figured bass; counterpoint; sight singing; ear training; analysis. Prerequisite: MUSC 1211. Three lectures. Both courses required of all Music majors.

MUSC 4010 Practicum in Arranging (2). Individual projects supervised by a practicing professional arranger. Prerequisites: permission of instructor and junior standing in Music.
MUSC 4210, Form and Analysis I, (3). A study of compositions in the smaller and larger forms. Prerequisite: MUS 2212. Three lectures.
MUSC 4310 Orchestration (3). A systematic study and application of the techniques for using the capabilities of orchestral and band instruments in music composition. Prerequisite: MUSC 2212. Three lectures.

MUSC 4350 Composition (3). Exploration of techniques of composition. Close attention is given to style, texture, and creating by synthetic means. Prerequisite: MUSC 2212.

MUSC 4510 Senior Recital (P/F). Student passed only upon successful completions the public senior recital. Prerequisite: completion of applied courses and permission of major applied instructor and department Head. Required of all Music Education and Music-Liberal Arts majors.

\section*{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.

MUSC 1410, 1420 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.

MUSC 1590, 1591 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.

MUSC 1640 Country Fiddle (3). Emphasis on folk (including Bluegrass) violin performance. Prerequisite: permission of instructor.

MUSC 2410, 2420 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: MUSC 1420. MUSC 2410 may be repeated once for credit.

MUSC 2590 Solo Guitar II(2). A continuation of MUS 1590, which is a prerequisite for the course.

MUSC 2610 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.

MUSC 2710 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.

MUSC 2711 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.
MUSC 3010 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: MUSC 1210 and permission of instructor.

MUSC 3030 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 6 hours of credit.

MUSC 3040 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.

MUSC 3190 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: MUSC 2212.

MUSC 3610 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: MUSC 2610..
MUSC 3630 Advanced Sound Production (3). Continuation of MIDI and sound-processing experience. Prerequisite: MUSC 2610.
MUSC 3710 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.

MUSC 4010, 4011, 4012 Internship (3, 3, 3). Onsite, hands-on experience in student's area of specialization, e.g., recording, sequencing, performing, and arranging. Interns must have completed at least ten hours of commercial music courses. Each course may be repeated once for credit. Prerequisite: junior standing.

MUSC 4110 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: MUSC 1210.

MUSC 4410 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: MUSC 4310.
MUSC 4523, 4524 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: MUSC 2610.

MUSC 4525, 4526 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: MUSC 2710, 3630.

MUSC 4527, 4528 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: MUSC 3610.
MUSC 4610 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: MUSC 3610.
MUSC 4810 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: MUSC 3610.

\section*{Music History, Literature, and Appreciation}

MUSC 1010 Music Appreciation (3). Emphasis upon development of listening skill and on a broad repertoire of literature, including both Western and Nonwestern music. History is brought in only when it gives deeper meaning to the music being studied. Course applies toward satisfaction of University humanities requirement.

MUSC 1020 Honors Music Appreciation (3). Honors version of MUSC 1020. 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.

MUSC 2350 Introduction to Afro-American Music (3). History of blues, gospel music, jazz, and African music, with emphasis on black artists and their contributions. Prerequisite: permission of instructor.

MUSC 3150 Folk Music (3). Folk music with emphasis upon that of the Southeastern United States. Prerequisite: MUSC 1010.

MUSC 3310 Introduction to Music Literature (3). An introductory course in music literature.

MUSC 3370, 3380 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.

MUSC 4220 World Music (3). A study of world music with emphasis on the music of Africa, India, China, Indonesia and South America. Attention is given to the diversity music as influenced by geographical conditions, social and economic systems, values, beliefs, and ways of life. Required of all Music Education and Music-Liberal Arts majors. Prerequisite: MUSC 2211 and junior standing.

MUSC 4240, 4250 American Music I, II (3, 3). MUS 4240 treats music from colonial times through Charles Ives; MUSC 4250 covers music from 1930 to the present. Prerequisite: permission of instructor.
MUSC 4330, 4340 Seminar in Jazz (3, 3). Study of the history of jazz and an analysis of the styles and major contributors.
MUSC 4520, 4521, 4522 Special Topics I, II, III (1-3, 2, 3). Independent studies courses intended to serve students who would otherwise be impeded in normal progress toward earning their degree. May be taken for a maximum of 9 hours of credit. Prerequisite: permission of Department Head.

MUSC 1115 Class Piano I for Non-majors (1). Course intended for nonmajors/minors. Topics include notes, rhythms, fingering, proper playing techniques, scales, and selected songs. One hour credit.

MUSC 1116 Class Piano II for Non-majors (1). A continuation of MUSC 1115, this course is intended for non-music majors/minors. Topics include more in-depth study of notes, rhythms, fingerings, proper playing techniques, scales, chords, and selected songs. One hour credit.

MUSC 2020 Woodwind Class for Non-Majors (1). Course intended for University Marching Band students needing increased proficiency on their instrument. Admission by permission of the Director of Bands. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated for up to four hours of credit. Non-music majors only. One hour credit.

MUSC 2025 Brass Class for Non-Majors (1). Course intended for University Marching Band students needing increased proficiency on their instrument. Admissions by permission of the Director of Bands. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Non-music majors only. One hour credit.
MUSC 2026 Percussion Class for Non-majors (1). Course intended for University Marching Band students needing increased proficiency on their instrument. Admissions by permission of the Director of Bands. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Non-music majors only. One hour credit.
MUSC 2097 Pep Band (1). Membership open to all University Marching Band students by permission of the Director of Bands. This ensemble performs at university basketball games and special events. Music majors and band scholarships students must maintain concurrent membership in University Marching and Concert Bands. Rehearsals to be arranged. May be repeated up to 4 hours of credit. Class is for on hour credit.

MUSC 3075 Meistersingers (1). Course intended for vocal majors and students with proficiency in voice. Students are exposed to secular and sacred choral chamber literature from various periods and cultures. Admission by permission of the instructor. Emphasis is placed on public
performance of material. Course may be used for vocal ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one credit hour.

MUSC 3096 Concert Band (1). Open to all University students proficient with a band instrument, and permission of the Director of Bands. Ensemble performs standard and contemporary band literature. This course may be used for large ensemble requirements. Rehearsals are to be arranged. Course in one hour credit, and may be repeated up to four hours of credit.

MUSC 3750 Jazz Improvisation Techniques I (1). A study of instrumental improvisation, including chord construction, chord progression, scale modes, scale patterns, and aural skills. Open to music majors or students who demonstrate proficiency on their instruments, with permission of instructor. Class is one hour credit. No prerequisites.

MUSC 3755 Jazz Improvisation Techniques II (1). A continuation of MUSC 3750, including chord construction, chord progression, scale modes, scale patterns, and aural skills. Open to music majors or students who demonstrate proficiency on their instruments, with permission of instructor. Class is one hour credit. Prerequisite: MUSC 3750

MUSC 3815 Clarinet Choir (1). Course intended for clarinet majors, and students with proficiency on clarinet. Students are exposed to clarinet literature form all periods and cultures. Admissions by permission of the instructor. Emphasis is placed on public performance material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

MUSC 3816 Saxophone Quartet (1). Course intended for saxophone majors, and students with proficiency on saxophone. Students are exposed to saxophone chamber literature form all periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. This course may be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

MUSC 3819 Woodwind Quintet (1). Course intended for double reed, single reed, and French horn majors, and students with proficiency on listed instruments. Students are exposed to woodwind chamber literature form all periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

MUSC 3830 Trumpet Choir (1). Course intended for trumpet majors, and students with proficiency on trumpet. Students are exposed to trumpet chamber literature form all periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

MUSC 3836 Trombone Choir (1). Course intended for trombone majors, and students with proficiency on trombone. Students are exposed to trombone chamber literature form all periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

MUSC 3839 Brass Quintet (1). Course intended for brass majors, and students with proficiency on brass. Students are exposed to brass literature from all periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Class is one hour credit.

\title{
Department of Physics and Mathematics
}

\author{
Sandra H. Scheick, Ph.D., Head 305 Boswell Hall Telephone 615-963-5811
}

Faculty: O. Bignall, G. Burks, K. Daniels, A. Dean, S. Forcey, K. Ganesan, J. Jackson, W. Myint, G. Nagarajan, L. Ouyang, J. Propes, M. Rajagopalan, R. Richardson, M. Reed, H. Ren, M. Sarkar, S. Sathananthan, K. Semenya, C. Williams, G. Yang.

General Statement: The objectives of the Department are: (1) to provide programs of study for those who desire to pursue an undergraduate major in mathematics or physics, or a minor in physics, mathematics or astronomy; 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 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 approved by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

\section*{Astronomy}

General Statement: The objectives of the Astronomy Program are (1) to provide training that would enable students to gain a better understanding of the universe that they live in; (2) to provide training to enable graduates to enter graduate school in astronomy or related areas.

\section*{Departmental Requirements \\ for a Minor in Astronomy \\ ASTR 1010-1020 \\ ASTR 3010, 3330 \\ ASTR 3800, 4900 (at least 9 hours)}

\section*{Mathematics}

General Statement: The objectives of the Mathematics Program are (1) to provide training to enable graduates to be employed by any of a number of private industries, government agencies, foundations, and institutions requiring high-level quantitative skills and a highly developed ability to think critically and logically; (2) to provide training to enable graduates to enter graduate school in mathematics or related areas; (3) to provide training to enable graduates to assume careers as teachers of mathematics in secondary schools; (4) to develop proficiency in basic mathematical operations and develop skills in the use of formulas for the solution of problems; (5) to provide science and engineering majors the mathematical skills required by their various programs of study.

\section*{Departmental Requirements 40 Semester Hours (38 for Mathematics Education) For Bachelor of Science Mathematics}

The curriculum for a B.S. degree in Mathematics consists of a minimum of 120 semester hours, of which 42 must be at the 3000 or 4000 level. A minimum of 40 ( 38 for teacher certification candidates) semester hours must be in Mathematics or Statistics, exclusive of MATH 1005, 1115, 1710, 1720, and 1730 with at least 28 (27 for teacher certification candidates) of these being at the 3000 or 4000 level, exclusive of MATH 3710, 4724, and 4750. Note that Computer Science 3900 may be used to satisfy upper level course requirements for the major in Mathematics. The 40 (38) hours in Mathematics are differentiated into a required core and an appropriate specialization. Further requirements include 12 hours ( 6 hours for teacher certification candidates) of Computer Science and 8 hours of Physics. 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 major core 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 40 (38) hours of course work (grade C or above), the major must pass a written comprehensive examination on the core requirements.

Students who minor in Mathematics must earn at least 23 or 26 semester hours: 11 or 14 semester hours of calculus depending on the sequence taken and a minimum of 12 semester hours of 3000 or 4000 level MATH or STAT courses, exclusive of MATH 3710, 4724, and 4750. Computer Science 3900 may be used to satisfy upper level course requirements for the minor in Mathematics.

Besides the general program where the recommended RA's (related areas) are pre-medicine, pre-law, etc., there are four options of specialization.
a) The pure Mathematics option includes MATH 4310 and 4530 , as well as both the sequences MATH 4410-4420 and 46404650 in the required core. The recommended RA's include computer science, physics, and philosophy.
b) The applied Mathematics option includes MATH 3120, 4560 and 4570, as well as MATH 4410-4420 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 4210-4220 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 COMP 3200, STAT 3110, and MATH 3810, 4410, 4420, and 4750 in the required core. Students seeking teacher certification must apply in writing to the College of Education, usually in the sophomore year. At the time of applying they must have a \(2.75 \mathrm{cu}-\) mulative grade point average and must have passed the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. Formal
admission to the Teacher Education Program is a prerequisite for enrolling in upper-division certification courses.

Students must pass PRAXIS II exam before they can enroll in student teaching. Students must complete nine 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 the College of Education section.

\section*{General Education Core}

Communications (9 hours)
ENGL 1010, \(1020 \begin{aligned} & \text { Freshman English I, II } \\ & \text { (minimum grade of } C \text { in each) }\end{aligned}\)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2322 Sophomore Literature

\section*{Elective From approved list.}

Elective From approved list.
Social and Behavioral Science (6 hours)
ECON 2010 Principles of Economics I 3
Elective From approved list. 3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
PHYS 2110/2111 General Physics I
4
PHYS 2120/2111 General Physics II
Mathematics ( 3 hours)
MATH \(1910 \quad\) Calculus I, Alternative
Orientation (1 hour)
ASOR 1001 Orientation for Science Majors
(Teacher certification students should take EDCI 1010.)
Total General Education Hours

\section*{Upper-division Admission}

For admission into the upper-division program of the Mathematics major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, earned a cumulative grade point average of at least 2.0 on college-level course work, and completed the Rising Junior Examination. They must also have earned a grade of C or better in MATH 1910, 1920 and 2110.

Major Core (29, 24 for teacher certification candidates)
MATH 2500 Mathematics Research Experience I
(Not required for teacher certification candidates)
MATH 3500 Mathematics Research Experience II
(Not required for teacher
certification candidates)
MATH 3510 Intermediate Analysis
MATH \(3610 \quad\) Linear Algebra I
MATH 3620 Linear Algebra II
(Not required for teacher
certification candidates)
MATH 3640 Abstract Algebra
MATH 4410, 4420, or Advanced Calculus I, II, or
MATH 4640, 4650, or Modern Algebra I, II or
STAT 4210, 4220 Statistical Methods I, II
(MATH 4410, 4420 required of teacher
certification candidates)
MATH 4500
Senior Project
(teacher certification candidates take
STAT 3110 and MATH 3810)
Suggested courses in areas of specialization may be obtained by consulting the major advisor.

Professional Education Core (37)
Requirements for Teacher certification students, only. PSYC 2420 Human Growth\& Learning 3 EDCI \(2010 \quad\) History \& Foundation of Education 3 EDCI \(3870 \quad 3\) EDSE 3330 Education of Exceptional Children 3 PSYC 3120 Measurement/Evaluation in Schools EDAD \(4000 \quad\) Professional Rights and Responsibilities EDRD \(4910 \quad\) Reading \& Study in Secondary School EDCI \(4190 \quad\) Technology in the Schools MATH \(4724 \quad\) Student Teaching of Mathematics EDCI \(4705 \quad\) Educational Seminar MATH 3710 Teaching Mathematics in the Secondary Schools

\section*{Physics}

General Statement: The objectives of the Physics Program are :
(1) to provide training relating to scientific work in industry and government requiring (a) a clear understanding of the principles of physics and their application, and (b) the ability to reason logically and to analyze critically; (2) to provide a foundation for graduates to do graduate study in physics or related areas; (3) to provide majors from any of the science and engineering areas with the requisite knowledge in physics required to complete their various programs of study.

\section*{Departmental Requirements For Bachelor of Science Physics}
(39 semester hours)

The curriculum of the B.S. degree in Physics consists of a minimum of 120 semester hours, of which 42 must be at the 3000 or 4000 level. A minimum of 39 hours must be taken in Physics courses with a minimum of 28 hours selected from Physics courses numbered 3000 and above. No course with a letter grade below C will be counted towards meeting the 39 hours of work required in Physics. In addition to successfully completing 39 hours of course work, the major must pass a written comprehensive examination on the core requirements.

Students who minor in Physics must earn at least 23 hours in Physics, including the three semester general physics sequence (PHYS 2110, 2111, 2120, 2121, and 2230) and a minimum of 12 semester hours of 3000 and 4000 level PHYS courses.

\section*{General Education Core (42)}

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II 6
\(\begin{array}{ll} & \text { (minimum grade of } C \text { in each) } \\ \text { COMM } 2200 & \text { Public Speaking }\end{array}\)
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2322 Sophomore Literature 3
Elective From approved list. 3
Elective From approved list. 3
\(\begin{array}{ll}\text { Social and Behavioral Science }(6 \text { hours }) \\ \text { Elective } & \text { From approved list. }\end{array}\)
Elective From approved list. 3
\(\begin{array}{ll}\text { History (6 hours) } & \\ \text { HIST } 2010 & \text { American History I }\end{array}\)
HIST 2020 American History II 3
Natural Science (8 hours)
PHYS 2110/2111 General Physics I 4
PHYS 2120/2121 General Physics II 4
Mathematics (3 hours)
MATH1910 Calculus I, Alternate 3
Orientation (1 hour)
ASOR 1001 Orientation for Science Majors 1
(Teacher certification students should take EDCI 1010.)
Total General Education Hours

Required Support Courses (25 or 28)
ASOR 1001 Orientation for Science Majors 1
COMP \(2100 \quad\) Computer Laboratory
COMP 2110, 2120 Computer Programming I \& II
MATH 1920, 2110 or Calculus II, III, Alternate or MATH 1925, 2115, 2125 Calculus II, III, IV
CHEM 1110,1111 General Chemistry I \& II 1120,1121
PHIL 2500 Logical \& Critical Thinking

\section*{Upper-division Admission}

For admission into the upper-division program of the Physics major, students must complete all of the requirements listed above under General Education Core and Required Support Courses. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses earned a cumulative grade point average of a 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 PHYS 2030, 2031, 2040 and 2041.

Major Core (31)
PHYS 2330 General Physics III
PHYS 3110, 3120 Electricity and Magnetism I, II
PHYS 3200 Heat and Thermodynamics 6

PHYS 3210 Mechanics I
PHYS 3411, 3421 Advanced Physics Laboratory I \& II
3
PHY 3410 Advance Physics Laboratory I \& II
PHYS 3610 Solid State Physics 3
PHYS 4100 Intro to Quantum Mechanics I 3
PHYS 4120 Modern Physics I 3
PHYS 4500 Senior Project

\section*{Additional Requirements (9)}
\begin{tabular}{lll} 
MATH 3120 & Applied Mathematics & 3 \\
MATH 3510 & Intermediate Analysis & 3 \\
MATH 3610 & Linear Algebra & 3
\end{tabular}

\section*{Bachelor of Science Degree in Mathematics}
\begin{tabular}{lrlr}
\multicolumn{3}{c}{ Suggested Four-Year Plan } \\
\multicolumn{4}{c}{ FRESHMAN YEAR } \\
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
* MATH 1910 & 4 & MATH 1920 & 4 \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
HIST 2010 & 3 & HIST 2020 & 3 \\
COMP 2100 & 3 & COMP 2110 & 3 \\
ASOR 1001 & \(\mathbf{1}\) & HUMANITIES ELECTIVE & \(\frac{3}{3}\) \\
& \(\mathbf{1 4}\) & & 16
\end{tabular}
*MATH 1710 and/or 1720 must be taken prior to MATH 1910 if need is indicated.

\section*{SOPHOMORE YEAR}

FALL SEMESTER
MATH 2110
HR
SPRING SEMESTER
COMM 2200
HR
MATH 2500
ENGL 2010
PHYS 2110, 2111
COMP 2120
SOC SCI EL
HUMANITIES ELECTIVE 3
PHYS 2120, 21214
ECON 20103
ELECTIVE, ANY LEVEL \(\underline{3}\)

JUNIOR YEAR
FALL SEMESTER
HR
MATH 3610
COMP 3200
MATH 3500
ELECTIVES, ANY LEVEL

SPRING SEMESTER
HR

\section*{MATH 3620} MATH 3510 MATH 3640 ELECTIVES, ANY LEVEL

\section*{FALL SEMESTER}

SENIOR YEAR

MATH 4410 OR 4640 or STAT 4210

HR SPRING SEMESTER
HR
3 MATH 4420 OR 4650 OR STAT 4220
MATH 4500
MATH ELECTIVE 3000/4000 3 LEVEL
ELECTIVES, 3000/4000 LEVEL 7
LEVEL
ELECTIVES, 3000/4000 LEVEL
\(\frac{4}{13}\)

\section*{Bachelor of Science Degree in Mathematics With Teacher Certification Licensure for Grades 7-12}
\begin{tabular}{lrlr}
\multicolumn{3}{l}{ Suggested Four-Year Plan (122) } \\
\multicolumn{4}{c}{ FRESHMAN YEAR } \\
& HR & SPRING SEMESTER & HR \\
FALL SEMESTER & 4 & MATH 1920 & 4 \\
* MATH 1910 & 3 & MATH 1005 & 1 \\
HUMANITIES ELECTIVE & 3 & ENGL 1020 & 3 \\
ENGL 1010 & 3 & HIST 2020 & 3 \\
HIST 2010 & \(\mathbf{1}\) & COMP 2100 & \(\underline{3}\) \\
EDCI 1010 & \(\mathbf{1 4}\) & & 14
\end{tabular}
*MATH 1710 and/or 1720 are to be taken prior to MATH 1910 if need is indicated.

\section*{SOPHOMORE YEAR}
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
MATH 2110 & 3 & COMM 2200 & 3 \\
ENGL 2010 & 3 & ECON 2010 & 3 \\
SOCIAL SCIENCE ELECTIVE & 3 & HUMANITIES ELECTIVE & 3 \\
PHYS 2110, 2111 & 4 & PHYS 2120, 2121 & 4 \\
PSYC 2420 & \(\mathbf{3}\) & EDCI 2010 & \(\frac{3}{16}\)
\end{tabular}
\begin{tabular}{lrlr} 
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
MATH 3510 & 3 & MATH 3640 & 3 \\
MATH 3610 & 3 & MATH 4410 & 3 \\
PSYC 3120 & 3 & MATH 3810 & 3 \\
STAT 3110 & 3 & MATH 4750 & 3 \\
EDAD 4910 & 3 & EDSE 3330 & 3 \\
EDCI 3870 & \(\mathbf{3}\) & EDCI 4190 & \(\underline{2}\) \\
& \(\mathbf{1 8}\) & & 17 \\
& & \\
& SENIOR YEAR & \\
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
COMP 3200 & 3 & MATH 4724 & 9 \\
MATH 4420 & 3 & EDCI 4705 & 3 \\
MATH 4500 & 3 & & \\
MATH 3710 & 3 & & \\
EDAD 4000 & \(\underline{3}\) & -12
\end{tabular}

\section*{Bachelor of Science Degree in Physics}

Suggested Four-Year Plan

\section*{FRESHMAN YEAR}

FALL SEMESTER
HR SPRING SEMESTER

ENGL 1010
HIST 2010
CHEM 1110, 11114 CHEM 1120, 1121
* MATH 19104 MATH 1920

ASOR 10011 HUMANITIES ELECTIVE
\begin{tabular}{lr} 
ENGL 1020 & 3 \\
HIST 2020 & 3 \\
CHEM 1120, 1121 & 4 \\
MATH 1920 & 4 \\
HUMANITIES ELECTIVE & \(\frac{3}{17}\)
\end{tabular}
*MATH 1710 and/or 1720 must be taken prior to MATH 1910 if the need is indicated.

\section*{SOPHOMORE YEAR}

FALL SEMESTER
PHYS 2110, 2111
HR

ENGL 2010
COMP 2040
MATH 2110
SOCIAL SCIENCE ELECTIVE

SPRING SEMESTER HR
PHYS 2120, 21214
PHIL 25003
PHYS 22303
COMM 22003
SOCIAL SCIENCE ELECTIVE
16
16

\section*{JUNIOR YEAR}

FALL SEMESTER
PHYS 3210
PHYS 3110
MATH 3610
COMP 2140
MATH 3120

FALL SEMESTER
PHYS 3610
PHYS 3411
PHYS 4100
PHYS 2500
ELECTIVES, ANY LEVEL

HR

SPRING SEMESTER HR
PHYS 32003
PHYS 31203
COMP 22403
MATH 35103
ELECTIVE (Any level) 3
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 1005 Mathematics Education Orientation (1) (Formerly MATH 192). An introduction to the Mathematics teacher education program, including field experience. Prerequisite: interest in becoming a mathematics teacher. Offered in spring.

MATH 1013 Contemporary Mathematics (3). An Introduction to the mathematics used in our society. It includes elements of mathematical thought, inductive and deductive reasoning, and problem solving. Some of the topics included are graphics, counting techniques, number sequences, probability and statistics. This course satisfies the general education mathematics requirement. Prerequisites: Two years high school algebra or the equivalent, or one year of high school algebra and one year geometry or the equivalent. Offered in the fall, spring, and summer.

MATH 1110 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 1111 Honors College Algebra I (3). The Honors version of MATH 1110. Enrollment is limited to members of the University Honors Program. Offered in fall.

MATH 1115 Fundamentals of Problem-Solving (1) (Formerly MATH 191). An introduction to Polya theories with emphasis on solving problems using mathematical methods. Prerequisite: 3 semester hours of collegelevel mathematics or permission of the Department Head. Offered in fall, spring, and summer.

MATH 1120 College Algebra II (3). Rational functions, conic sections, systems of equations and inequalities, matrices and determinants, and an introduction to discrete mathematics. Prerequisite: grade of \(C\) or better in MATH 1110 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 1121 Honors College Algebra II (3). The Honors version of MATH 1120. Enrollment is limited to members of the University Honors Program. Offered on demand.

MATH 1140 Analytic Geometry and Trigonometry (3) (Formerly MATH 114). A survey of analytic geometry and trigonometry, including conic sections, connections among right triangle ratios, variation, periodic and circular functions, and the use of appropriate calculators and computers. Prerequisites: two years of high school algebra or the equivalent, or one year of high school algebra and one of geometry, or the equivalent. Offered in fall and spring.

MATH 1410, 1420 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; prob-lem-solving; measurement in the metric system; elements of algebra; plane and solid geometry; elementary statistics. Prerequisite: For MATH 1410: Two years of high school algebra or the equivalent or one year high school algebra and one year geometry or the equivalent. For MATH 1420: MATH 1410. MATH 1410 Offered in fall, spring, and summer. MATH 1420 Offered in fall and spring.
MATH 1610 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 1710 Precalculus Mathematics I (3). A course which with MATH 1720 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 1720 Precalculus Mathematics II (3). A continuation of MATH 1710. Topics include right triangle trigonometry, trigonometric functions, analytic geometry, conic sections, sequences, and notation. Prerequisite: grade of \(C\) or better in MATH 1710 or permission of the Department Head. Offered in fall, spring, and summer.
MATH 1730 Precalculus Mathematics, Alternate (3). Integrated college algebra and trigonometry. This course provides the student with the background necessary to enter the calculus sequence. Topics include polynomials; rational functions; exponential, logarithmic, and trigonometric functions; analytic geometry; and conic sections. Prerequisites: high school algebra II, geometry, and trigonometry, or the equivalent. Offered in fall and spring.

MATH 1830 Basic Calculus I (3). An introduction to the basic concepts of differential and integral calculus, with applications oriented towards economics, business, and the social sciences. Prerequisite: grade of C or better in MATH 1110 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 1910 Calculus I, Alternate (4) (Formerly MATH 1910). Part of the sequence MATH 1910, 1920 recommended for Mathematics, Physics, Chemistry, and Biology majors. Topics include functions, graphs, limits, derivatives with applications, and the definite integral with applications. Prerequisite: grade of C or better in MATH 1720 or 1730 or permission of the Department Head. Offered in fall.

MATH 1915 Calculus and Analytical Geometry (4). Part of the sequence MATH 1915, 1925, 2115, 2125 , which emphasizes application to the physical sciences. Topics include functions, graphs, limits, derivatives, the definite integral, and rational functions including applications. Prerequisite: grade of C or better in MATH 1720 or 1730 or permission of the Department Head. Offered in fall, spring, and summer.
MATH 1920 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 1910, 1920, 2110, recommended for all Mathematics, Physics, Chemistry, and Biology majors. Prerequisite: grade of C or better in MATH 1910 or permission of the Department Head. Offered in spring.
MATH 1925 Calculus II (4). Further applications of definite integral, derivatives and integrals of transcendental functions, techniques of integration, and polar coordinates. Prerequisite: grade of C or better in MATH 1910 or 1915 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 2110 Calculus III, Alternate (3). Vector functions, three-dimensional space, partial derivatives, multiple integrals, line integrals, and applications. Part of the sequence MATH 1910, 1920, and 2110 recommended for all Mathematics, Physics, Biology, and Chemistry majors. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Head. Offered in fall.
MATH 2115 Calculus III (3). Infinite sequences and series, vectors in twoand three-dimensional space, the calculus of a vector function, and applications. Prerequisite: grade of \(C\) or better in MATH 1925 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 2125 Calculus IV (3). The calculus of vector variables, including partial, differentiation and multiple integration, line integrals, Stokes' theorem, and applications. Prerequisite: grade of C or better in MATH 2115 or permission of the Department Head. Offered in fall, spring, and summer.

MATH 2500 Mathematics Research Experience I (1). The first in a two semester sequence of seminars designed to familiarize the mathematics major with the tools necessary to do research in mathematics. Included are logic, reading and writing mathematics, research methods and typesetting. MRE I is an introduction to the topics with emphasis on the reading and research methods. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Head. Required of all Mathematics majors (except for teacher certification candidates) Offered in fall.

MATH 3120 Applied Mathematics (3). Ordinary differential equations, Fourier series, and Laplace transforms, with emphasis on the application to mechanical and electrical systems. Prerequisites: grades of C or better in MATH 2125 or 2110 and in PHYS 2120, 2121. MATH 3120 is required of all Physics majors. Offered on demand.

MATH 3130 Advanced Mathematica (3) (Formerly MATH 313). An indepth treatment of the computer software "Mathematica" with emphasis on programming in the "Mathematica" language to solve selected problems.

Prerequisites: grades of C or better in MATH 2110 and 3610, and COMP 2120, or permission of the Department Head. Offered in fall.

MATH 3210 Introduction to Number Theory (3) (Formerly MATH 321). 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: grade of C or better in MATH 1920 or permission of the Department Head. Offered in fall.

MATH 3500 Mathematics Research Experience II (1). The second of in a two semester sequence of seminars designed to familiarize the mathematics major with the tools necessary to do research in mathematics. Included are logic, reading and writing mathematics, research methods and typesetting. MRE II is a continuation of the topics with emphasis on writing and presentation. Prerequisite: grade C or better in MATH 2500 or permission of the Department Head. Required of all Mathematics majors (except for teacher certification candidates) Offered in fall.
MATH 3510 Intermediate Analysis (3) (Formerly MATH 351). A study of the foundations of real variable calculus, including the real numbers, limits, sequences, continuity, Bolzano-Weierstrass theorem, Heine-Borel theorem, intermediate-value theorem, and differentiability. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Head. Required of all Mathematics and Physics majors. Offered in spring and summer.

MATH 3610 Linear Algebra I (3) (Formerly MATH 361). Homogeneous and non-homogeneous systems, matrix algebra, determinants, vector spaces and subspaces, bases, orthogonal bases, linear transformations, and rank. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Head. Required of all Mathematics, Physics, and Computer Science majors. Offered in fall, spring, and summer.
MATH 3620 Linear Algebra II (3) (Formerly MATH 362). A continuation of MATH 3610. It is strongly recommended that 3610 and 3620 be taken sequentially. Topics include a further treatment of linear transformations, rank, eigenvalues, eigenvectors, and the spectral theorem. Prerequisite: grade of C or better in MATH 3610. Required of all Mathematics majors. Offered in spring.

MATH 3640 Abstract Algebra (3) (Formerly MATH 364). An introduction to properties of groups, rings, integral domains, and fields. Prerequisites: grades of C or better in MATH 1920 and 3210, or permission of Department Head. Required of all Mathematics majors. Offered in spring.

MATH 3710 Teaching Mathematics in the Secondary School (3) (Formerly MATH 371). 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 3810 Geometry (3) (Formerly MATH 381). A brief review of Euclidean geometry with further topics, including the non-Euclidean and projective geometries. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Head. Required of all teacher certification candidates in Mathematics. Offered in fall of odd numbered and summer of even-numbered years.
MATH 3900 Introduction to Numerical Analysis (3) (Formerly MATH 390). Errors, interpolation, approximations, numerical quadrature, solution of ordinary differential equations. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Head. Offered on demand.

MATH 4310, 4320 Topology I, II (3, 3) (Formerly MATH 431, 432). Homeomorphisms, connectedness, compactness, metric spaces, normal spaces, Urysohn's lemma, Tietze's theorem, separation axioms, product topology, Hilbert space, quotient space, paracompactness, nets, and filters, with an introduction to homotopy theory. Prerequisites: grades of C or better in MATH 2110, and 3510, or permission of the Department Head. Offered on demand.

MATH 4410, 4420 Advanced Calculus I, II (3, 3) (Formerly MATH 441, 442). A variety of topics including functions of several variables; the algebra and topology of Euclidean \(n\)-space; differentials; extrema; the gradient; line, surface and volume integral; Stokes' theorem; inverse mapping theorem; and manifolds. Prerequisites: grades of C or better in MATH 2110, 3510, and 3610, or permission of the Department Head. Mathematics majors must take this sequence or MATH 4640-4650 or STAT 4210-4220. MATH 4410 is offered in fall and 4420 in spring.

MATH 4500 Senior Project (3) (Formerly MATH 450). 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 4510, 4520 Real Analysis I, II (3, 3) (Formerly MATH 451, 452). Set theory, algebra, and topology of the real numbers, continuous functions, uniform convergence, measure and integration theory, Lebesque measure and integrals, convergence theorem, L-spaces, Banach spaces, differentiation, Radon-Nikodym theorem, Fubini theorem. Prerequisite: grade of C or better in MATH 4420 or permission of the Department Head. Offered on demand.

MATH 4530, 4540 Complex Analysis I, II \((3,3)\) (Formerly MATH 453, 454). Analytic functions, Cauchy's integral theorem, Taylor and Laurent series, singularities, residue theory, analytic continuation, conformal mapping, Riemann surfaces, infinite products, and entire functions. Prerequisite: grade of C or better in MATH 442 or permission of the Department Head. MATH 4530 is offered in fall of odd-numbered years and 4540 is offered in spring of even-numbered years.
MATH 4560, 4570 Differential Equations I, II \((3,3)\) (Formerly MATH 456, 457). First- and second-order equations, general theory of linear nth-order differential equations, constant coefficient systems, variation of parameters, infinite series, singular solutions, asymptotic solutions, Green's functions, stability, special functions, Laplace transform. Prerequisites: grades of C or better in MATH 3030 and 3620, or permission of the Department Head. MATH 4560 is offered in fall of even-numbered years and spring of odd-numbered years.

MATH 4640, 4650 Modern Algebra I, II \((3,3)\) (Formerly MATH 464, 465). Equivalence relations, mappings, groups, rings, fields, polynomial rings, modules, vector spaces, Galois theory. Prerequisites: grades of C or better in MATH 3210, 3620, and 3640, or permission of the Department Head. Mathematics majors must take this sequence or MATH 4410-4420 or STAT 4210-4220. MATH 4640 is offered in the fall and 4650 in the spring.

MATH 4724 Student Teaching of Mathematics in the Secondary Schools (9) (Formerly MATH 472S). 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 4705, which is taken concurrently. Offered on demand.

MATH 4730, 4740 Logic I, II (3, 3) (Formerly MATH 473, 474). Introduction to mathematical logic. Logic \(I\) is a survey of fundamental material including the statement calculus and the predicate calculus. Logic II is an introduction to Fuzzy Logic and Gödel's Incompleteness Theorem. Prerequisite: grade of C or better in MATH 2110 or permission of the Department Head. Offered on demand.

MATH 4750 History of Mathematics (3) (Formerly MATH 475). The origin and development of mathematical ideas, beginning with geometry and algebra and continuing through selected topics in modern mathematics. Prerequisite: grade of C or better in MATH 2110 or permission of the Department Head. Offered in fall or even numbered and summer of odd-numbered years.

MATH 4900 Special Topics (3) (Formerly MATH 490). 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.

\section*{Physics (PHYS)}

PHYS 2010 College Physics I (3). The first course in a non-calculusbased introductory physics sequence. Topics included are mechanics and heat. The course presents the basic principles of physics. It is required of biology, pre-medicine, and allied health profession majors. Prerequisite: grade of C or better in MATH 1140, 1720, or 1730. Offered in fall, spring, and summer.

PHYS 2011 College Physics I Laboratory (1). One two-hour laboratory each week. This course is designed to be taken concurrently with the corresponding lecture course, PHYS 2010. Offered in fall, spring, and summer.

PHYS 2020 College Physics II (3). The second course in a non-calculusbased physic sequence. Topics included are sound, light, electricity, mag-
netism, and modern physics. Prerequisite: grade of C or better in PHYS 2010. Offered in fall, spring, and summer.

PHYS 2021 College Physics II Laboratory (1). One two-hour laboratory each week. This course is designed to be taken concurrently with the corresponding lecture course, PHY 2020. Offered in fall, spring, and summer.
PHYS 2110 General Physics I (3) (Formerly PHYS 2030). Principles of mechanics, rotational mechanics, fluid mechanics and thermodynamics. The first course in calculus-based physics sequence that is intended for student with majors in physics, engineering, mathematics, or a physical science. PHYS 2110 with accompanying laboratory, is required of all physics and Mathematics majors. Prerequisite: MATH 1720 and 1915; Corequisite: MATH 1925. Offered in fall, spring, and summer.

PHYS 2111 General Physics I Laboratory (1) (Formerly PHYS 2031). One two-hour laboratory per week designed to be taken concurrently with the corresponding lecture course, PHY 2110. Required of all Physics and Mathematics majors. Offered in fall, spring, and summer.
PHYS 2120 General Physics II (3) (Formerly PHYS 2040). Principles of sound, electricity, magnetism, and optics. The second course in calculusbased physics sequence. PHYS 2120 with accompanying laboratory, is required of all Physics and Mathematics majors. Prerequisite: PHYS 2110. Offered in fall, spring, and summer.

PHYS 2121 General Physics II Laboratory (1) (Formerly PHYS 2041). One two-hour laboratory per week designed to be taken concurrently with corresponding lecture course, PHYS 2120. Required of all Physics and Mathematics majors. Offered in fall, spring, and summer.

PHYS 2230 General Physics III (3) (Formerly PHYS 223). Principles of gravitation, wave mechanics, and modern physics. Problem solving techniques. The third course in a calculus-based physics sequence. Prerequisite: PHYS 2120. Offered in fall.

PHYS 3110, 3120 Electricity and Magnetism I, II (3, 3) (Formerly PHYS 311, 312). Fundamentals of theoretical electricity and magnetism. Emphasis is placed upon problems using vector calculus in three dimensions. Prerequisites: MATH 2110 or 2125, AND PHYS 2120, 2121, all with a grade of \(C\) or better. Three lectures per week. Required of all Physics majors. PHYS 3110 is offered in fall of even-numbered years and 3120 in spring of odd-numbered years.

PHYS 3140 Optics (3) (Formerly PHYS 314). A brief review of geometrical optics and a study of physical optics, including spectroscopy. Prerequisites: MATH 1920 and either of the sequences: PHYS 2020, 2021 or PHYS 2120, 2121. Three lectures and one laboratory period per week. Offered in spring of odd-numbered years.
PHYS 3200 Heat and Thermodynamics (3) (Formerly PHYS 320). A study of the fundamentals of heat and an introduction to thermodynamics with applications to chemistry. Prerequisites: PHYS 2120, 2121, and MATH 1920. (MATH 3610 and either MATH 2110 or 2125 recommended). Three lectures per week. Required of all Physics majors. Offered in spring of even-numbered years.

PHYS 3210, 3220 Mechanics I, II (3, 3) (Formerly PHYS 321, 322). Statics and dynamics of particles and rigid bodies, Lagrange's and Hamilton's equations, fluid statics, and vibrations. Prerequisites: PHYS 2120, 2121, and MATH 1920. MATH 3610 and either MATH 2110 or 2125 recommended. Three lectures per week. PHYS 321 required of all Physics majors. PHYS 3210 is offered in fall of odd-numbered years and 3220 is offered on demand.

PHYS 3411, 3421 Advanced Physics Laboratory I, II (2, 2) (Formerly PHYS 341, 342). 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: PHYS 2120, 2121, and MATH 1920. Two laboratory periods per week. Required of all Physics majors. PHY 3411 is offered in fall and 3421 in spring.
PHYS 3610 Solid State Physics (3) (Formerly PHYS 361). 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 2120, 20121 and either MATH 2110 or 2125. Required of all Physics majors. Offered in fall of even-numbered years.

PHYS 4100, 4110 Introduction to Quantum Mechanics I, II (3, 3) (Formerly PHYS 410, 411). Introduction to fundamental principles of quantum
mechanics and methods of calculation, with application to atomic, molecular, and nuclear physics. PHYS 4100 is required of all Physics majors. Prerequisites: PHY 2120, 2121, and MATH 1920. PHYS 4100 is offered in spring of odd-numbered years and 4110 is offered on demand.

PHYS 4120, 4130 Modern Physics I, II (3, 3) (Formerly PHYS 412, 413). 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. PHYS 4120 is required of all Physics majors. Prerequisites: MATH 1070 and either of the following two sequences: PHYS 2020, 2021, or PHYS 2120, 2121. PHYS 4120 is offered in fall of even-numbered years and 4130 is offered on demand.

PHYS 4500 Senior Project (3) (Formerly PHYS 450). Individual study and presentation of a special topic in physics. Required of all Physics majors. Prerequisite: senior standing. Offered in spring.
PHYS 4600 Undergraduate Readings and Research (3) (Formerly PHYS 460). Individual study and research under faculty guidance. Prerequisites: 12 hours of upper-level physics and permission of instructor. Offered on demand.

PHYS 4900 Special Topics in Physics (Up to 9 hours total) (Formerly PHYS 490). 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: PHYS 2120, 2121, and permission of the instructor. Offered on demand.
PHYS 4905 Advanced Laboratory Studies (2)
PHYS 4906 Analytical Mechanics (3)
PHYS 4907 Electricity and Magnetism (3)
PHYS 4908 Modern Physics (3)
PHYS 4909 Optics (3)
PHYS 4910 Quantum Mechanics (3)
PHYS 4911 Research Project (3)
PHYS 4912 Solid State Physics (3)
PHYS 4913 Thermodynamics and Statistical Mechanics (3)

\section*{Statistics (STAT)}

STAT 1510, 1520 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. STAT 1510 is offered in fall and 1520 on demand.

STAT 3110, 3120 Probability and Statistics I, II \((3,3)\) (Formerly STAT 311, 312). 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 1920 or permission of the Department Head. STAT 3110 is required of all Computer Science majors. STAT 3110 is offered every semester; 3120 is offered only in the spring.
STAT 3700 Introduction to Statistical Computing and Data Management (3) (Formerly STAT 370). Components of digital computers, characteristics of magnetic storage devices, use of JCL and utility programs, concepts and techniques of research data management. Prerequisites: MATH 1920 and CS 222, or permission of the Department Head. Offered on demand.

STAT 4210 Statistical Methods I (3) (Formerly STAT 421). Approaches to the problems of description and goodness of fit; univariate location and scale; elvariate independence and correlation; comparison of independent or matched samples, involving categorical, discrete, or continuous data; non-parametric tests. Prerequisite: STAT 3120 or permission of the Department Head. All Mathematics majors must take the STAT 4210-4220 sequence or MATH 4410-4420 or MATH 4640-4650. Offered in fall.

STAT 4220 Statistical Methods II (3) (Formerly STAT 422). A continuation of STAT 4210. 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 4210 or permission of the Department Head. Offered in spring.

Department of Social Work and Sociology

\author{
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}

Faculty: A. Blasi, D. Butler, W. DeBerry, R. Hampton, B. Husaini, B. Kilbourne, W. Lawson, M. Mahmoud, E. Rhodes, E. Sanford, J. Scales, V. Williams

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 Rationale: Tennessee State University has a service-mix area that includes approximately 1.1 million people, including all ethnicities, races and socioeconomic groups. The Nashville metropolitan area, including a small rural population requires a variety of social service agencies to serve this population. Additionally, Tennessee State University's student body and faculty originate from the United States and more than fifty countries. The Social Work Program is needed to provide leadership and to produce a reservoir of Social Work professionals who can serve diverse populations in Nashville, Middle Tennessee, the State of Tennessee, and the nation.

Mission Statement: The Mission of the Social Work Program is to prepare students for entry-level professional social work practice. This includes preparing graduates of the program primarily for an urban population, the promotion of social and economic justice, to respond to diversity and oppression, and to serve populations-atrisk. Additionally, the program provides leadership and a reservoir of social work professionals for the region.

The Goals of the Social Work Program are to: (1) prepare students for professional entry-level generalist social work practice to effectively meet the human needs of individuals, families, groups, organizations and communities in Metro Nashville; (2) prepare graduates who are aware of their responsibility to continue their professional growth and development; (3) provide students with an understanding of the dynamics and consequences of human oppression and discrimination, and with strategies to promote social and economic justice; (4) provide content about the social environment of social work practice, the changing nature of this context, and the behavior of organizations and the change process; (5) infuse throughout the curriculum the values and ethics that guide professional social workers in their practice; (6) provide to students of diverse social, economic, racial and cultural backgrounds the opportunity to become professional social workers.

Program Objectives: The objectives of the Social Work Program are to produce graduates who can (1) apply a generalist framework of knowledge, skills and values for entry-level social work practice based on a problem-solving process including engagement, assessment, planning, implementation, evaluation, termination, and follow-up with systems of various sizes; (2) demonstrate knowledge of the psychological, biological, and social aspects that affect human behavior and utilize relevant theory to understand interactions among and between social systems including individual, families, groups, organizations and communities; (3)
understand the history of the social work profession and its current structures and be able to engage in policy formulation and analyze the impact of social policies on client systems, workers and agencies; (4) utilize supervision as social work generalists within agencies and community settings; (5) build their professional social work practice on a liberal arts foundation including an ability to think critically, learn independently, and demonstrate effective oral and written communication skills in their professional practice; (6) develop an ability to evaluate research, apply research findings and implement ethical, qualitative and quantitative research to evaluate and inform their practice interventions; (7) demonstrate appropriate professional use of self and apply social work values and ethics, respecting the dignity of the individual client self-determination and human diversity; (8) acquire an understanding of discrimination, oppression, and strategies of change, promoting social and economic justice for all people, especially for populations-at-risk; (9) demonstrate knowledge of urban community resources that serve individuals, families and groups from diverse populations; (10) develop a commitment to lifelong learning and personal growth and development; (11) function within organizations and service delivery systems under supervision to become advocates for client systems and to seek organizational change.

The baccalaureate Social Work Program is the only public program in Nashville, Tennessee that prepares students for entrylevel professional practice. It also prepares students for acquiring registration, certification, and licensure in social work.

Career Opportunities: Career opportunities include employment at the professional entry-level in social work positions in public and private agencies in the following areas: human services, public health, mental health, mental retardation, corrections, social services in hospitals and nursing homes, senior citizen centers, state and county social services agencies, public housing, adult protective services, child protective services, school social work, planned parenthood centers, 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 to the profession. The Program has been accredited since 1974.

Admission and Exit Requirements: Students who wish to gain admission to the Social Work Program must meet the university admission policy, complete the university general education requirements, submit an application to be reviewed by the advisor, earn a cumulative grade point average of 2.3 ( 4.0 scale) on college-level coursework, and complete the Rising Junior Examination. After the review of the formal application, the faculty advisor conducts an interview. The interview serves as the primary tool for exploration of student's knowledge of the profession of social work, motivation for selecting social work as a major, prior work or volunteer experiences, and future career goals. The advisor then meets with the faculty to decide on admission of student. 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 general education 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. 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 content and quality and come from a CSWE-accredited program.

Departmental Requirements
120 Semester Hours
For Bachelor of Science Social Work

A student must complete a minimum of 120 semester hours to receive a degree. A minimum of 60 of the semester hours must be in courses on the 3000 and 4000 level. A minimum of 48 semester hours is required in social work professional courses, 18 related liberal arts perspective semester courses, and 42 semester hours of general education courses.

General Education Core
Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II 6
(minimum grade of \(C\) in each)
COMM \(2200 \quad\) Public Speaking 6

3
Humanities and/or Fine Arts (9 hours)
ENGL 2013 Black Arts and Literature 3
ENGL 2023 Black Literature: Short Story and Novel 3
ART or Music 1010Art Appreciation, or Music Appreciation 3
Social and Behavioral Science (6 hours)
PSYC \(2010 \quad\) General Psychology I
SOCI 2010 Introduction to Sociology 3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
BIOL 1010/1011 Introductory Biology I and lab 4
BIOL 1020/1021 Introductory Biology II and lab 4
Mathematics ( 3 hours)
MATH \(1110 \quad 3\)
Orientation (1 hour)
ASOR 1002 Orientation for Social Science Majors
Total General Education Hours
Other Requirements:
ECON 2010 Principles of Economics I 3
POLI 2010 American National Government 3
PHIL 1030 Introduction to Philosophy:
Contemporary Moral Issues
Electives

\section*{Upper-division Admission}

For admission into the upper-division program of the Social Work major, students must complete all of the requirements listed above under General Education Core and Other Requirements. In addition, they must have removed all high school deficiencies, satisfactorily completed all required remedial/ developmental courses, earned a cumulative grade point average of 2.3 on college-level coursework, and completed the Rising Junior Examination.

\section*{Professional Curriculum}

In the professional phase of the Social Work Program, students must complete a minimum of 50 semester hours of Social Work courses, and 18 hours of related liberal arts perspective courses. Social Work majors must earn at least a C grade in the required social work courses. Students who earn less than a C grade must repeat them until they earn a C grade. Enrollment in Social Work courses 3300, 3350, 3400, 3450, 3500, 4600, 4800, 4850, 4100, 4200 and 4900 is limited to Social Work majors only:
SOWK 2010 Introduction to Social Work
SOWK \(2100 \quad\) Social Work Interviewing Skills 3
SOWK 3300 Human Behavior and the Social
Environment I
SOWK 3350 Human Behavior and the Social
Environment II
SOWK 3400
SOWK 3450
Social Welfare Policy
Social Welfare Policy Analysis
Social Work Practice I

SOWK 4600
Social Work Practice II
SOWK 4800
Social Work Research I
SOWK 4850
SOWK 4100
Social Work Research II
Field Instruction 8
SOWK 4200
Field Instruction Seminar
Senior Seminar in Social Work
SOWK 4900
SOWK 3000/4000
HUM Elective
SOCI 3000
SOCI 3600
PSYC 3510
POLI 4200
ENGL 3101

RELS 2011 World Religions
Social Statistics
The Family
Developmental Psychology
Legislative Process
Technical Report Writing - SW

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 services 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 instruction program.

Students must spend a minimum of 450 clock hours ( 1 semester) in field instruction in selected social service agencies and organizations, while registered for SOWK 4100 Field Experience. This experience provides students with an opportunity to apply theory to actual practice under supervision and guidance of a qualified practitioner. Students are evaluated on the basis of their growth and development in relation to the program's formal education outcomes. Students must have a cumulative grade point average of at least 2.3 and must have earned the grade of \(C\) or better in SOWK 2010, 2100, 3300, 3350, 3400, 3450, 3500, 4600, and 4800, as well as in SOC 3000, before being admitted to Field Instruction. No academic credit is given for life experience or prior work experience. Only Social Work majors are admitted to the Field Instruction program.

\section*{Sociology Program}

General Statement: Sociology is the study of group life. As a social science, it combines scientific and humanistic perspectives to identify, describe, explain, and understand the connections between the social forces that help shape who we are, what we believe, how we behave, and how we choose to live our lives. It examines how we shape our world through our interactions with others and by the choices we make, and how and why groups form, organize, achieve goals, and evolve. Key areas of inquiry include culture, identity, urban and rural life, family patterns and relationships, social change, racism, sexism, social class, economic systems, political power, conflict, education, population, environment, technology and communications, health care and illness, social movements, community responses to disasters, life in organizations, and contemporary social issues. In recent years the skills that are cultivated in sociological research have been in high demand by business, industry, and government. Sociology majors should choose electives both in the field and outside the field with this in mind.

Mission: The Sociology Program's mission is to prepare students for entry level professional employment in government, education, and business, industry, and community organizationswith emphasis on the acquisition of basic research skills. The program also prepares students for graduate and professional study in Sociology and other social science disciplines, law, and business. The program's overall orientation is consistent with the College of Arts and Sciences' mission to provide a broad liberal arts education

Objectives: This program of study is designed to develop students': 1) understanding of the connections between the social forces that help shape society; 2) knowledge of sociological concepts and theoretical perspectives on human social behavior; 3) skill in using social research and statistical methodology; 4) leadership and critical thinking skills; and 5) ability to engage in a lifetime of learning.

Career Opportunities: Career opportunities include employment in local, state, and federal government, and social and community service agencies in the areas of housing, juvenile courts and juvenile and adult corrections, urban and community planning/development, mental health and drug counseling, youth guidance, human services, and social research; and in business and industrial management and management trainee programs in retail, manufacturing, insurance, banking, utilities, journalism, and personnel.

\section*{Departmental Requirements \\ For Bachelor of Science Sociology}

30 Semester Hours

\section*{General Education Core}

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II 6
(minimum grade of C in each)
COMM \(2200 \quad\) Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2010-2230 Sophomore Literature I 3
Elective From approved list. 3
Elective From approved list. 3
Social and Behavioral Science (6 hours)
Flective
From approved list
Elective From approved list. 3
History ( 6 hours, choose any of the two below)
HIST \(2010 \quad\) American History I
HIST 2020 American History II 3
HIST 2030 History of Tennessee 3
Natural Science (8 hours)
Lecture and lab from approved list. 4
Lecture and lab from approved list. 4
Mathematics (3 hours)
One course from approved list. 3
Orientation (1 hour)
ASOR 1002 Orientation for Social Science Majors
Total General Education Hours
Other Requirements:
ENGL 2012-2322 Sophomore Literature II
One course from the following: ANTH 2300, ECON 2010,
GEOG 1010, 1020, POLI 2010, PSYC 2010

\section*{Upper-division Admission}

For admission into the upper-division program of the Sociology major, students must complete all of the requirements listed above under the General Education Core and Other Requirements; in addition, they must have earned at least a C in SOCI 2010. 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.

\section*{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 .

SOCI 2010
SOCI 3000

Introduction to Sociology
\begin{tabular}{llr} 
SOCI 4520 & Senior Project & 3 \\
SOCI 4900 & Sociological Thought & 3 \\
SOCI 4910 & Sociological Theory & 3 \\
SOCI or ANTH & Upper-division Electives & 12
\end{tabular}

Minor Requirements: SOCI 2010 and 15 hours of upper-division Sociology courses.

\section*{Bachelor of Science Degree in Social Work}

\section*{Suggested Four-Year Plan}

\section*{FRESHMAN YEAR}
FALL SEMESTER
ENGL 1010
HIST 2010
BIOL 1010, 1011
MATH 1110
SOCI 2010
ASOR 1002
\begin{tabular}{|c|c|c|c|}
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline SOWK 2010 & 2 & SOWK 2100 & 3 \\
\hline ENGL 2013 & 3 & ENGL 2023 & 3 \\
\hline ECON 2010 & 3 & PHIL 1030 & 3 \\
\hline COMM 2200 & 3 & HUM ELECTIVE & 3 \\
\hline PSYC 2010 & 3 & FREE ELECTIVE & 3 \\
\hline Free Elective & 3 & & \\
\hline & 17 & & 15 \\
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline FALL SEMESTER & HR & SPRING SEMESTER & HR \\
\hline SOWK 3400 & 3 & SOWK 3350 & 3 \\
\hline SOWK 3300 & 3 & SOWK 3450 & 3 \\
\hline SOCI 3600 & 3 & SOWK 3500 & 3 \\
\hline PSYC 3510 & 3 & ENGL 3106 & 3 \\
\hline POLI 4200 & 3 & SOWK Elective, 3000/4000 & \\
\hline & & & 2 or 3 \\
\hline & 15 & & or 15 \\
\hline
\end{tabular}
\begin{tabular}{lrlr}
\multicolumn{3}{c}{ SENIOR YEAR } \\
FALL SEMESTER & HR & SPRING SEMESTER & HR \\
SOWK 4600 & 3 & SOWK 4850 & 2 \\
SOWK 4800 & 3 & SOWK 4100 & 8 \\
SOWK ELEC, 3000/4000 Level \(2 / 3\) & SOWK 4200 & 3 \\
SOCI 3000 & 3 & SOWK 4900 & \(\frac{1}{14}\)
\end{tabular}

\section*{Bachelor of Science Degree in Sociology}

\section*{Suggested Four-Year Plan}

FRESHMAN YEAR

FALL SEMESTER
SOCI 2010
ENGL 1010
HIST 2010, 2020, OR 2030
MATH 1110
ASOR 1002

HR
3
3
3 HIST 2010, 2020, OR 2030

\section*{FALL SEMESTER \\ ENGL 2012-2322 \\ SCIENCE AND LAB SOCIAL SCIENCE}

\section*{SOPHOMORE YEAR}
\begin{tabular}{rlr} 
HR & SPRING SEMESTER & HR \\
3 & ENGL 2012-2322 & 3 \\
4 & SCIENCE AND LAB & 4 \\
9 & COMM 2200 & 3 \\
\(\overline{16}\) & ELECTIVES, ANY LEVEL & \(\frac{6}{16}\)
\end{tabular}

\section*{JUNIOR YEAR}

FALL SEMESTER
SOCI 3000
SPRING SEMESTER HR
SOCI 4900
SOCI 45103
SOCI, 3000/4000 LEVEL 6
ELECTIVES, 3000/4000 LEVEL 6
SOCI, 3000/4000 LEVEL
ELECTIVES, ANY LEVEL

\section*{SENIOR YEAR}

FALL SEMESTER HR SPRING SEMESTER HR
SOCI 45203 SOCI, 3000/4000 LEVEL 3
ELECTIVES, 3000/4000 LEVEL \(\underline{12}\) ELECTIVES, ANY LEVEL \(\underline{12}\)

15
15

\section*{Course Descriptions}

\section*{Social Work (SOWK)}

Course marked with an asterisk (*) are required for Social Work majors. Courses marked with an M are limited to Social Work majors.
*SOWK 2010 Introduction to Social Work (2) (Formerly SW 201). Introduction to the generalist perspective of social work practice and the profession of Social Work. This course will help students develop a more authentic understanding and appreciation of the profession. Students will be exposed to what social workers do and the importance of considering the environmental context that surrounds all decisions.
*SOWK 2100 Social Work Interviewing Skills (3) (Formerly SW 210). Introduction to Social Work generic interviewing skills, essential facilitative qualities, and professional integrity. Emphasis on working with culturally and psychologically diverse, and oppressed client systems. Prerequisite: SOWK 2010.
*(M) SOWK 3300 Human Behavior and the Social Environment I (3) (Formerly SW 330). A bio-psychosocial examination of human beings from conception through old age and death. The focus is on humans as systems and the person - environment fit. Prerequisites: SOWK 2010, 2100, PSYC 2010. Co-requisite: PSYC 3510. Enrollment limited to Social Work majors only.
*(M) SOWK 3350 Human Behavior and the Social Environment II (3) (Formerly SW 335). A description and analytical examination of families, groups, communities and organizations as they affect and are affected by the social environment. Prerequisite: SOWK 3300. Enrollment limited to Social Work majors only.
*(M) SOWK 3400 Social Welfare Policy (3) (Formerly SW 340). Examination of the historical development of the social welfare system and the establishment and evolution of social welfare policies, practices and programs from 1500 to the present. Offered fall semester only. Prerequisites: SOWK 2010, HIST 2010 \& 2020, PHIL 1030. Enrollment limited to Social Work majors only.
*(M) SOWK 3450 Social Welfare Policy Analysis (3) (Formerly SW 345). A critical analysis of contemporary social policies and programs for social work practitioners. Emphasis is on developing and using a practical method for analyzing and interpreting current programs and policies directed at meeting human needs. Prerequisite: SOWK 3400, ECON 2010. Enrollment limited to Social Work majors only.
*(M) SOWK 3500 Social Work Practice I (3) (Formerly SW 350). Provide a comprehensive study to the general problem-solving method used in generalist social work practice with client systems of various sizes including individuals, families, groups, communities, and organizations. Prerequisites: SOWK 2010, 2100, 3300, PSYC 3510. Co-requisites: SOWK 3350, 3450. Enrollment limited to Social Work majors only.
*(M) SOWK 4602 Social Work Practice II (3) (Formerly SW 360). Systematic use of the generalist perspective of social work practice and experiential use in working with groups, communities, and organizations from diverse populations, using the NASW Code of Ethics in social work methods of intervention. This course is a continuation of practice sequence initiated in SOWK 3500. Prerequisite: SOWK 3500 Enrollment limited to Social Work majors only.
*(M) SOWK 4800 Social Work Research I (3) (Formerly SW 380). The rationale, principles, ethics, goals, methods, and techniques of the scientific research process in social work. Prerequisites: SOWK 3500, MATH 1110, and BIOL 1010 \& 1020. Enrollment limited to Social Work majors only.
*(M) SOWK 4850 Social Work Research II (2) (Formerly SW 385). The development and implementation of a practice-related research design. Emphasis is on data collection, data analysis, and reporting of data collected in field placement. Prerequisite: SOWK 4800. Co-requisites: SOWK 4100, 4200. Enrollment limited to Social Work majors only.

SOWK 4000 Social Work Intervention in Health (2) (Formerly SW 400). A course designed to acquaint the student with the symptoms, etiology, and physical and emotional aspects of acute and chronic diseases, illnesses, and disabilities, with the development of comprehensive medicine involving the whole person in his or her milieu. Emphasis is placed on acquiring knowledge regarding social aspects of illness, as well as use of community resources for the continuation of preventive methods. One hour per week is devoted to participatory observation at a health-related agency. Prerequisite: admission to upper division.
*(M) SOWK 4100 Field Instruction (8) (Formerly SW 410). Field instruction to provide the student with the opportunity to apply and integrate academic content and to develop skills that meet the requirements for entry-level professional social work practice. Supervision in the field is provided by a qualified practitioner committed to undergraduate social work education. Students are required to spend a minimum of 450 clock hours in an educationally oriented field practicum. Seniors are admitted after the completion of a formal admission process, including recommendation by the student's advisor. Prerequisites: completion of general education core, SOWK 2010, 2100, 3300, 3350, 3400, 3450, 3500, 4600, 4800, SOCI 3000. Co-requisites: SOWK 4850, 4200. Enrollment limited to senior Social Work majors only.
*(M) SOWK 4200 Field Instruction Seminar (3) (Formerly SW 420). A course to give students in field instruction an opportunity to discuss and share agency experiences and to relate social work theory to direct field practice. Discussion in the Seminar moves from the level of personal experiences to abstraction. Co-requisites: SOWK 4850, 4100. Enrollment limited to Social Work majors only.

SOWK 4400 Social Work Services for Children and Youth (3) (Formerly SW 440). General knowledge of the basic concepts of social work principles and practice as a method of helping children and adolescents with their social problems. Course acquaints students with the social agencies and the social welfare system and their roles in providing services to children and youth. The course also increases the student's understanding of the adolescent peer group, family relationships, emotional and physical development, and role. Prerequisite: admission to upper division.

SOWK 4460 Intervention in Child Abuse and Neglect (3) (Formerly SW 446). Course designed to identify behaviors common to abusive and neglectful parents and children who have been abused. Specific emphasis is placed on the development of interventive skills for working with the families. Knowledge of the law in child abuse and neglect is one of the foci. Prerequisite: admission to upper division.

SOWK 3602 Ethnic and Minority Concerns in Social Work (2) (Formerly SW 460). A course designed to emphasize the general method of social work practice with ethnic minorities. Focus is on the African-American community and the issues of multiculturalism. Prerequisite: admission to upper division.

SOWK 4700 Gerontological Social Work (3) (Formerly SW 470). A course designed to examine the aging process and its impact upon the individual, the family, and society. Emphasis is placed on the physical, psychological, and sociological aspects of aging. An interdisciplinary approach is used in dealing with these aspects to enhance and enrich the understanding of the life process. Prerequisite: admission to upper division.
*(M) SOWK 4900 Senior Seminar in Social Work (1) (Formerly SW 490). A course designed to: (1) initiate areas of interest through discus-
sion; (2) emphasize new trends and contributions to the field; and (3) familiarize students with the various examinations and other techniques for gaining employment and admission to graduate school. Offered in spring semester only. Co-requisite: SOWK 4100, 4200, 4850. Enrollment limited to Social Work majors only.
(M) SOWK 4950 SW Readings and Research (3) (Formerly SW 495). Independent study and research under faculty guidance for students who desire to do special projects. Prerequisites: junior or senior standing and permission of instructor. Enrollment limited to Social Work majors only.

\section*{Sociology (SOCI)}

SOCI 2010 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.

SOCI 2110 Honors Introduction to Sociology (3). Honors version of SOCI 2010. Enrollment limited to students in the University Honors Program.
SOCI 2300 Social Problems (3) (Formerly SOC 230). A course which teaches students to assess critically social issues and problems which negatively affect institutions, groups, and individuals. The thrust is to discuss and analyze these issues and problems using the major theories in sociology. (Formally SOC 330)
SOCI 2400 Courtship and Marriage (3) (Formerly SOC 240). 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. (Formally SOC 340)
SOCI 3000 Social Statistics (3) (Formerly SOC 300). Introduction to elementary statistics, with emphasis on analysis and interpretation of social survey data. Required of all Social Work and Sociology majors.

SOCI 3101 Sex, Gender, and Social Interaction (3) (Formerly SOC 310). 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.

SOCI 3200 Anthropology (3) (Formerly SOC 320). 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.

SOCI 3350 Sociology of Health (3) (Formerly SOC 335). 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.

SOCI 3450 Cultural and Social Aspects of Health (3) (Formerly SOC 345). 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 SOCI 2010.

SOCI 3500 Social Psychology (3) (Formerly SOC 350). Analysis of the social act. Topics include socialization, symboling systems, social status and social role, personality, and small-group analysis and research.
SOCI 3550 Social Movements (3) (Formerly SOC 355). Development, organization, and function of social movements, especially ideology, leadership, and organization of political, religious, and other types of social movements.

SOCI 3600 The Family (3) (Formerly SOC 360). 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.

SOCI 3700 Minority Group Problems (3) (Formerly SOC 370). 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.

SOCI 3750 Sociology of Sports (3) (Formerly SOC 375). Examination of social mobility, environmental adjustments, and problems of male and female athletes. Attention is paid to such factors as race, cultural back-
ground of ethnic groups, and other factors involved in apparent group superiority in some sports.

SOCI 3800 Industrial Sociology (3) (Formerly SOC 380). 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.

SOCI 3850 Political Sociology (3) (Formerly SOC 385). 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.

SOCI 3950 Racism: A Sociological Analysis (3) (Formerly SOC 395). 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.

SOCI 4000 Criminology (3) (Formerly SOC 400). An examination of the problems of crime and criminals, the making of the criminal, the theories of crime and punishment, machinery employed in dealing with the criminal, penal and correctional institutions, and programs of correction. Case studies and visits to institutions serve as aids in enriching understanding. Prerequisite: admission to upper level.

SOCI 4100 Juvenile Delinquency (3) (Formerly SOC 410). Examination of theories of juvenile delinquency, the problems, causes, punishment, and correction of the delinquent. The course considers the machinery employed in dealing with the delinquent. Visits to institutions are made available. Prerequisite: admission to upper level.

SOCI 4150 Sociology and the Future. (3) (Formerly SOC 415). Methodologies for studying the future and their application to trends in population, organization, environment, technology, and the media. Alternative visions of the future are developed and evaluated. Prerequisite: admission to upper level.

SOCI 4200 Population Problems (3) (Formerly SOC 420). Growth and change in the composition and distribution of population in the world and in the United States. The course studies basic demographic concepts, theories of population growth and decline, and population policies. Prerequisite: admission to upper level.

SOCI 4300 Sociology of Child Development (3) (Formerly SOC 430). A study of the development of the child, with emphasis upon a distinct sociological approach to behavior in relation to the family, play groups, school situations, and the community. Designed to acquaint prospective teachers and majors in Sociology with the influences of social institutions upon the child's total development. Prerequisite: admission to upper level.

SOCI 4400 Rural Sociology (3) (Formerly SOC 440). A cross-cultural examination of rural life in the past and the present, focusing on change and its processes. Prerequisite: admission to upper level.

SOCI 4450 Sociology of Religion (3) (Formerly SOC 445). Interrelationship of society, culture, and religion. Prerequisite: admission to upper level.

SOCI 4510 Introduction to Social Research (3) (Formerly SOC 451). 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: SOCI 2010 and 3000 and admission to upper level. Required of all Sociology majors.
SOCI 4520 Senior Project (3) (Formerly SOC 452). 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: SOCI 3000 and 4510.

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: SOCI 3000, 4510, and 4600.

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' atti-
tudes toward a social situation or problem. Research design must be developed and approved before project is initiated. Prerequisites: SOCl 3000,4510 , and admission to upper level.
SOCI 4520 (Formerly SOC 452) is required of all Sociology majors.
SOCI 4600 Urban Sociology (3) (Formerly SOC 460). Growth of urbanism throughout the world, including internal structure of the city, metropolitan areas, urban fringe and suburban areas, and analysis of social institutions in urban and metropolitan areas. Prerequisite: admission to upper level.
SOCI 4650 Complex Organizations (3) (Formerly SOC 465). Structure and function of formal organizations and the interrelationships of organizational variables, such as power, authority, influence, efficiency, hierarchy, and stability. Prerequisite: admission to upper level.
SOCI 4700 Social Stratification (3) (Formerly SOC 470). A study of social, sexual, and racial inequalities and their causes and consequences. Topics include class and ethnic ranking, discrimination, power, status, and social mobility in American society. Prerequisite: admission to upper level.

SOCI 4750 Introduction to Medical Sociology (3) (Formerly SOC 475). A survey of the major concerns of medical sociology and social psychiatry. Emphasis is placed on such topics as distribution of disease in society, the organization of the health professions, social change and health care, death and dying, stress and disease, and social factors affecting health services and their utilization. Prerequisite: admission to upper level.

SOCI 4800 Collective Behavior (3) (Formerly SOC 480). Analysis of a wide variety of collective groupings and movements, including their origin, organization, membership, leadership, and dissolution. Course includes analysis of such social phenomena as audiences, publics, crowds, mobs, fads and fashions, and mass movements such as social unrest and reform. Prerequisite: admission to upper level.

SOCI 4900 Sociological Thought (3) (Formerly SOC 490). An introductory survey of the development of the field of sociology during the nineteenth and early twentieth centuries. Major emphasis is placed on the intellectual traditions which gave rise to sociology as a separate discipline. Theorists include Comte, Marx, Weber, Durkheim, and others. Prerequisites: 12 hours of sociology or permission of instructor. Required of all Sociology majors. Prerequisite: admission to upper level.

SOCI 4910 Sociological Theory (3) (Formerly SOC 491). A survey and analysis of the development of sociological theory in the twentieth century, with emphases on theory construction and theory in American sociology. Prerequisite: admission to upper level.

SOCI 4920 Black Thought: Social Theory I (3) (Formerly SOC 492). Introductory theory course for students of all disciplines. Course deals with black thought and social theory from ancient to contemporary times. Provides knowledge of the contributions of black thinkers and theoreticians to sociological thought. Prerequisite: admission to upper level.

SOCI 4930 Black Thought: Social Theory II (3) (Formerly SOC 493). A continuation on SOCI 4920, an introductory theory course for students of all disciplines. Course deals with black thought and social theory from ancient to contemporary times. Provides knowledge of the contributions of black thinkers and theoreticians to sociological thought. Prerequisite: admission to upper level.

SOCI 4950, 4955, 4956, 4957, 4958 Independent Studies and Reading (3, 3, 3, 3, 3) (Formerly SOC 495, 495A, 495B, 495C, 495D). Courses designed to allow students to work independently or in groups on topics of special interest not covered in depth in course offerings. Work may be done in a tutorial relationship with an individual faculty member or in a seminar. Prerequisites: admission to upper level and permission of instructor.

\section*{Anthropology (ANTH)}

ANTH 2100 Human Prehistory (3) (Formerly ANTH 210). 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 2300 Introduction to Cultural Anthropology (3) (Formerly ANTH 230). 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 2350 Principles of Cultural Anthropology (3) (Formerly ANTH 235). Basic concepts and objectives in study of culture, including the range of cultural phenomena and approaches to its study. Prerequisite: ANTH 230. Formerly ANTH 330.

ANTH 3100 Comparative Social Structures (3) (Formerly ANTH 310). 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 2300.

ANTH 3400 Religion of Primitive Peoples (3) (Formerly ANTH 340). Religions of non-literate peoples, including the place of religion in their social and cultural systems.

ANTH 3800 Language and Culture (3) (Formerly ANTH 380). Relationship between linguistic categories and patterns of culture. Prerequisite: ANTH 2300.

ANTH 4001 Special Topics (3) (Formerly ANTH 400). Student- or faculty-generated course. Scope of subject matter is determined by students and instructor. Prerequisites: admission to upper level and permission of instructor. A writing-intensive course.

ANTH 4100 Indians of the Southwest United States (3) (Formerly ANTH 410). Survey of Southwestern Indian cultures with emphasis on Pueblo society. Course examines the lifeways of Southwestern Indians before and after European contact. Prerequisites: admission to upper level and ANTH 2300 or consent of instructor.

ANTH 4550 Indians of the Southeast United States (3) (Formerly ANTH 455). Survey of Southeastern Indian cultures, with emphasis on aboriginal adjustment to environment and lifeways of Southeastern Americans prior to Euro-American contact. Prerequisites: admission to upper level and ANTH 2300 or permission of instructor.

\author{
Tilden Curry, Ph.D., Dean \\ Avon Williams Campus \\ www.cob.tnstate.edu \\ (615) 963-7121
}

\section*{GENERAL STATEMENT}

The College of Business at Tennessee State University is strongly grounded with a stellar reputation afforded by accreditation at both the undergraduate and graduate levels by the major national accrediting agency for business schools-AACSB International - The Association to Advance Collegiate Schools of Business. The College is poised to successfully fulfill its mission with new academic programs, new corporate alliances, new international partners, and a newly renovated academic facility on the Avon Williams Campus which includes a state-of-the art financial trading center.

\section*{Vision}

Our vision is to be broadly recognized for the high quality of our academic program, graduates that compete successfully in the global marketplace, a strong teaching and research faculty, and important outreach services to the Nashville area business community.

\section*{Mission}

Our mission is to educate business professionals of the future through a complementary combination of teaching, research, and service focused on contemporary business operations, entrepreneurship, and urban economic development.
[The mission of the College of Business is guided by an appreciation of the institutional history of Tennessee State University and the obligations of a state university located in the heart of a vibrant metropolitan area with a diversified economy. This calls for the College of Business to prepare qualified students from a broad spectrum of society, to offer an appropriate array of sound baccalaureate and graduate degree programs, and to develop as one of the engines of economic development for its urban region containing local, national, and international businesses.]

\section*{Guiding Principles and Core Values}
- Academic Integrity
- Continuous Improvement
- Diversity
- Global Perspective
- Professionalism
- Service
- Collegiality
- Courtesy
- Ethical Conduct
- Mutual Respect
- Scholarship
- Teamwork

\section*{Instruction}

The strong credentials of the full-time tenured and tenure-track faculty are exemplified by the fact that \(100 \%\) hold a doctoral degree and the majority have practical business experience. Instruction is further strengthened by average class sizes of less than thirty students. The instructional program is designed to provide both traditional and innovative teaching approaches and the integration of business ethics, international business, and computer applications throughout the curriculum. Flexibility in class scheduling is provided by day, evening, and weekend course offerings.

\section*{Research}

The College of Business has a strong overall record in research productivity. Each faculty member remains current in his or her academic field and contributes to its advancement. Support for mission related research is provided through the College's Office of Business and Economic Research. Additionally, the College has two approved Chairs of Excellence. The Frist Chair of Excellence in Business currently provides impetus for entrepreneurial research, activities and alliances in the community. The TSU Chair of Excellence in Banking and Financial Services is designed to serve as a catalyst for enhancing the College's research as well as curriculum development in the area of banking and financial services.

\section*{Public Service}

Public Service is a strength of the College of Business. Services to the business community are provided through the:

Management Development Institute - Provides relevant programs of high quality to managers in the Nashville area. The Institute was created through an endowment from Aladdin Industries.

Nashville Business Incubation Center - Entrepreneurs are provided below market rental rates within the Incubation Center for up to five years, as well as managerial and administrative support. The Center is the result of collaborative efforts between TVA, EDA, TSU, and Growth Enterprises Nashville, Inc.

Office of Business and Economic Research - The office supports the overall mission of the College of Business by providing data and analyses of economic, demographic, and business trends for Tennessee's private and public sector organizations. This office focuses on urban business and economic development issues and conducts applied research on a wide variety of topics related to urban development, small and minority businesses, and entrepreneurship through the combined expertise of faculty, staff, and students from the College of Business.

Office of International Business Programs - Strengthens the international dimension of the College of Business through establishing linkages with foreign institutions, student internships and study abroad opportunities, curricula enhancements, and the Windows onto the World Lecture Series.

Small Business Development Center - Provides one-onone business counseling, as well as workshops and seminars for several hundred small business clients each year. An extensive small business resource center, formerly known as the Small Business Resource Center of the Bank of America in Nashville, is an operational unit of the SBDC.

Additionally, business majors share their growing knowledge of the business world by providing community service through:

Junior Achievement - Through hands-on activities, TSU students, faculty and staff help elementary school children better understand the relationship between what they learn in school and their successful participation in our economy.

Students in Free Enterprise (SIFE) - Involves the community in the free enterprise system through public awareness campaigns and classroom activities with school-age children.

Student Small Business Consulting Services - Senior and junior level students enrolled in MGMT 3240 and 3250 form teams to provide in-depth research and insight pertaining to the specific concerns of small business owners.

Volunteers in Tax Assistance (VITA) - TSU students and faculty volunteer to prepare tax returns for individuals at no charge in this IRS sponsored program.

\section*{ACCREDITATION}

The College of Business is accredited at both the undergraduate and graduate levels by the prestigious AACSB International - The Association to Advance Collegiate Schools of Business.

\section*{STUDENT DEVELOPMENT SERVICES}

\begin{abstract}
ADVISEMENT
General advising in the College of Business is available Monday through Friday in two advisement centers, Avon Williams Campus, Suite H-408, (615) 963-7138 and Main Campus, Student Development Center, Holland Hall, Room 103, (615) 963-5145. It is recommended that students visit one of these offices on a regular basis to ensure that they are informed about current requirements and procedures. Students desiring career and academic advisement should contact the department appropriate to their major for the assigned faculty advisor. A student handbook is available as a source of information on the College's website.

The College of Business Student Development Center (SDC), located in Holland Hall on the Main Campus, is established to enhance academic achievement and career success for business majors. The Center maintains a hands-on approach with students and guides them through the matriculation process. The SDC provides easy access to information about College of Business policies, internships, career opportunities, professional development, and student organizations. The Center also produces the College of Business Student Handbook, a guide to College of Business policies and matriculation requirements.
\end{abstract}

\section*{INTERNATIONAL}

International linkages with Tunis El Manar University in Tunisia, Tianjin Polytechnic University in China, L'viv Institute of Management in Ukraine, and the Malawi Institute of Management have enhanced the international dimension of the College of Business. The international focus of the College is further evident through the Journal of Developing Areas, a scholarly publication distributed bi-annually throughout the world.

\section*{Internship and Co-op Programs}

Opportunities are available for qualified students to obtain paid on-the-job experience through internship and Co-op programs. The
programs involve multiple work experiences and are generally started during the student's sophomore or junior year. Students interested in the programs should contact the College of Business Assistant Director for Student Placement as early as possible.

\section*{CAREER OPPORTUNITIES AND PLACEMENT SERVICES}

The College of Business Office of Placement, in concert with the University's Career Development Center, facilitates interviews and information sessions for students desiring internships as well as full-time career positions. Each fall, more than 200 companies recruit on our campus, which include leading international firms such as: IBM, Dell, Cummins, Boeing, General Motors, and Kohl's. Because of these opportunities, TSU business graduates are contributing in companies throughout Nashville, the state, the nation, and the world.

\section*{STUDENT ORGANIZATIONS}

The College of Business encourages its students to participate in extracurricular activities. To complement the total educational experience and to provide leadership opportunities, the following business student organizations are available: Beta Gamma Sigma National Honor Society in Business, The Accounting Club, Advertising Club, Alpha Kappa Psi Professional Business Fraternity, Association of Information Technology Professionals, The Economics and Finance Society, The Finance Investment Club, The National Association of Black Accountants, Phi Beta Lambda, Society for Human Resource Management, and Students in Free Enterprise. For information on these professional organizations, contact the Student Development Center at (615) 963-5145 in the College of Business located on the Main Campus in Holland Hall, Room 103, or contact the College of Business Office of Public Service on the Avon Williams Campus at (615) 963-7137.

\section*{SCHOLARSHIPS}

Scholarships and academic awards are available on a competitive basis for College of Business majors. The awards are based on academic excellence, civic achievements, course of study, or other specific criteria developed by the sponsor. The scholarships and awards are sponsored by business, industry, individuals and professional organizations. For more information and/or applications, contact the College of Business Office of Public Service on the Avon Williams Campus at (615) 963-7137.

\section*{BUSINESS COMMUNITY INVOLVEMENT}

Many corporate alliances have been forged to further strengthen the College of Business. Eight corporations, including Dell, Boeing, Cummins, Genco, Corning, Digital Connections, Ingram Micro and Lexmark International, have recently stepped forward with pledges of over \(\$ 500,000\) in financial support and active executive participation in a new governing board to help develop the Supply Chain Management program. These new alliances complement long-standing support from the local business community through the College's Board of Advisors. Composed of approximately twenty-five senior executives, the board was formed in the early 1980s to assure that the Nashville area had an easily accessible and cost effective public higher education program in business that offered a relevant, practical, and comprehensive curriculum that met the most rigorous national accreditation standards. Another board, Growth Enterprise Nashville, is the policy board for the College's Nashville Business Incubation Center.

\section*{RESOURCES}

In a broad sense, the entire business community of Nashville offers an ideal laboratory for student development. The College of

Business is situated in the heart of downtown Nashville where faculty and students alike have ready access to sources of business and government information and relationships.

Special resources of the College of Business of particular interest to students are:

\author{
Accounting Tutorial \\ Chair of Excellence in Banking and Financial Services \\ College of Business Placement Office \\ Database Lab \\ Economics and Statistical Tutorial \\ Financial Trading Room \\ Frist Chair of Excellence in Business \\ Hassan Adamu Distinguished Professorship \\ Microcomputer Labs \\ Nashville Business Incubation Center \\ \section*{Networking Lab} \\ Office of Business and Economic Research \\ Office of International Business Programs \\ Pilot Center of Excellence in Intelligence Studies \\ Small Business Development Center \\ Special Academic Counselors \\ Student Development Center \\ Student Professional Organizations
}

\section*{MAJORS IN BUSINESS}

Four undergraduate majors are offered in the College of Business. The curriculum for each of these majors (see below) is presented under the section describing each of the four academic departments of the College of Business.
\begin{tabular}{|c|c|c|}
\hline Departments & Majors & Degrees \\
\hline \multicolumn{3}{|l|}{Accounting \&} \\
\hline Business Law & Accounting & BBA \\
\hline Business Administration & Business Administration* & BBA \\
\hline Business Information Systems & Business Information Systems** & BB \\
\hline Economics and Finance & Economics and Finance & BBA \\
\hline \multicolumn{3}{|l|}{*Within the major of Business Administration, a student may concentrate in any one of the five following areas: General Business, Management, Marketing, Real Estate and Urban Development, or e-Business and Supply Chain Management.} \\
\hline **Within the major of may follow the Industry, & ss Information Systems, usiness Technology con & student tration. \\
\hline
\end{tabular}

\section*{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 per-
sonal interests, satisfy intellectual curiosity generated by introductory courses, enrich their undergraduate experience, differentiate their individual program of study from those of fellow students, or enhance their opportunities for employment or for admission to graduate or professional schools.

Students pursuing the Bachelor of Business Administration degree are encouraged to obtain minors in fields such as Psychology, Foreign Language, and Computer Science. Students outside the College of Business may apply for a minor in Business Administration or other minors offered by the College.

\section*{General Business Minor}

For the General Business minor, students need to select at least 18 hours of business courses which meet their objectives for taking the minor. If courses selected have prerequisites, these must be satisfied. Only juniors and seniors may enroll in 3000 or 4000 level business courses. ACCT 2010, ECON 2010, and MGMT 3010 should be included in all business minors. Other suggested courses for a minor in general business are listed below:
\begin{tabular}{ll} 
BISI 3230 & 3 \\
BISE 3150 & 3 \\
MGMT 4030 & 3 \\
MKTG 3010 & 3
\end{tabular}

\section*{MBA Foundation Courses}

Eighteen hours of the following courses may also be used to constitute a business minor, and are useful in preparing students for a graduate business administration degree. For more information, see the graduate catalog of the school of your choice.
\begin{tabular}{ll} 
Accounting Principles & 6 \\
Business Finance & 3 \\
Economic Principles & 6 \\
Information Systems & 6 \\
Legal Environment & 3 \\
Mgt. \& Org. Behavior & 3 \\
Marketing Principles & 3 \\
Quantitative Methods & 3
\end{tabular}

ACCT 2010, ACCT 2020 FINA 3300
ECON 2010, ECON 2020
BISI 2150, BISI 3230
BLAW 3000
MGMT 3010
MKTG 3010
ECON 2050

\section*{International Business Minor}

A minor is available in International Business. It is open to both business and non-business majors. This minor is designed to provide a broad interdisciplinary background of the cultural, social, economic, political, and business environment of the world. The purpose is to prepare more globally competent men and women to function productively in the world economy. The specific curriculum requirements are listed below:
1. Required Courses

ECON 4100 International Economics 3
MGMT 4800 Internship/International 3
2. Guided Electives (Choose 3)

MGMT 4120 International Business Management 3
MKTG 4350 International Marketing 3
FINA 4700 International Finance 3
ACCT 4250 International Accounting 3
ECON 4150 Economic Development 3
3. General Electives for Business Majors (Choose 1)
POLI 3600 Intro. to Comparative Govt. \& Politics

POLI 3930 Political Economy 3
POLI 3630 International Relations 3
4. Area Studies (Consent of Advisor Needed) \(\frac{3}{21}\)
Total
5. Other Requirements
a. All students with a minor in International Business are required to complete two years of college language studies. Students proficient in a foreign language may test out of this requirement through an exam arranged by the Department of Languages, Literature and Philosophy.
b. Only students with an overall GPA of 2.5 at the end of the sophomore year, as well as in ECON 2010-ECON 2020 and ACCT 2010-2020, will be allowed to declare a minor in International Business.
c. All students are expected to meet the prerequisites for each course taken. Any exceptions, based on the background of any given student, must be approved in writing by an advisor in the Office of International Business Programs and a student's department head.
d. Business majors may apply restricted and unrestricted business electives in the major area towards satisfying the International Business minor.

\section*{ADMISSION, RETENTION AND GRADUATION}

Students pursuing the Bachelor of Business Administration (BBA) degree must make application to the College of Business through their respective department head for admission to the Upper Division after successfully completing the Lower Division. Admission is required in order to receive degree credit for 3000 and 4000 level business courses.
1. The College's policy is not to recognize for degree purposes credits earned in upper division ( 3000 and 4000 level business courses) prior to a student's Tentative or Full Admission to the Upper Division of the College of Business. It is the student's responsibility to have his/her status verified before registering for upper division business courses.
2. Administrative Withdrawal. A student may be administratively withdrawn from any College of Business course when the student is not eligible to be enrolled in the course
3. At least 50 percent of the business credit hours for the business degree must be earned at Tennessee State University.
4. Transfer students should consult their department head regarding core course requirements if they are transferring in business courses or to determine the acceptability of business courses earned at other institutions.
5. 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.
6. 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.

\section*{Tentative and Full Admission to the College of Business}

Business majors who have completed all except nine hours of the required lower division courses (1000 and 2000 level courses) with a cumulative GPA of at least 2.00 and a lower division business core GPA of at least 2.00, may apply for tentative admission to the upper division of the College Business. Admission to the Upper Division is required to gain approval to take 3000 and 4000
level courses. The Lower Division business core is made up of the following courses: ACCT 2010, ACCT 2020, ECON 2010, ECON 2020, ECON 2040, and ECON 2050. Eligible students will be granted tentative or full admission. The Rising Junior Examination is required for all baccalaureate degree seekers who entered TSU in August 1997 and after. Students who transfer to TSU with more than 60 credit hours are exempt from taking the Rising Junior Examination.

Tentative admission is valid only for the semester for which it is issued. While holding tentative admission, students should be enrolled in all remaining required lower division courses. If all lower division course requirements are not successfully completed the first semester of tentative admission, students must reapply for tentative admission. The maximum number of Upper Division business credits that can be approved for degree purposes while a student holds tentative admission is 24 hours.

To gain full admission to the College of Business, all Lower Division requirements must be successfully completed with a GPA of 2.00 or higher for both the Lower Division business core courses and for all lower division courses.

\section*{Credit Hours Required for Graduation}

Credit hours required for the Bachelor of Business Administration degree total a minimum of 120 semester hours for all College of Business majors and concentrations.

\section*{Degree Credit for Business Internship, and Independent Study Courses}

A maximum of six semester hours of credit earned in business internship and independent study courses (combined) may be applied to degree requirements. Approval of the appropriate department head is required to enroll in College of Business internship, and independent study courses. These courses are ACCT 4800, ACCT 4990, BISI 4800, BISI 4990, ECON 4980, ECON 4990, MGMT 4800, MGMT 4810, MGMT 4990, and REUD 4490.

\section*{Specific College of Business Graduation Requirements}
1. Business majors must maintain an overall TSU cumulative GPA of at least 2.00 (not including remedial and developmental courses), a GPA of at least 2.00 in the lower division business core courses, a GPA of at least 2.00 in the upper division business core, and a GPA of at least 2.00 in the ten courses (30 hrs) being used to satisfy the major field plus upper division business elective course requirements.
2. All business majors, except Accounting, may not have more than two D's in the ten courses being used to satisfy the major. Accounting majors must have at least a C in all ten courses used to satisfy the major. D's and F's in additional (extra) elective courses beyond the 10 courses required for the major will not count toward determining whether the student is in violation of the 2D policy.
3. At least 50 percent of the business credit hours required for the business degree must be earned at Tennessee State University; Business Strategy (MGMT 4500) should be taken at Tennessee State University during the final semester of enrollment.
4. The general education component of each student's undergraduate curriculum shall comprise at least 50 percent of the student's fouryear program.
5. Graduation applications will be received only from students who have been admitted to the Upper Division in the College of Business and have at least an overall 2.0 G.P.A.
6. All business majors are required to review degree requirements with the Office of Undergraduate Studies at least one full semester (before the end of the registration period) prior to the semester in which graduation is anticipated. Only students who are eligible will be permitted to remain enrolled in MGMT 4500 (Business Strategy). It is the responsibility of the student to schedule an appointment for his/her senior transcript review.
7. Business majors must complete 24 of their final 30 hours in residence at TSU.
8. Students are to participate in performance evaluation measures (taking various tests, responding to inquiries) designated by the College or University.
9. All business degree electives taken in the junior and senior years must be 3000 or 4000 level courses.

\section*{Transfer of Credit Policy}
1. The specific credit for work done at other institutions which will apply toward the BBA degree is determined by the Office of Admissions and Records and the appropriate department head in the College of Business. Allowance of transfer credit by the Office of Admissions and Records does not necessarily mean that all of such credit will be applied toward the BBA degree.
2. 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.
3. Courses transferred from community and junior colleges may not be used to meet 3000 and 4000 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.
4. Transient Status: BBA students who wish to attend another institution as "transient" or "visiting" students to take upper division business courses for degree credit must get written approval in advance from their department head. Approval is not automatic. MGMT 4500 (Business Strategy) must be taken at TSU.
5. Re-enrollment after Transferring Elsewhere: BBA students who enroll at another institution as regular students (as opposed to transient or visiting status) will be considered as having transferred to that institution. If such students later re-enroll in the BBA program, they may be subject to the curricular degree requirements in effect at the time of their re-enrollment. Such students are encouraged to discuss their transfer to the other institution with their department head in advance if they intend to apply this work towards the BBA degree at TSU.
6. 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.

\section*{Requirements for the BBA Degree}

\section*{General Education and Other Courses}

MGMT 1000
ENGL 1010 and 1020
HIST 2010 and 2020
MATH 1830*
ENGL 2012-2322/
Humanities
COMM 2200
NAT. SCIENCE w/LAB
Social Science:
Social Science:
ECON 2050
BISI 2150/Non-Business Elective**
Orientation
Freshman English 6
American History 6
Basic Calculus
Humanities 3

Public Speaking 3
Natural Science 8
ECON 20103
ECON 2020

Non-Business Electives
* MATH 1110 is a prerequisite for MATH 1830 and can be used as
a non-business elective
** Students testing out of BISI 2150 must take any 3 hour nonbusiness elective course.

\section*{Business Core}

The Business Core, which consists of 42 hours, is common to all BBA degree students. The freshman and sophomore years are common for all students majoring in Accounting, Business Administration, Business Information Systems and Economics/Finance

\section*{Lower Division Business Core}

ACCT 20102020 Principles of Accounting I \& II 6
ECON 2010-2020 Principles of Economics I \& II 6
ECON 2040-2050 Statistical Analysis I \& II 6
Upper Division Business Core
BISI \(3230 \quad\) Business Information Systems 3
BISE 3150 Business Communications 3
BLAW 3000 Legal Environment of Business 3
FINA \(3300 \quad 3\)
MGMT 3010 Management and Organization Behavior 3
MGMT 3020 Operations Management 3
MKTG 3010 Basic Marketing 3
MGMT 4500* Business Strategy and Policy 3
* MGMT 4500 may not be taken until all other business lower division and upper division core courses have been satisfactorily completed and should be taken during the final semester of enrollment.

\section*{Major Requirements}

All BBA students must complete a minimum of 30 hours of 3000/4000 level business courses to constitute their major as indicated on the following pages.

\section*{Freshman and Sophomore Years (All Accounting, Business Information Systems, Business Administration, and Economics/Finance Majors)}

\author{
FALL SEMESTER \\ Courses \\ ENGL 1010 \\ HIST 2010 \\ MATH 1830* \\ MGMT 1000 \\ Natural Science w/Lab
}

FRESHMAN YEAR

\section*{SOPHOMORE YEAR}

FALL SEMESTER
Courses
ACCT 2010
ECON 2010
ECON 2040
ENGL 2012-2230
COMM 2200

SPRING SEMESTER
HR

\section*{Courses}

HR
ACCT 20203
ECON 20203
ECON 20503
ENGL 2012-2230/Humanities 3
Non-Business Elective
exam by obtaining a Master of Science in Accounting degree or other graduate degree, such as a Master of Business Administration, or by taking additional undergraduate classes. Students should consult with their advisors and their State Boards of Accountancy for the exact requirements. In Tennessee graduate course hours count \(150 \%\) toward meeting the 150 hour requirement.

\section*{ACCOUNTING MAJOR CORE (24 HOURS)}

ACCT 3110 Intermediate I 3
ACCT 3120 Intermediate II 3
ACCT 3130 Intermediate III 3
ACCT 3140 Cost Accounting 3
ACCT 3070
ACCT 3200
ACCT 4230
Federal Income Tax I
3
Accounting Information Systems 3
Auditing Theory
BLAW 3230 Business Law I 3

\section*{ACCOUNTING MAJOR ELECTIVES (6 HOURS)}

Accounting majors must take 6 hours of guided accounting electives from the list below. Students should consult with the Accounting Faculty on all upper division electives.

\section*{Accounting Electives:}

ACCT 4010 Advanced Accounting 3
ACCT 4030 Governmental/NFP Accounting 3
ACCT 4160 Internal Auditing 3
ACCT 4170 Federal Income Tax II 3
ACCT 4190 Advanced Cost Accounting 3
ACCT 4220 Accounting Theory 3
ACCT 4240 Advanced Auditing 3
ACCT 4250 International Accounting 3
ACCT 4800 Accounting Internship 3
ACCT 4950 Accounting Topics 1-3
ACCT 4990 Independent Study 1-3

\section*{JUNIOR YEAR}

\section*{Admission, Retention, and Graduation:}
1. Accounting majors will be required to take a minimum of four upper division accounting courses at TSU including ACCT 3130-Intermediate Accounting III, ACCT 4230-Auditing Theory, and two accounting electives.
2. Students must earn at least a grade of "C" in each course used to complete the Accounting Major.
3. See College of Business section on Admission, Retention, and Graduation for additional requirements.

Major: (In addition to courses listed below, see College of Business Freshman and Sophomore years, and Business Core.) Admission to the upper division of the College of Business is required to receive degree credit for 3000 and 4000 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 procedures.

Requirements for Professional Certification: The bachelor's degree provides the educational background for many entry-level accounting positions. Students with this degree will have the necessary educational requirements for the CMA and CIA exams. Students will also have earned at least 120 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

FALL SEMESTER
Courses
ACCT 3110
ACCT 3140
BISE 3150
MGMT 3010
MKTG 3010
SPRING SEMESTER
HR Courses HR
ACCT 31203
BISI 32303
BLAW 30003
FINA 33003
MGMT \(3020 \quad \underline{3}\)
15

\section*{SENIOR YEAR}

\section*{FALL SEMESTER}

Courses
ACCT 3070
ACCT 3130
ACCT 3200
ACCT Elective*
Non-Business Elective
SPRING SEMESTER
HR Courses
ACCT 42303
BLAW 32303
MGMT 45003
ACCT Elective* 3
Non-Business Elective \(\quad \frac{3}{15}\)
15
15
*Students should consult with an Accounting faculty advisor before selecting an accounting elective.

\title{
Department of Business Administration
}

\author{
Festus O. Olorunniwo, Ph.D., Head \\ Avon Williams Campus, Fourth Floor 615-963-7123
}

Faculty: L. Carr, T. Curry, C. Fan, P. Flott, J. Jolayemi, X. Li, M. Lownes-Jackson, V. Lukosius, B. Pennington, S. Thach, and R. Unni

General Statement: Consistent with the missions of Tennessee State University and the College of Business, the Department of Business Administration, by integrating instructional technology in the classroom, offers practical and innovative undergraduate programs, which expose students to current information concerning the study and practice of business. This information aids students in developing managerial skills and responsible ethical awareness that differentiates them in the marketplace, advances their careers, and enables them to compete effectively in the world of business.

Business Administration Major: The curriculum in Business Administration provides students with general education requirements, core requirements in the various disciplines of business, and a strong background in its several concentrations.

Majors in Business Administration have the option of concentrating in e-Business and Supply Chain Management, General Business, Management, Marketing, or Real Estate and Urban Development. Each concentration requires a minimum of 120 hours for the BBA degree.

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

\section*{Major in Business Administration with Concentration in e-Business and Supply Chain Management}

General Education Requirements: See College of Business General Education Requirements

General Statement: The e-Business and Supply Chain Management concentration is primarily concerned with the use of internet-based technology to efficiently coordinate the processes through which suppliers, factories, warehouses, distribution centers, and retail outlets produce and distribute items to the right customers, at the right time, and at the right price to minimize costs while satisfying a certain level of service. Such processes include: developing, managing, and monitoring a firm's supply environment; identifying and creating alliances in supply networks, creating and managing the facilitating services associated with supply such as: logistics services, relationship management, communication networks and technological support (enterprise software, databases, and various e-commerce arrangements). Students learn to use current internet systems and technological tools to create rich, relevant, and interactive relationships between Busi-ness-to-Business (B2B) customers in a supply chain.

\section*{e-Business and Supply Chain Management Core Courses}

\section*{(30 hours)}

MGMT/MKTG 3500 e-Business Models 3
BISI 4150
BISI 4250
MGMT 3550
MGMT 4020
MKTG 4300
MKTG 4400
MGMT 4600
MGMT/MKTG/Business Elective* 6
* Choose two from MGMT 3400, MKTG 4100, MKTG 4350 and BISI 4360

\section*{General Electives 12 Hours)}

Any object-oriented programming language 3
BISI 2150/Non-Business Elective** 3
Non-Business Electives
** Students testing out of BISI 2150 must take any 3 hour non-business elective course.

Concentration in e-Business and Supply Chain Management
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline \multicolumn{2}{|l|}{FALL SEMESTER} & \multicolumn{2}{|l|}{SPRING SEMESTER} \\
\hline Courses & HR & Courses & HR \\
\hline \multicolumn{4}{|l|}{Any object-oriented programming} \\
\hline BISI 3230 & 3 & BISE 3150 & 3 \\
\hline BLAW 3000 & 3 & MGMT 3020 & 3 \\
\hline MGMT 3010 & 3 & MGMT/MKTG 3500 & 3 \\
\hline MKTG 3010 & 3 & MGMT/MKTG/Bus. Elective** & 3 \\
\hline BISE 3150 & 3 & & \\
\hline & 15 & & 15 \\
\hline \multicolumn{4}{|c|}{SENIOR YEAR} \\
\hline FALL SEMESTER & & SPRING SEMESTER & \\
\hline Courses & HR & Courses & HR \\
\hline BISI 4150 & 3 & BISI 4250 & 3 \\
\hline MGMT 3550 & 3 & MGMT/MKTG 4020 & 3 \\
\hline MKTG 4300 & 3 & MGMT 4500 & 3 \\
\hline MKTG 4400 & 3 & MGMT 4600 & 3 \\
\hline Non-Business Elective & 3 & MGMT/MKTG/Bus. Elective** & 3 \\
\hline & 15 & & 15 \\
\hline
\end{tabular}
** Choose two from MGMT 3400, MKTG 4100, MKTG 4350 and BISI 4360

\section*{Major in Business Administration with Concentration in General Business}

Concentration in General Business: This concentration is designed for students who prefer to acquire broad undergraduate training in business, rather than specializing in a specific area.

General Education Requirements: See College of Business General Education Requirements.

General Business Concentration Core ( 6 Hours)
REUD 3130 - Principles of Real Estate \& Urban Development 3 MGMT 4030 - Human Resources Management

\section*{General Business Electives ( 24 Hours)}

3000 and 4000 level courses from the following disciplines: Accounting, Business Law, Economics, Finance, Management, Business Information Systems, Marketing, Real Estate, Quantitative Methods.
Distribution is not restricted.
Marketing Elective (3 Hours)
Business Electives ( 21 Hours)
General Electives (Non-Business, 12 Hours)
BISI 2150/Non-Business Elective*
3
Non-Business Electives 9
* Students testing out of BISI 2150 must take any 3 hour non-business elective course.

\section*{Major in Business Administration with Concentration in General Business}

JUNIOR YEAR
FALL SEMESTER
Courses
BISE 3150
BLAW 3000
MGMT 3010
MKTG 3010
REUD 3130

FALL SEMESTER
Courses
MGMT 4030
Marketing Elective
Business Electives*

SPRING SEMESTER
HR
BISI 32303
FINA 33003
MGMT 30203
Business Electives*
6

\section*{SENIOR YEAR}
*Students concentrating in General Business elect 21 hours of 3000/4000 level business courses according to their career objectives to constitute their major.

\section*{Major in Business Administration with Concentration in Management}

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.

Students who choose a management concentration will have the option of choosing the General Management track or the Human Resources (HR) Management track.

Management Concentration Core (All Tracks - 12 hours)
REUD 3130 Principles of Real Estate and Urban Development
MGMT \(4020 \quad\) Quality Management 3
MGMT \(4030 \quad 3\)
MGMT 4050 Organization Behavior 3
Track I: Human Resources Management (18 Hours)
MGMT \(4090 \quad\) Human Resource Planning and Evaluation 3
MGMT 4100 Compensation Administration 3
MGMT \(4190 \quad\) Collective Bargaining 3
MGMT 3400 Business Ethics 3
Business Electives 6
Track II: General Management (18 Hours)
MGMT Elective 3
MGMT Elective 3
MGMT Elective 3
MGMT Elective 3
Business Electives 6
General Electives (Non-Business, 12 Hours)
BISI 2150/Non-Business Elective* 3
Non-Business Electives 9
* Students testing out of BISI 2150 must take any 3 hour non-business elective course.

\section*{Major in Business Administration with Concentration in Management - Human Resources Track}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline FALL SEMESTER & & SPRING SEMESTER & \\
\hline Courses & HR & Courses & HR \\
\hline BISE 3150 & 3 & FINA 3300 & 3 \\
\hline BISI 3230 & 3 & MGMT 3020 & 3 \\
\hline BLAW 3000 & 3 & MGMT 4030 & 3 \\
\hline MGMT 3010 & 3 & MKTG 3010 & 3 \\
\hline REUD 3130 & 3 & Business Elective & 3 \\
\hline & 15 & & 15 \\
\hline \multicolumn{4}{|c|}{SENIOR YEAR} \\
\hline FALL SEMESTER & & SPRING SEMESTER & \\
\hline Courses & HR & Courses & HR \\
\hline MGMT 4050 & 3 & MGMT 3400 & 3 \\
\hline MGMT 4090 & 3 & MGMT 4020 & 3 \\
\hline MGMT 4190 & 3 & MGMT 4100 & 3 \\
\hline Business Elective & 3 & MGMT 4500 & 3 \\
\hline Non-Business Elective & 3 & Non-Business Elective & 3 \\
\hline & 15 & & 15 \\
\hline
\end{tabular}

\section*{Major in Business Administration with Concentration in Management - General Management Track}

\author{
FALL SEMESTER
}

Courses

\section*{JUNIOR YEAR}

BISE 3150
BISI 3230
BLAW 3000
MGMT 3010
REUD 3130
SPRING SEMESTER
HR Courses

MGMT 3020

\section*{SENIOR YEAR}

FALL SEMESTER
Courses
SPRING SEMESTER
HR Courses
MGMT 4050
MGMT Electives
Business Elective
Non-Business Elective
```

MGMT 4020

```

MGMT 4500
MGMT Electives
Non-Business Elective

\section*{Major in Business Administration with Concentration in Marketing}

General Education Requirements: See College of Business General Education Requirements.

General Statement: Marketing includes all activities concerned with ascertaining and satisfying the needs and desires of individual and organizational buyers/consumers. It is consequently a function of prime importance in all forms of organizations. The marketing program is designed to facilitate both entry into marketing and long-term professional advancement. Course emphasis is placed on marketing management.

Those who choose marketing as a career will be involved in product development and improvement, consumer research, pricing, promotion, sales, and distribution. Professional careers are open to marketing students in advertising firms, research organizations,
retail organizations, retail and wholesale firms, and other service organizations, as well as a wide range of manufacturing, service, and non-profit groups devoted to supplying goods or services to meet the needs of the customer/buyer.
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Marketing Concentration ( $\mathbf{3 0}$ Hours)
MKTG 3200 Sales Management
MKTG 3300 Applied Marketing Research
3
MKTG 4050 Consumer Behavior 3
MKTG 4200 Marketing Channels 3
MKTG 4250 Retail Marketing 3
MKTG 4350 International Marketing 3
MKTG 4550 Marketing Strategy** 3
MKTG Elective 3
MKTG Elective
Business Elective
3
**Prerequisites for MKTG4550 are: MKTG3200 or MKTG4050 and MKTG3300

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\section*{General Electives (Non-Business, 12 Hours)}

BISI 2150/Non-Business Elective*
3
Non-Business Electives
9
*Students testing out of BISI 2150 must take any 3 hour non-business elective course.

\section*{Major in Business Administration with Concentration in Marketing}

JUNIOR YEAR
FALL SEMESTER
Courses
BISE 3150
BISI 3230
FINA 3300
MGMT 3010
MKTG 3010

FALL SEMESTER
Courses
MKTG 4050
MKTG 4200
MKTG 4250
MKTG Elective
Non-Business Elective

SPRING SEMESTER
HR
Courses HR
BLAW 30003
MGMT \(3020 \quad 3\)
MKTG 3200
MKTG \(3300 \quad 3\)
MKTG Elective \(\quad 3\)
15

\section*{SENIOR YEAR}

SPRING SEMESTER
HR
Courses
HR
MGMT 45003
MKTG \(4350 \quad 3\)
MKTG 45503
Business Elective 3
Non-Business Elective 3
\(\overline{15}\)

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.
\begin{tabular}{lr} 
Real Estate Concentration Core (18 Hours) & \\
REUD \(3130 \quad\) Real Estate Principles & 3 \\
REUD 3200 & Urban Land Resource Analysis \\
REUD Electives & 3 \\
& \\
Guided Electives (12 Hours) & 12 \\
Accounting & \\
Business & 3 \\
Economics or Finance & 6 \\
General Electives (Non-Business, 12 Hours) & 3 \\
BISI 2150/Non-Business Elective* & \\
Non-Business Electives & 3 \\
*Students testing out of BISI 2150 must take any 3 hour non-business \\
elective course. & 9
\end{tabular}

\section*{Major in Business Administration with Concentration in Real Estate and Urban Development}

FALL SEMESTER

\section*{JUNIOR YEAR}

Courses
SPRING SEMESTER

BISE 3150
HR Courses HR

BLE 1500
FINA 3300
BLAW 3000
MGMT 3010
MGMT 3020
REUD 3200
ACCT Elective
Real Estate Elective
MKTG 3010
REUD 3130

\section*{SENIOR YEAR}

FALL SEMESTER
Courses
SPRING SEMESTER

BISI 3230
HR Courses
ECON ar FINA Electiv
Real Estate Electives
Business Electives
Non-Business Elective
Real Estate Elective
Non-Business Elective

\section*{Major in Business Administration with Concentration in Real Estate and Urban Development}

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

Faculty: A. Kamssu, D. King, G. Marquis, F., J. Siekpe, S. Venkatraman

General Statement: The need to remain competitive in today's global economy is forcing companies to reengineer their business processes using technology. The future will involve continued growth in the use of information technology to help boost organizational efficiency. Therefore, every organization will need individuals with knowledge and skills necessary to implement information technologies that enable the organization to operate more effectively.

The Department of Business Information Systems graduates students with the required practical skills and real-world experience in information technology while maintaining a high level of academic rigor. The curriculum is designed to develop effective decisionmaking skills by requiring cross-functional and diverse courses.

Therefore, in addition to courses geared toward effective use of computer and information technology, students are required to take courses in other disciplines (areas) in the College of Business, as well as other colleges and schools within the University.

The Department of Business Information Systems offers a Bachelor of Business Administration (BBA) in Business Information Systems - Industry Concentration (BISI), and in Business Information Systems e-Business Technology Concentration (EB). The BISI Program prepares students for technical and managerial positions. The BISI Program produces capable individuals with marketable skills required to become a systems analyst, network administrator, database manager, information system manager or strategist. The main objective of the e-Business Concentration is to develop students who understand the strategic and operational nature of e-business, and are capable of developing Web-based systems. The graduates of the e-Business Concentration should possess the required management and technology skills necessary for positions in e-Business and e-Commerce.

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 3000 and 4000 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: 120 hours are required for the Business Information Systems-Industry Concentration (Networking, Organizational Information Systems Track; and/or General Track), and Business Information Systems e-Business Technology Concentration.

\section*{BISI-Industry Concentration}

\section*{Required Courses ( 18 Hours)}

BISE \(3350 \quad\) Business Research and Report Writing 3
BISI 3160 Business Application Development 3
BISI \(3260 \quad\) Object-Oriented Programming 3
BISI 3360 Applied Information Technology 3
BISI 4150 Database Systems 3
BISI \(4230 \quad\) Analysis, Design, and Implementation

Track I: Networking Track (12 hours)
BISI 3500 Data Mining 3
BISI \(4300 \quad\) Business Telecommunications 3
BISI \(4360 \quad\) PC Networks and Computer Security 3
BISI Elective Any Upper Division BISI Course 3
Track II: General Track (12 Hours)
BISI/BISE Upper Division Courses
Track III: Organizational Information Systems Track (12 hours)
BISE \(3400 \quad\) Desktop Presentation Tools
BISE \(4000 \quad\) Information and Media Management 3
BISI \(4240 \quad\) End-User Computing Development 3
BISE 4300 Administrative Office Management 3

\section*{General Electives}

BISI 2150/Non-Business Elective*
Non-Business Electives
*Students testing out of BISI 2150 must take any 3 hour non-business elective course.

In selecting non-business electives, the department highly recommends that BISI students consider, in consultation with their faculty advisor, programming language courses offered by the department of Computer Science. These courses will provide a strong background in programming, and also allow students to enroll in additional upper division computer science offerings. (Course prerequisites must be taken.)

\section*{Business Information Systems Industry Concentration}

\section*{FALL SEMESTER}

Courses

\section*{JUNIOR YEAR}

HR Courses
BISI 3160
BISI 3260
BISI 3230
BISE 3350
BISE 3150
FINA 3300
BLAW 3000
MGMT 3010
MKTG 3010
BISI 3360

\section*{SENIOR YEAR}

FALL SEMESTER
SPRING SEMESTER
Courses
BISI 4150
MGMT 3020
Track Course
BISI/BISE Track Course
Non-Business Elective

HR Courses
MGMT 45003
BISI/BISE Track Course 3
BISI/BISE Track Course 3
Non-Business Elective 3
15

BISI/BISE electives may be selected from the following list for the BISI-Industry Concentration.
BISI 3360
Applied Information Technology
BISI \(3500 \quad\) Data Mining
BISI 3610 Introduction to Relational Databases
BISI 3620 Relational Data Administration
BISI 4240 End-User Computing Development
BISI \(4250 \quad\) Decision Support Systems
BISI \(4260 \quad\) Training Strategies for BIS Professionals
BISI 4300 Business Telecommunications
BISI \(4360 \quad\) PC Network Systems
BISI \(4364 \quad\) Network Security and Administration
BISI \(4400 \quad\) Introduction to Web Site Development
BISI \(4410 \quad\) Web Site Development
BISI 4800 Internship
BISI 4810/4820 Seminar in Information Systems
BISI \(4990 \quad\) Independent Study
BISE 3400 Desktop Presentation Tools
BISE \(4000 \quad\) Information and Media Management
BISE 4300 Administrative Office Management

\section*{Business Information Systems e-Business Technology Concentration}

Concentration in e-Business Technology, 120 hours required for the BBA degree

General Statement: The BBA-EB degree prepares students for a career in the rapidly growing field of e-Commerce and e-Business. The degree program provides a solid business foundation upon which rigorous information technology competencies are built. The graduate of the program will possess the requisite management and technology skills required for positions in the e-Business and e-Commerce arena. The main objective of the Program is to develop students who understand the strategic and operational nature of e-Business, and are capable of developing dynamic, Web-based systems that provide a strategic and competitive advantage.

JUNIOR YEAR

FALL SEMESTER
Courses
BISI 3160
BISI 3230
BLAW 3000
MGMT 3010
MKTG 3010

FALL SEMESTER
Courses
BISI 4150
BISI 4300
BISI 4400
MGMT 3550
Any object-oriented programming
language

SPRING SEMESTER
HR
Courses HR
BISI 32603
BISE 31503
FINA 33003
MGMT 30203
MKTG 3500/MGMT 3500
15

\section*{SENIOR YEAR}

\section*{SPRING SEMESTER}

Courses HR
BISI 44103
BISI 4360 3
BISI 42503
3 MGMT 45003
Non-Business Elective 3

\section*{Department of Economics and Finance}

\title{
Soumendra Ghosh, Interim Head Avon Williams Campus, Fourth Floor 615-963-7172
}

Faculty: D. Dhakal, S. Ghosh, J. Hasty, H. Luea, N. Modeste, W. Perry, A. Ray, C. Weis, A. Wahid

General Statement: The Department's mission is to provide an academically rigorous program in support of the College of Business mission of offering a high quality academic program. The Department of Economics and Finance offers a program of instruction for those who expect to pursue careers in economics, finance, or insurance and provides service courses for business and non-business majors.

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

\section*{Major in Economics and Finance}

General Education Requirements: See College of Business General Education Requirements.

Major: (In addition to courses listed below, see College of Business Freshman and Sophomore year, and Business Core.) Admission to the College of Business is required to receive degree credit for 3000 and 4000 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.

\section*{Major Core (18 Hours)}

ECON 3110 Intermediate Microeconomic Theory 3
ECON 3120 Intermediate Macroeconomic Theory 3
FINA \(3400 \quad\) Financial Markets and Institutions 3
FINA 3600 Investment Theory 3
ECON 3000 Introduction to Quantitative Methods 3
ECON 3020 Basic Econometrics 3

\section*{Guided Electives (12 Hours)}

Economics \& Finance Electives
General Electives (Non-Business, 12 Hours) BISI 2150/Non-Business Elective* ..... 3
Non-Business Electives ..... 9
*Students testing out of BISI 2150 must take any 3 hour non-business elective course.
JUNIOR YEAR
FALL SEMESTERSPRING SEMESTER
HR
HR Courses Courses ..... HR ..... HR
BISE 3150
BISE 3150 BISI 3230 BISI 3230 ..... 3 ..... 3
ECON 3120
ECON 3120
ECON 3120 ECON 3020 ECON 3020 ..... 3 ..... 3
MGMT 3010
MKTG 3010
MGMT 3010
MKTG 3010
MGMT 3010
MKTG 3010 FINA 3400 FINA 3400 FINA 3400 ..... 3 ..... 3 ..... 3
MKTG 3010
MKTG 3010
MKTG 3010
15
15
15 ..... 15 ..... 15
SENIOR YEAR
FALL SEMESTERSPRING SEMESTER
Courses
HR
Courses ..... HR
BLAW 3000ECON or FINA Electives6FINA 3600
Non-Business Electives6
ECON or FINA Electives
MGMT 4500315

\section*{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) 9637121.

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 3000 and 4000 level business courses.

\section*{Accounting (ACCT)}

ACCT 2010 Principles of Financial Accounting I (3). (Formerly AC 211) This is an introduction to the basic concepts of accounting, the accounting cycle, accounting systems including ethical consideration, and components of the financial statements. This course examines accounting as a system of communicating to owners, creditors, governmental bodies, and others needing the financial results of the operation of business entities. Also covered are concepts, theories, and conventions underlying measurement, processing of business activities, and reporting of the financial results of those activities. Prerequisite: MATH 1110.

ACCT 2020 Principles of Managerial Accounting II (3). (Formerly AC 212) An analysis of financial data, forms of business organizations in our legal environment, departmental accounting, manufacturing, basic cost accounting, cost-volume-profit analysis, and managerial decisions. Use of accounting data for internal managerial decision-making and analysis, including accounting for planning and control; relevant cost and contribution approaches to decisions and capital budgeting. Prerequisite: ACCT 2010.

ACCT 3030 Principles of NFP/Fund (3). (Formerly AC 303) An introduction to Not-for-Profit Accounting. Application of the theories for recording and reporting in non-corporate forms of organization as applied to government. ACCT 3030 may not be used by accounting majors to satisfy a degree requirement. Prerequisite: ACCT 2010.
ACCT 3050 Financial Information for Entrepreneurial Ventures (3). (Formerly AC 305) 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. ACCT 3050 may not be used by accounting majors to satisfy a degree requirement. Prerequisite: ACCT 2020.

ACCT 3070 Federal Income Tax I - Individual (3). (Formerly AC 307) Determination of taxable income, and other aspects of tax accounting are emphasized. Particular attention is given to preparation of federal income tax returns for individuals following the Internal Revenue Code (IRC). Tax research methodology is introduced. Prerequisite: ACCT 2020.

ACCT 3110 Intermediate Accounting I (3). (Formerly AC 311) Broad theoretical structure of accounting including underlying environmental assumptions, expanded review of the accounting cycle and components of financial statements. Emphasis is placed on the accounting process and future and present value concepts. Theory and practice of accounting, emphasizing need for and use of accounting information in measuring and evaluating an entity's business income and financial status. Prerequisite: ACCT 2020.

ACCT 3120 Intermediate Accounting II (3). (Formerly AC 312) 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 cash flows. Prerequisite: ACCT 3110.

ACCT 3130 Intermediate Accounting III (3). (Formerly AC 313) Emphasis is placed on special problem areas in accounting including incomplete data, pensions, leases, price-level accounting, entities in financial difficulty and circumstances unique to SEC reporting. In-depth discussion and analysis of financial statements. Prerequisite: ACCT 3120.

ACCT 3140 Cost Accounting (3). (Formerly AC 314) 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: ACCT 2020.

ACCT 3200 Accounting Information Systems (3). (Formerly AC 320) 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. Prerequisite: ACCT 2020.

ACCT 4010 Advanced Accounting - Consolidation (3). (Formerly AC 401) 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: ACCT 3120.

ACCT 4030 Governmental/NFP ACCOUNTING (3). (Formerly AC 403) 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: ACCT 3110.

ACCT 4160 Internal Auditing (3). (Formerly AC 416) 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 covered. Prerequisite: ACCT 3200.

ACCT 4170 Federal Income Tax II - Corp/Part/Fiduciary (3). (Formerly AC 417) Corporate, Partnership, Gift, Estate, and Trust federal tax returns are analyzed based on research of the IRC, Treasury Regulations, etc. Prerequisite: ACCT 3070.

ACCT 4190 Advanced Cost Accounting (3). (Formerly AC 419) This course covers advanced managerial accounting concepts, techniques for decision making, capital budgeting, transfer pricing, decision models, inventory management, behavioral accounting, inventory systems and yield/mix models of profit maximization. Prerequisite: ACCT 3140.
ACCT 4220 Accounting Theory (3). (Formerly AC 422) 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: ACCT 3120.
ACCT 4230 Auditing Theory (3). (Formerly AC 423) This course addresses 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. Prerequisites: ACCT 3200 and ACCT 3110.

ACCT 4240 Advanced Auditing (3). (Formerly AC 424) A course which emphasizes the student's ability to apply knowledge of audit theory and principles, generally accepted 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: ACCT 4230.

ACCT 4250 International Accounting (3). (Formerly AC 425) 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 are addressed. Prerequisite: FINA 3300.

ACCT 4800 Accounting Internship (3). (Formerly AC 480) Internships are designed to provide accounting students supervised practical learning experiences in public, industry, governmental, or not-for-profit entities. Work experience enhances theory and classroom studies. Student activity and progress must be monitored and evaluated by an assigned senior department faculty. Prerequisites: Consent of Department Head and full admission to the College of Business.

ACCT 4950 Accounting Topics (1-3). (Formerly AC 495) Provide the opportunity for outstanding accounting students to explore, update and expand the core knowledge of accounting theory, financial, managerial, auditing, taxation, and business law using professional problems. Prerequisite: Consent of Instructor.

ACCT 4990 Independent Study (1-3). (Formerly AC 499) A course which allows outstanding accounting students to investigate, in depth, approved accounting topics of the student's choice. Studies will be coordinated by a senior department faculty member. Prerequisite: Consent of Department Head.

\section*{Business Information Systems (BISI)}

BISI 2150 Microcomputer Applications (3). (Formerly BIS 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.
BISI 3160 Business Application Development (3). (Formerly BIS 316) Covers the development of programs to address business needs utilizing sequential and random access file structures and processing techniques. Emphasis on modular program design and construction. Prerequisite: BISI 2150.
BISI 3230 Management Information Systems (3). (Formerly BIS 323) This covers the fundamental principles and issues of managing information technology as a corporate resource. The primary purpose is to provide an awareness of the future role of information technology in business organizations. Major concepts, developments and managerial implications involved in computer hardware, software, communications, and other computer-based information systems will be discussed using specific business case examples. The challenges and methods of managing information systems, technologies, and resources from an assoc-technical approach will provide the conceptual framework for the course. Prerequisite: BISI 2150.

BISI 3260 Object-Oriented Programming (3). (Formerly BIS 326) [Formerly BIS 314] Provides an introduction to programming in the business environment using the dot net framework. 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: BISI 2150.

BISI 3360 Applied Information Technology (3). This course provides an introduction to computer hardware and system software in the context of a microcomputer. The course will include a hands-on approach to hardware/software installation and configuration, troubleshooting, and introduction to computer networking. Prerequisite: BISI 2150.
BISI 3500 Data Mining (3). This course will cover both the predictive and descriptive models of analysis to discover patterns and relationships in sets of data. The total knowledge discovery process will be examined including; identification of the problem to be solved, collection and preparation of data, deploying the models, and interpreting and monitoring results.

BISI 3610 Introduction to Relational Databases (3). (Formerly BIS 361) This course provides an introduction to the design, organization, and use of a relational database. Prerequisite: BISI 3230.

BISI 3620 Relational Data Administration (3). (Formerly BIS 326) This course includes topics on database administration. Specifics include the creation of database objects, backup and recovery, and performance monitoring. Prerequisite: BISI 3610.

BISI 4150 Database Systems (3). (Formerly BIS 415) Study of data concepts, planning, database management, database design, current trends, and commercial products. Topics included are: Database models, Structured Query Language (SQL), Entity-Relationship Modeling (E-R), and normalization. Students will develop a single-user database system. Prerequisites: BISI 3160 and BISI 3230 (or Consent of the Instructor).

BISI 4230 Analysis, Design, and Implementation (3). (Formerly BIS 423) Use of information systems techniques to solve managerial and organizational problems of limited complexity. The course includes discussion of various System Development Life Cycles. Students will use a SDLC approach for the analysis and design of a semester long project. Prerequisites: BISI 4150 and BISE 3350.

BISI 4240 End-User Computing Development (3). (Formerly BIS 424) This course addresses the links between information technology, people, and organizational goals as well as project management from the information systems perspective. The course also features an end-user approach to project management by providing a comprehensive, practical, up-todate treatment of information technology evaluation, selection, acquisition, and management. Business process is reviewed with emphasis given to strategies of deploying the technology into the workplace. Prerequisite: BISI 3230.

BISI 4250 Decision Support Systems (3). (Formerly BIS 425) Key technical and managerial issues in the development and use of decision support systems in organizations are addressed. Strategic management decision making and the role of DSS in the process are explored. Contemporary topics including Expert Systems, Executive Information Systems, data warehousing, data visualization, and Group Decision Support Systems are reviewed. Prerequisite: BISI 3230.

BISI 4260 Training Strategies for BIS Professionals (3). (Formerly BIS 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: BISI 3230.

BISI 4300 Business Telecommunications (3). (Formerly BIS 430) Provides a broad overview of the telecommunications field as well as the implications for business and industry. Prerequisite: BISI 3230.

BISI 4360 PC Networks (3). (Formerly BIS 436) Principles and specific implementation of a local area network system; including predominant networking product methodologies. Includes extensive network administration exercises. Prerequisite: BISI 3230.

BISI 4364 Network Security and Administration (3). This course provides the student with an introduction to network and information security. The student will learn basic terminology and concepts of security and apply them to computer networks. Specific topics will include security policy and procedures, computer networks, user authentication and authorization, encryption, computer crime, network attacks and network protection. Prerequisite: BISI 4360.

BISI 4400 Introduction to Web Site Development (3). Upon completing this course, the student will be able to develop fairly sophisticated web sites using HTML authoring tool. Students are introduced to various features of a web site such as forms, multimedia, graphics and scripts. The course also covers related topics such as security and Internet protocols. Prerequisite: Any object-orientated programming language.

BISI 4410 Web Site Development (3). This is the capstone course in the E-business curriculum. This course covers the design and implementation of a Web site similar to one used by an E-Commerce Business. This course emphasizes dynamic content driven web development using database concepts. Prerequisites: BISI 4400 and BISI 4150.

BISI 4800 Internship (3). (Formerly BIS 480) Designed to provide BIS students the opportunity to obtain supervised information systems relatedwork 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.

BISI 4810/4820 Seminar in Information Systems (3/3). (Formerly BIS 481/482) Provides an in-depth study of current BIS topics. Extensive readings/research on current information system developments are reviewed and discussed. Prerequisites: BISI 4150 and Consent of Department Head.

BISI 4900 Practicum (3). (Formerly BIS 490) Provides the senior BIS student an opportunity to gain hands-on experience in assisting users in resolving user/systems software related problems. Prerequisites: BISI 3230 and Consent of Department Head.

BISI 4990 Independent Study in BIS (3). (Formerly BIS 499) Provides the outstanding student the opportunity to investigate in-depth, an approved information systems topic. A senior faculty member of the department will coordinate the work of each individual student. Prerequisites: BISI 3230 and Consent of the Department Head.

\section*{Business Information Systems Education (BISE)}

BISE 3150 Business Communications (3). (Formerly BISE 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: BISI 2150.

BISE 3350 Business Research \& Report Writing (3). (Formerly BISE 335) 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 3150.

BISE 3400 Desktop Presentation Tools (3). (Formerly BISE 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: BISI 2150.
BISE 4000 Information and Media Management (3). (Formerly BISE 400) Provides a detailed treatment of information and media management. Media is defined as the information storage format, and includes paper, micro-records, electronic, video, and other forms of information generation, recording, and storage. Students will develop an understanding of the information life cycle, information value, and how information serves as a critical organizational asset. Legal and ethical issues, information resource management, and varying cultural conventions governing information management are presented. Prerequisite: BISI 2150.
BISE 4300 Administrative Office Management (3). (Formerly BISE 430) Designed to help students develop an understanding of the complexities associated with systems, methods, and procedures for efficient office management. Prerequisite: BISI 2150.

\section*{Business Law (BLAW)}

BLAW 3000 Legal Environment of Business (3). (Formerly BL 300) A study of the legal aspects of the business environment and the legal rights and potential liabilities of business persons. The presentation of law as an expanding social and political institution in the environment of business. Includes the development and nature of the legal system; business crimes; the law of torts; constitutional limitations on regulatory powers; legislative, judicial, and administrative control of business activity through tax laws, antitrust laws of employment, labor laws, and consumer and debtor protection laws.

BLAW 3230 Business Law I (3). (Formerly BL 323) A study of the legal rights and potential liabilities of business persons, including an introduction to the nature of the legal system and the basic law of contracts. Uniform Commercial Code, sales, secured transactions, and bankruptcy. Prerequisite: BLAW 3000.

BLAW 3240 Business Law II (3). (Formerly BL 324) A study of the legal rights and potential liabilities of business persons, including the basic legal principles of agency, partnerships, corporations and securities, personal property and bailment, real property and environmental controls, U.C.C. and commercial paper. Prerequisite: BLAW 3000.

\section*{Economics (ECON)}

ECON 2010 Principles of Economics I (3). Methodology of economics, fundamentals of macroeconomics, fiscal policy, and fundamentals of monetary policy. Prerequisite: Math 1110.

ECON 2020 Principles of Economics II (3). (Formerly EC 212) Economic growth and microeconomics, some domestic and international applications, economics and comparative economic systems. Prerequisite: ECON 2010.

ECON 2040 Introduction to Statistical Analysis I (3). (Formerly QM 201) 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 1110.
ECON 2050 Introduction to Statistical Analysis II (3). A continuation of ECON 2040. Topics covered include; linear regression and correlation, multiple regression, the analysis of variance, elements of time series analysis, forecasting models, and survey sampling. Prerequisite: ECON 2040.

ECON 3000 Introduction of Quantitative Methods (3). (Formerly QM 300) 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. Prerequisites: ECON 2040 and ECON 2020.

ECON 3020 Basic Econometrics (3). (Formerly QM 302) Classical linear regression model, Gauss-Markov theorem, its assumptions, detection, consequences, and correction of heteroscadasticity, multicollinearity, autocorrelation. Prerequisite: ECON 2040.

ECON 3110 Intermediate Microeconomics Theory (3). (Formerly EC 311) The price system and allocation of resources; economic analysis of demand and production. Prerequisite: ECON 2020.
ECON 3120 Intermediate Macroeconomic Theory (3). (Formerly EC 312) Aggregate demand, aggregate supply, and equilibrium level of employment; the price level, inflation, and deflation. Prerequisite: ECON 2020.

ECON 3200 Money and Banking (3). (Formerly EC 320) 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: ECON 2020.

ECON 3300 Principles of Labor Economics (3). (Formerly EC 330) A study of the labor market; American labor movement; union history, structure and philosophy; labor problem analysis; industrial disputes and labor legislation. Prerequisite: ECON 2020.

ECON 4100 International Economics (3). (Formerly EC 410) 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: ECON 2020.

ECON 4150 Economic Development (3). (Formerly EC 415) 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: ECON 2020.

ECON 4520 Urban Economics (3). (Formerly EC 452) Urban history, location theory, city growth, and urban problems. Prerequisite: ECON 2020.

ECON 4700 Managerial Economics (3). (Formerly EC 470) Application of economic theory to business decision making, emphasis on profit objectives, measurement and forecasting demand, and costs and capital budgeting. Prerequisite: ECON 2020.
ECON 4800 Current Economic Problems (3). (Formerly EC 480) Examination of key economic issues. Such major objectives as economic progress and economic justice provide a general framework for analyzing economic growth, inflation, unemployment, public debt, income maintenance, agriculture, and international economic affairs. Prerequisite: ECON 2020.

ECON 4980-4990 Independent Study (3,3). (Formerly EC 498-499) A course which allows outstanding students to investigate in depth approved topics of the student's choice. Individual studies are coordinated by a senior member of the departmental faculty. Prerequisites: ECON 3110, ECON 3120.

\section*{Finance (FINA)}

FINA 3300 Business Finance (3). (Formerly FN 330) Financial goals, ratios, sources and uses of funds, asset management, capital budgeting, leverage, cost of capital, dividend policy, valuation, mergers and reorganizations and financial performance evaluation. Prerequisite: AC 2020.

FINA 3400 Finance Markets and Institutions (3). (Formerly FN 340) Operating characteristics, regulation, flows of funds, intermediation, major sectors of money and capital markets and the institutions operating therein. Prerequisite: FINA 3300.

FINA 3600 Investment Theory (3). (Formerly FN 360) Theory of investment value, investment media and strategies, risk returns, price behavior, investment techniques and portfolios, Prerequisite: FINA 3300.
FINA 4450 Commercial Bank Management (3). (Formerly FN 445) Organization, administration of commercial banks, balance sheet management, loans and investments. Prerequisite: FINA 3300.

FINA 4500 Corporate Finance (3). (Formerly FN 450) Optimizing sources and uses of funds, corporate asset and financial structure management and strategies and sophisticated techniques of analysis. Prerequisite: FINA 3300.
FINA 4600 Security Analysis and Portfolio Management (3). (Formerly FN 460) Fundamental and technical techniques analysis, security valuation, capital asset pricing model, portfolio analysis and management, advanced models, theories, and techniques of analysis. Prerequisite: FINA 3600.

FINA 4700 International Finance (3). (Formerly FN 470) Problems in international finance; the balance of international payments; financing international trade; foreign departments of banks; foreign exchange markets; and the impact of international financial problems on business. Prerequisite: FINA 3300.

\section*{Management (MGMT)}

MGMT 1000 Business Orientation (1). (Formerly MG 100) 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.
MGMT 3010 Management and Organization Behavior (3). (Formerly MG 301) 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: ECON 2010.

MGMT 3020 Operations Management (3). (Formerly MG 302) An overview of the basic principles, concepts, and analytical tools involved in the design, operation, and control of operations that produce goods and services, with an emphasis on the efficient use of resources. Prerequisites: Junior Standing, ECON 2050.
MGMT 3030 Management of Service Organizations (3). (Formerly MG 303) 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: MGMT 3010.

MGMT 3040 Introduction to Management Science (3). (Formerly MG 304) Application of quantitative methods used in business decision making. Topical application areas will be drawn from all areas of business, industry, and government, including: accounting, finance, information system, investment portfolio analysis, human resources management, production of goods and services in manufacturing and service operations, and quality management. Prerequisites: ECON 2050.

MGMT 3200 Entrepreneurship-New Venture Creation and Management (3). (Formerly MG 320) 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, and MGMT 3010.

MGMT 3240-3250 Business Consulting and Entrepreneurship I and II (3,3). (Formerly MG 324-325) 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 envi-
ronment. Lectures and discussion, but emphasis on problem solution by the student. Prerequisites: Approval of instructor, MGMT 3010, and MGMT 3200. (MGMT 3240 is prerequisite to MGMT 3250).

MGMT 3400 Business Ethics (3). (Formerly MK 340) Ethical, legal, and human relations dimensions of the business and nonprofit environments. Prerequisite: MKTG 3010.

MGMT 3500 E-Business Models (3). (Formerly MG 350) This course is a survey of the dynamic business issues surrounding the development and emergent patterns of the electronic commercialization in the global marketplace. Included is an overview of internet development and security. Leveraging new technologies to enhance business processes, unique characteristics of e-marketing, and the legal, ethical, and regulatory issues in conducting e-business. Prerequisites: MGMT 3010, MKTG 3010, and BISI 3230. Cross-listed with MKTG 3500.

MGMT 3550 Enterprise Resource Planning (ERP) Systems (3). (Formerly MG 355) Planning and control systems for product and service flows in the supply chain. . Extended ERP- the management of inter-enterprise business processes like Customer Relationship Management and Supply Chain Management as well as analytical applications. Integration of management, sales, marketing, finance, operations, e-business technology to create a true customer-focused strategy in Business-to-Business (B2B) and Busi-ness-to-Consumer (B2C) markets. Prerequisite: MGMT/MKTG 3500. MGMT 3020 may be taken as a pre-requisite or concurrently.
MGMT 4020 Quality Management (3). (Formerly MG 402) An integrated study of quality issues in the entire supply chain. The course will emphasize the continuous improvement of business processes, as well as the design, establishment, evaluation, and improvement of quality systems in the supply chain. Issues on Quality System Certification to meet industry and international standards shall also be addressed. Cross-listed with MKTG 4020 Prerequisite: MGMT 3010.

MGMT 4030 Human Resources Management (3). (Formerly MG 403) 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: MGMT 3010.
MGMT 4040 Organization Theory (3). (Formerly MG 404) 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: MGMT 3010.

MGMT 4050 Organization Behavior (3). (Formerly MG 405) Theoretical foundations for the study and analysis of human behavior in complex social organizations and of related managerial problems and challenges. A study of management and behavioral science concepts. Techniques and research as applied toward increasing human productivity and individual and group satisfaction in organizational settings. Prerequisite: MGMT 3010.

MGMT 4060 Special Topics in Management (3). (Formerly MG 406) Research into selected areas of management. Prerequisites: MGMT 3010 and approval of the instructor.

MGMT 4070 Industrial Relations (3). (Formerly MG 407) 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: MGMT 3010

MGMT 4090 Human Resource Planning and Evaluation (Manpower Management Practices) (3). (Formerly MG 409) 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: MGMT 4030.

MGMT 4100 Compensation Administration (3). (Formerly MG 410) 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. Prerequisites: MGMT 3010 and MGMT 4030.

MGMT 4110 Operative Supervision (3). (Formerly MG 411) Operative (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: MGMT 3010.

MGMT 4120 International Business Management (3). (Formerly MG 412) 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 and MGMT 3010.

MGMT 4170 Seminar-Contemporary Management Innovations and Entrepreneurship (3). (Formerly MG 417) 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. Prerequisites: MGMT 3010 and Senior Standing.

MGMT 4190 Collective Bargaining (3). (Formerly MG 419) Analysis of collective bargaining processes, procedures, legislation in private and public sector organizations. Review of current and future implications for management. Prerequisite: ECON 2020.

MGMT 4250 Leadership ( \(\mathbf{3} \mathbf{~ h r s ) . ~ ( F o r m e r l y ~ M G ~ 4 2 5 ) ~ T h i s ~ c o u r s e ~ i s ~ a ~}\) broad survey of theories of leadership with primary focus on contemporary models and the specific contexts within which leadership behaviors occur. It will examine the different mix of personal, interpersonal, technical, and conceptual skills and competencies required of leaders (a) at the supervisory, managerial, and executive levels, (b) within different organizational frameworks such as industry, academia, governmental, non-profit, and the military, and (c) within the context of the rapidly changing 21st century political, economic and technological environment. Prerequisite: MGMT 3010.

MGMT 4500 Business Strategy and Policy (3). (Formerly MG 450) 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.

MGMT 4600 Supply Chain Strategy (3). (Formerly MG 460) Planning and design of systems for goods and service flows in supply chain. Integrated supply chain strategies synthesizing supply management, production, logistics, and enterprise resource planning (ERP) systems. Use of e-business in the integration, control, and execution of business processes in the supply chain. Prerequisites: MKTG 4400 and MKTG 4300.

MGMT 4800 and 4810 Internship (3, 3). (Formerly MG 480 and 481) College of Business Internships are designed to provide students supervised practical learning experiences in government, business or industry. Formal proposals, project objectives, and learning plans must be reviewed and approved by the department head. Student activity and progress must be monitored, evaluated and graded by an assigned full-time faculty member. Each course is three credit hours. Prerequisites: Students must be approved by the department head to enroll in each course and must have full admission to the upper division in the College of Business. Specific course requirements are available from the College's Office of the Associate Dean.

MGMT 4990 Independent Study in Business (1-3). (Formerly MG 490) 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.

\section*{Marketing (MKTG)}

MKTG 3010 Basic Marketing (3). (Formerly MK 301) A comprehensive overview of the process employed by profit and nonprofit organizations of marketing goods, services, and ideas. The modern marketing objective is customer satisfaction at a profit (or other measure of success) through product, distribution, promotion, and price. This study of basic marketing concepts
and terminology is set in the real-world context of the organization, competition, the economy, regulation, culture/society, and technology. Prerequisites: Junior standing and ECON 2020, or consent of the Department Head.

MKTG 3200 Sales Management (3). (Formerly MK 320) The course covers the nature of the basic selling function as well as salesperson selection, training, compensation, supervision, motivation. In addition, this course touches on how to determine sales budgets, quotas, territory designs, and sales analysis. Prerequisite: MKTG 3010.

MKTG 3300 Applied Marketing Research (3). (Formerly MK 330) This course examines the role of information in decision making with special emphasis on the applied techniques and methods used to identify marketing opportunities or solve marketing problems. The completion of an actual research project is generally required. Prerequisite: MKTG 3010.

MKTG 3400 Business Ethics (3). (Formerly MK 340) Ethical, legal, and human relations dimensions of the business and nonprofit environments. Prerequisite: MKTG 3010.

MKTG 3500 E-Business Models (3). (Formerly MK 350) This course is a survey of the dynamic business issues surrounding the development and emergent patterns of the electronic commercialization in the global marketplace. Included is an overview of internet development and security. Leveraging new technologies to enhance business processes, unique characteristics of e-marketing, and the legal, ethical, and regulatory issues in conducting e-business. Prerequisites: MGMT 3010, MKTG 3010, and BISI 3230. Cross-listed with MGMT 3500.

MKTG 4020 Quality Management (3). (Formerly MK 402) An integrated study of quality issues in the entire supply chain. The course will emphasize the continuous improvement of business processes, as well as the design, establishment, evaluation, and improvement of quality systems in the supply chain. Issues on Quality System Certification to meet industry and international standards shall also be addressed. Cross-listed with MGMT 4020 Prerequisite: MGMT 3010.

MKTG 4050 Consumer Behavior (3). (Formerly MK 405) An examination of the social, psychological, and decisional aspects of the buying process of individuals and households. Application of this knowledge is made via the selling organization's service of consumers by better satisfying their needs. Prerequisite: MKTG 3010.

MKTG 4100 Organizational Marketing Management (3). (Formerly MK 410) 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: MKTG 3010.

MKTG 4150 Integrated Marketing Communications (3). This course provides various strategies and tactics used to utilize the promotional variable of the marketing mix. An integrated marketing communications plan contains elements of the coordination of advertising campaigns, public relations, publicity, sales promotional activities, and personal selling decisions. Details of the inception, execution, evaluation and control of a promotional campaign that include media and creative decisions will be presented. Prerequisite: MKTG3010 or instructor's consent.

MKTG 4200 Marketing Channels (3). Channels of distribution for goods and services in business settings. Considers methods of optimizing the number, quality of institutions and activities employed in dealing with exchange, and space and time aspects of channel management. Relates management of marketing channels to selecting marketing mix and achieving organizational objectives. Prerequisite: MKTG3010 or instructor's consent.

MKTG 4250 Retailing Management (3). (Formerly MK 425) This important industry employs one out of eight people in the U.S. workforce. Exciting and challenging career opportunities are available to business graduates, plus the study of retailing creates better informed and wiser consumers. Since the retail store is a complete business, every aspect of business is brought to bear plus those unique to the field. Prerequisite: MKTG 3010.

MKTG 4300 Procurement (3). (Formerly MK 430) All organizations purchase for use and some(middlemen) purchase for both use and resale. A multitude of buying principles has developed separately for each of these purposes but will be studied together in this unique course. Buying in both instances is designed to satisfy the needs of other than the one(s) doing the buying. Organizational and customer need satisfaction act as the motivations for buyers who must serve well in order to succeed. Prerequisite: MKTG 3010.

MKTG 4350 International Marketing (3). (Formerly MK 435) 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: MKTG 3010.
MKTG 4400 Logistics (3). (Formerly MK 440) Analysis of logistic and transport services. Contemporary issues in:- customer service; distribution operations; purchasing; warehousing location, design and operation; carrier selection; transportation costing and negotiation. Prerequisites: MKTG 3010 and MGMT 3020.

MKTG 4500 Non-profit Marketing (3). (Formerly MK 450) This course undertakes the dual task of examining the service sector, which comprises an ever-increasing proportion of GNP, as well as the diverse set of organizations which operate under special governmental dispensation for the purpose of serving society with objectives other than achieving profit. While the basic marketing principles apply in both cases, special emphasis will be given to operational differences between these two important categories of marketers and their goods/profit-oriented counterparts. Prerequisite: MKTG 3010.

MKTG 4550 Marketing Strategy (3). (Formerly MK 455) This is a capstone course in Marketing (to be taken near graduation). It focuses on strategic planning and operations, which integrates various topics such as the marketing concept, market segmentation, brand building, consumer attitudes, marketing research, and integrated marketing communication. A computer-based marketing simulation as well as business plan is required. Prerequisites: MKTG 3200 OR MKTG 4050, and MKTG 3300

\section*{Real Estate And Urban Development (REUD)}

REUD 3130 Principles of Real Estate and Urban Development (3). (Formerly RE 313) 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. Prerequisites: ECON 2010 and Junior Standing.

REUD 3200 Urban Land Resource Analysis (3). (Formerly RE 320) 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: REUD 3130.

REUD 3300 Real Estate Finance (3). (Formerly RE 330) 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: REUD 3130.

REUD 3400 Real Estate Law (3). (Formerly RE 340) 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: REUD 3130.

REUD 3500 Real Estate Appraisals (3). (Formerly RE 350) Economics theories of value applied to real estate; valuation methods, analysis of evidences of values; appraising residential properties. Prerequisite: REUD 3130.

REUD 4100 Urban Planning and Public Policy (3). (Formerly RE 410) Processes of and use regulations including the organization of public planning, planning methodology, zoning, subdivision regulations, and other governmental impacts on real estate. Prerequisite: REUD 3130.
REUD 4300 Income Property Appraisal (3). (Formerly RE 430) Financial theories and methodologies used in estimating the value of income producing properties, i.e., apartments, office buildings, and shopping centers. Prerequisite: REUD 3130.

REUD 4400 Real Estate Investment Analysis (3). (Formerly RE 440) 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.

REUD 4490 Independent Study in Business (3). (Formerly RE 449) 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.

\title{
THE COLLEGE OF EDUCATION
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\author{
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\section*{Vision Statement}

The College of Education aspires to be a place where students at both initial and advanced levels explore current research as they prepare to become competent and caring professionals who are able to work effectively with diverse populations.

Further, the College of Education seeks to provide students with global education opportunities, to inspire them toward a demonstrated commitment to service for others, and to provide them with the knowledge, skills, and dispositions necessary to excel in their chosen professions.

\section*{Mission Statement}

The mission of the College of Education is to prepare teachers, counselors, psychologists, and administrators to work effectively with schools and communities.

Additionally, the College of Education provides all students with the technological skills, knowledge and commitment to diversity necessary for the provision of global and community service, and demonstration of professional excellence.

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 students 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 colleges of the university in implementing the program.
6. To offer basic and advanced courses, laboratory, and other experiences designed to give students a knowledge and understanding of the data, theories and methods of psychology.

The professional education component provided by the College of Education is designed to develop the competencies necessary for beginning teachers, which are:
1. To develop knowledge and understanding of the principles and processes of human growth, development, and learning, and the practical application of this knowledge to teaching all children.
2. To develop an understanding of instructional methods, materials, and media as they apply to facilitating learning in the student's field of specialization.
3. To utilize materials, methods, and resources in order to plan and teach effectively and to work ethically and constructively with pupils, teachers, administrators, and parents.
4. To develop an understanding of the historical, philosophical, and social foundations underlying the development and practices of public education of this country.
5. To develop an understanding of purposes, organization, administration, and operation of the total educational program of the school.
6. To develop an understanding of the total instructional process through planned field based experiences that involve direct observation and participation in teaching under supervision.
7. To develop instructional skills and strategies through a wide range of laboratory, clinical, and student teaching experiences.
8. To provide experiences designed to enable the student to utilize and apply psychological data and evaluation procedures in measuring the progress of students.
9. To integrate current research of effective teaching and schooling into curricular offerings so that graduates will be on the cutting edge of professional knowledge and practice.

Basic goals of the College of Education regarding multicultural 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, implementation, and evaluation of educational materials that are appropriate for multicultural settings.
6. Guide learners in the development of teaching strategies that consider multicultural perspectives.
7. Maintain a diverse faculty as well as a diverse student body.

\section*{Accreditation and Memberships}

Teacher preparation for undergraduate and graduate programs for the preparation of teachers and related professionals are accredited by the National Council for Accreditation of Teacher Education. The College of Education also holds membership in the American Association of Colleges for Teacher Education, the Council of Academic Deans from Research Education Institutions, Teacher Education Council of State Colleges and Universities, the Tennessee Association of Colleges for Teacher Education, the Na tional Association of Multicultural Education, the American Psychological Association, and the University Council for Educational Administration.

\section*{Office of Public Service and Outreach}

Administered by the Assistant Dean for Public Service and Outreach, this unit is primarily responsible for establishment and coordination of off-campus classes and programs, administration of doctoral examinations, cooperation with the State Department of Education, and coordination of accreditation assessment.

\section*{Office of Teacher Education and Student Services}

This office is administered by the Assistant Dean for Teacher Education and Student Services. The College of Education provides pre-service field experiences in order to afford opportunities for students to link theoretical information with real life situations through observations, one-to-one, and small group participation; and finally, student teaching. The Office of Teacher Education and Student Services makes all placements for field-based activities. The Office processes applications and makes recommendations to the State Department of Education for teachers, principals, school counselors, and school psychologists.

\section*{Curriculum Laboratory}

The Curriculum Laboratory is a center for instructional materials and other resources in teacher education. It is designed for students and teachers in the professional core courses in education, the specialized professional courses, and student teaching. The laboratory is a hands-on facility where students and alumni come to create and carry out research. The laboratory serves as a depository for the state of Tennessee textbook collection (grades \(\mathrm{K}-12\) ). The laboratory director offers workshop experiences for our undergraduate students in materials and manipulatives. The laboratory is located in the Clay Hall Education Building.

> Center for Career and Technical Education

\author{
Chip Harris, Ed.D., Director 217 Humphries Complex Telephone (615) 963-7600
}

\section*{General Statement}

The Center for Career and Technical Education is a collaborative effort between the College of Education at Tennessee State University, the Tennessee Department of Education, and the local education agencies offering Career and Technical Education programs in Tennessee. The Center, serving as a state-wide clearinghouse, offers services to new instructors in the Career and Technical (CTE) program areas of Trade and Industry, Health Science and others as requested by the Tennessee Department of Education as well as to the local system administrators. The Center will structure a program of study in education pedagogy for teachers who have received their Apprentice Occupational License and seek advancement to the Professional License.

The Center objectives are:
1. To provide support to new CTE teachers in meeting the requirements for advancement from the Apprentice Occupational License to the Professional Occupational License through advisement and required coursework.
2. To provide CTE instructors with opportunities for knowledge and understanding of the multicultural society in which they live and their relation to and responsibility in such a society.
3. To assist new CTE instructors with their required education coursework by developing an individualized program of study; tracking their progress and reporting completion of the program.
4. To provide in-service opportunities to new CTE instructors through new teacher workshops offered three times annually.
5. To prepare new CTE instructors to advise their curricular based student-professional organization by offering training workshops for the teachers.
6. To assist experienced CTE teachers through advisement and coursework in meeting recertification requirements.

\section*{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 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 teaching profession. The Council develops policies relating to admission, retention, counseling, records, curricula and standards for completion of a program in Teacher Education, Counselor Education, School Psychology, and School Leadership.

The Council is composed of the following appointed members:
1. Dean of the College of Education, Unit Head
2. Assistant Dean for Teacher Education and Student Services, Chairperson
3. Associate Dean of the College of Education
4. Assistant Dean for Outreach of the College of Education
5. Dean of the Graduate School
6. Director of University Libraries
7. One member from the Department of Speech Pathology and Audiology
8. One member from the College of Business
9. One member from the School of Family and Consumer Science and Agriculture
10. One member from Early Childhood Education (P-4)
11. Eight members from the College of Arts and Sciences: one from History \& Geography, one from Languages, Literature and Philosophy, one from Biology, one from Chemistry, one from Mathematics, one from Art, one from Music, and the Elementary Education advisor
12. Four members from the College of Education: one each from Human Performance \& Sport Sciences, Educational Administration, Teaching and Learning, and Psychology
13. Principal from TSU Professional Development School (PDS) and a teacher from PDS
14. Two practitioners (one principal and one teacher)
15. Two students (STEA President and graduate student)
16. One representative of the community

\section*{Organization of the College of Education}

The College of Education is composed of four (4) departments as follows: The Department of Educational Administration, the Department of Human Performance and Sport Sciences, the Department of Psychology, and the Department of Teaching and Learning. The College of Education has established cooperative agreements with the Metropolitan Nashville-Davidson County school system and other school systems in Tennessee to assist with the student teaching program.

\section*{General Information on the Teacher Education Program}

The Office of Teacher Education and Student Services screens all students who apply for candidacy to the Teacher Education Program and secures a record of each applicant showing that the applicant has met standards for candidacy to Teacher Education which includes taking the Rising Junior Examination. The Assistant Dean informs the departmental representative for each Teacher Education curriculum concerning the students approved for the program.

The departmental Teacher Education representatives inform the Assistant Dean for Teacher Education and Student Services through their respective Deans the status of those students in their departments who are maintaining the Teacher Education Program's retention requirements. These representatives 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.

\section*{Teacher Education Admission and Retention Requirements}

\section*{ADMISSION}
1. Each student who desires to be a candidate for admission to the Teacher Education Program will make application to the Assistant Dean for Teacher Education and Student Services in the second semester of the sophomore year after the Rising Junior Examination has been taken;
2. Each student will submit documentation that \(s / h e\) has:
a. Completed at least 50 semester hours of course work, including: ENGL 1010, 1020, PSYC 2420, EDCI 2010, and an appropriate sequence of freshman mathematics and freshman science;
b. Earned a grade of \(C\) or better in each of the following courses: ENGL 1010, 1020, PSYC 2420, EDCI 2010;
c. Maintained a C or better average in all freshman level mathematics and sciences courses;
d. Earned a 2.75 GPA or better on a 4-point scale in all previous college work;
e. Taken the Rising Junior Examination.
3. Each student will provide official records that indicate s/he has:
a. Performed satisfactorily on the speech-screening test;
b. Earned acceptable scores on the Pre-Professional Skills Test (P-PST), Enhanced ACT or combined SAT; students who do not attain the requisite score on the P-PST after having taken it twice and are within two (2) points of the required score may appeal to the Assistant Dean for Teacher Education and Student Services if additional criteria of appeal are met (see Freshman Level Teacher Education Handbook);
c. Received three positive recommendations on the Behavioral Disposition Rating Scale; one each from the advisor, a professional education professor, and one other non relative education professional.
d. Received a positive review of the electronic portfolio of the student's work to date in professional education courses.
e. Received a positive recommendation from the 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: EDCI 3870, EDAD 4000, EDRD 4910, EDRD 4240, EDSE 3330, PSYC 3120, and all methods courses.

\section*{RETENTION}

To remain in the Teacher Education Program, the student must:
1. Maintain a cumulative GPA of 2.75 or above;
2. Continue to exhibit professional growth characteristics essential to becoming an effective educator;
3. Meet all criteria for admission to student teaching at the appropriate time.

\section*{Admission to Student Teaching}

As part of the University's retention requirements in the Teacher Education Program, each student must be formally admitted to student teaching. Thus, each student must:
1. Meet all Teacher Education requirements to date;
2. Document passing scores on the Praxis II examinations in the semester prior to student teaching (Praxis II examination pass rate for 2005-2006 is 98 percent);
3. Apply for student teaching through the Teacher Education advisor; submit the completed application during the first semester of the senior year; complete a structured interview that includes presentation of an electronic portfolio;
4. Maintain a cumulative GPA of 2.75 or better;
5. Exhibit professional growth characteristics essential to becoming an effective educator;
6. Complete the prescribed prerequisite professional education courses and all courses in one's major area of specialization with a grade of C or better;
7. Supply documentation that a physician certifies that one is free from communicable diseases;
8. Supply documentation of professional liability insurance.

For the student teaching semester, all students are limited to a maximum of twelve (12) semester hours, nine (9) hours in student teaching and three (3) hours in educational seminar. Dual placement will be a part of the fifteen-week student teaching experience. Students who are awarded a grade of C or D in student teaching may graduate from the University but will not be recommended for certification.

NOTE: A student must complete a minimum of six (6) approved semester hours at Tennessee State University prior to student teaching regardless of previous studies (effective fall 2004). The Assistant Dean for Teacher Education and Student Services must approve the courses of students affected by this policy.

\section*{Certification Recommendation Requirements}

In order to be recommended for certification, the student must:
1. Meet all teacher education requirements to date;
2. Complete all graduation requirements;
3. Earn a grade of \(B\) or better in student teaching;
4. Maintain a cumulative GPA of 2.75 or above;
5. Present acceptable score(s) on each test required in Tennessee, currently the Praxis II Examinations: Principles of Learning and Teaching (PLT) and appropriate Specialty Area test(s), and complete the application form.

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.

\section*{Approved Undergraduate Teacher Education Program Certification Areas}

Art Education K-12
Biology 7-12
Chemistry 7-12
Early Childhood Pre K-4
Elementary Education K-8 (Fall 2007 the certification level changes to K-6.)

English 7-12
Family and Consumer Sciences 7-12
French 7-12
Geography 7-12
Government 7-12
History 7-12
HPSS K-12
Mathematics 7-12
Music K-12
Spanish 7-12
Speech 7-12
Theatre 7-12

\title{
Department of Educational Administration
}

\author{
Christon Arthur, Ed.D., Interim Head \\ 103 Education Building-Clay Hall \\ Telephone (615) 963-2299
}

Faculty: C. Arthur, R. Boone, E. Coukous, J. Cornelius, D. Dunbar, J. Finch, K. Gundi, W. Guyette, K. Looney, P. Short, K. Stevens, E. Vogel, R. Wiemers.

\begin{abstract}
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 Education, Specialist in Education, or Doctor of Education. The department's courses, seminars, studies, and other programs are primarily intended for graduate students. Interested students should see the Graduate Catalog for more information. The department offers one undergraduate course.
\end{abstract}

\section*{COURSE DESCRIPTIONS}

\section*{Educational Administration}

EDAD 4000 Professional Rights and Responsibilities. (3) A course that examines the legal and ethical foundations of education. Teachers are made aware of their ethical responsibilities as professionals and knowledgeable of their legal rights and those of their students. Prerequisite: Admission to Teacher Education. Field experience required.

\title{
Department of Human Performance and Sport Sciences
}

\author{
Catana Starks, Ed.D., Department Head 332 Gentry Complex Telephone (615) 963-5581
}

Faculty: J. Bass, J. Gentry, E. Hamido, J. James, T. Jones, R. Miller, E. Overall, T. Silver, C. Starks.

General Statement: An important purpose of the Human Performance and Sport Sciences Department is to require students to become knowledgeable and consciously aware of the need to maintain physical fitness and wellness. Consequently, all students in this discipline should acquire and appreciate: (a) an understanding of the importance of physical fitness maintenance, (b) the pedagogical methods used to achieve potential in overall body development through sport, dance, aquatics, and other motor activities, (c) a knowledge of how to develop skills for successful and enjoyable participation in games and sports, (d) an understanding of the principles of skill acquisition and body control, and (e) an understanding of rhythmic patterns, designs of music, and other cultural expressions through dance movement.

The departmental objectives are:
1. To inspire students in the development of an appreciation for a variety of physical activities that may be enjoyed throughout their lifetime.
2. To provide health instruction to all students so that they may be knowledgeable as health consumers and improve their quality of life.
3. Assess and provide for the fitness and exercise needs of people who are healthy, those at high risk and with known diseases. To inspire students in the development of an appreciation for a variety of
4. To develop technicians for the health fitness industry, who may serve as coordinators and directors of fitness and wellness programs.
5. To prepare prospective teachers with knowledge and skills in the health or physical education K-12 school setting.
6. Facilitation of development for prospective teachers with dispositions and understanding that will allow them to work successfully with diverse student populations.
7. Preparation of prospective athletic trainers for entry level training positions in the public and private sectors.
8. To provide an opportunity for students to develop skills in the prevention and recognition, evaluation, rehabilitation, and immediate care of athletic injuries.
9. To provide clinical settings that will allow students to develop skills to work with a variety of athletic injuries.
10. To provide leadership services to the University and community in the areas of teacher education of health and physical education, exercise science, and athletic training.

\section*{DEGREE PROGRAMS:}

The department offers four (4) undergraduate options leading to a Bachelor of Science degree - areas of concentration 1) Health Education-Teacher Education, 2) Physical Education-Teacher Education, 3) Athletic Training, and 4) Exercise Science three (4) mi-nors- 1) Personal Training, 2) Dance, 3) Health 4) Physical Education and two (2) Master's degree concentrations. (See Graduate Catalog for graduate options).
Department Requirements for Bachelor of Science in Human Performance and Sport Sciences (BS in HPSS)

Students interested in career opportunities in the Human Performance and Sport Sciences (HPSS) discipline are encouraged to enroll in exploratory courses at the Lower Division level (100 and 200) in addition to HPER activity courses. Once deciding upon majoring in HPSS, it is recommended that each student contact the department for advisement prior to applying for Upper Division Standing.

Admission (all candidates must see an advisor regarding application procedures):
1. Completion of the University requirements for the General Education Core,
2. Completion of HPSS Lower Division coursework (including HPER 1011 -Swimming or the Swimming Competency Test),
3. Take the Rising Junior Examination
4. Achieve a Cumulative GPA of 2.5 ,
5. Apply for Upper Division Standing, and
6. Submit Professional Portfolio.
7. Teacher Education Candidates (in addition to items 1-6 above) Pass Praxis I / Pre-Professional Skills Test, Apply for Admission to Teacher Education, and Achieve a Cumulative GPA of 2.75.

Teacher education admission requirements are further specified in the introductory material included under the general heading: The College of Education.

\section*{RETENTION}

Upper Division Admission/Standing is an official action undertaken by the student in concert with an advisor from the HPSS Department. Following application, and the successful completion of all criteria for Upper Division Admission, the student will be notified in writing when admission has been granted. Once admission to Upper Division Standing has been secured, one of the following four (4) program options must be selected, and all Major Core requirements attempted. A Cumulative GPA of 2.5 (Teacher Education Candidates - Cumulative GPA of 2.75) must be maintained to continue as a major in the Department. Majors must earn a grade of \(C\) or better in all HPSS core courses that are required in the major. Majors may carry one grade of D in a required HPSS core course but must still achieve the requisite cumulative GPA. All subsequent grades of D, or any failing grades (F), in a required HPSS core course must be repeated, and that course passed with a grade of C or better. When a course is a prerequisite for another HPSS core course, a grade of \(C\) must be earned in the prerequisite course before taking the upper division course.

Teacher education retention requirements are further specified in the introductory material included under the general heading: The College of Education.

\section*{GRADUATION}

Students who maintain good standing throughout their academic career in the HPSS Department must complete the following activities in order to graduate:
1. Schedule visits with an advisor who will monitor your academic progress, and who must prepare a program of study for submission to the Records Office one semester prior to graduation.
2. Schedule with an advisor to take the Rising junior Examination once all General Education requirements are completed (normally during the second semester of the sophomore year).
3. Schedule with an advisor to take the Senior Exit examination during the final semester of the senior year.
4. Complete an on-line application for graduation before the deadline date, one semester prior to graduation.
5. Students who fail to complete requirements for graduation must re-file on-line.
6. See an advisor to verify an application for graduation is on file with the Records Office.

Physical Education-Teacher Education (PETE) option - Major Core: EDCI 1010, HPSS 1510, HPSS 2060, HPSS 2010, HPSS 2020, HPSS 2030, HPSS 2040, HPSS 2270, HPSS 2310, HPSS 2704, HPSS 3020, HPSS 3030, HPSS 3130, HPSS 3140, HPSS 3310, HPSS 3340 , HPSS 3350, HPSS 3734, HPSS 4005, HPSS 4020, HPSS 4150 HPSS 4240 (or 4250 or 4260), HPSS 4506.

Professional Education: EDCI 2010, PSYC 2420, HPSS 3100, HPSS 3710, HPSS 4030, EDCI 4700, HPSS 4724, EDCI 4900, EDRD 4910.

Health Education-Teacher Education (HETE) option - Major Core: EDCI 1010, HPSS 1510, HPSS 2060, HPSS 2310, HPSS 2704, HPSS 3000, HPSS 3030, HPSS 3040, HPSS 3050, HPSS 3070, HPSS 3130, HPSS 3140, HPSS 3310, HPSS 3340, HPSS 3734, HPSS 4005, HPSS 4090, HPSS 4150, HPSS 4505.

Professional Education: EDCI 2010, PSYC 2420, HPSS 3720, HPSS 4030, EDCI 4700, HPSS 4724, EDCI 4900, EDRD 4910.

Exercise Science - Major Core: HPSS 1010, HPSS 1510, HPSS 2010, HPSS 2020, HPSS 2030, HPSS 2040, HPSS 2060, HPSS 2270, HPSS 2310, HPSS 3030, HPSS 3040, HPSS 3050, HPSS 3080, HPSS 3130, HPSS 3140, HPSS 3310, HPSS 3340, HPSS 4006, HPSS 4020, HPSS 4150, HPER 4240-4260, HPSS 4505, HPER 4730. Required Electives: HPSS 3190, HPSS 3200, HPSS 3300, HPSS 3350.

Athletic Training option - Major Core: HPSS 1010, HPSS 1510, HPSS 1400, HPSS 2060, HPSS 2400, HPSS 2410, HPSS 2420, HPSS 3130, HPSS 3140, HPSS 3410, HPSS 3420, HPSS 3450, HPSS 3460, HPSS 3470, HPSS 3480, HPSS 4007, HPSS 4505, HPSS 4730.

Professional Core: HIM 1040, NTR 2010, BIOL 2210, BIOL 2211, BIOL 2220, BIOL 2221, PSYC 4370.

\section*{Departmental Requirements for Minor}

Athletic Training: Not available as a minor.
Dance: A minimum of 18 hours including: HPER 1012, HPER 1042, HPSS 2060, HPSS 2225 or 2226 or 2227 or 2228, HPSS 2310, HPSS 3260, HPSS 3265, HPSS 3266, HPSS 3267, ELECTIVES - HPSS 2270 or HPSS 3230 and THEA 4020.

Health Endorsement: A minimum of 18 hours including: HPSS 2060, HPSS 3000, HPSS 3030, HPSS 3050, HPSS 3070, HPSS 4090.

Physical Education: A minimum of 18 hours including: HPER 1011, HPSS 2060, HPSS 2225 (or 2226 or 2270), HPSS 2310, HPSS 3140, HPSS 3340, and HPSS 4020.

\section*{Human Performance and Sport Sciences Department}

\title{
Physical Education - Teacher Education (K-12) Option (PETE)
}

\section*{120 hour Curriculum Guide Sheet}

\section*{FRESHMAN YEAR}

FALL SEMESTER
Courses Hours
ENGL 1010 Freshman English 3 HIST 2010/2030 Amer/TN History 3 MATH 1110 College Algebra 3 Humanities Elective* 3
EDCI 1010 Orientation 1
HPER 1011 Swimming (Required) or HPER 1010-1053

SPRING SEMESTER
Courses Hours
ENGL 1020 Freshman English 3 HIST 2020/2030 Amer/TN History 3 HPSS 1510 Health \& Wellness 3
Humanities Elective
COMM 2200 Public Speaking 3
\(\frac{1}{14}\)
\(\frac{1}{14}\)

15

NOTE: All HPSS majors must take HPER 1011 (Swimming) or pass Swimming Competency Test

\section*{SOPHOMORE YEAR}

Natural Science Elective* ENGL 2010-2028 Literature EDCI 2010 Foundations of Education
HPSS 2060 First Aid \& CPR HPSS 2010Sports Skills I HPSS 2030 Sports Skills II HPSS 2020

4 Natural Science Elective* 4 3 PSYC 2420 Human Dev.\& Learn. 3

HPSS 2310 Anatomy \&
Physiology
Social/Behavioral Science Elec.* 3
1 HPSS 2704 Pedagogy \& Ob. 1
1 HPSS 2040 Sports Skills III Theory of Aquatics

NOTE: Pass Rising Junior Exam \& Praxis; Apply for Upper Division stand ing \& Admission to Teacher Education

HPSS 3340 History \&
Philosophy of PE
HPSS 2270 Rhythms \& Movement 2
HPSS 3350 Lifespan Motor
Development
HPSS3730 4Clinical
Classroom Observation
HPSS 4020 Mgmt . \& Org. of HPER \& Sport
HPSS 4240-4260 Coaching

\section*{JUNIOR YEAR}

HPSS 3130 Kinesiology 3
HPSS 4150 Elements of Sport \& Sch Law

3
HPSS 3310 Measurement \& Eval
in PE
HPSS 4030 Educ Students w/ Disabilities

3

Concepts of
Games \& Play
HPSS 4005 Current Issues
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|c|}{SENIOR YEAR} \\
\hline EDRD 4910 Reading \& Study in
Sec. Sch & 3 & EDCI 4700 Student Teaching
Seminar \\
\hline HPSS 3140 Physiology of Exercise & 3 & HPSS 47204 Enhanced Stud Teaching (K-12) \\
\hline HPSS 4505 Senior Project & 3 & \\
\hline EDCI 4900 Multicultural Issues & 3 & \\
\hline HPSS 3710 Curriculum \& & & \\
\hline Methods in PE & 3 & \\
\hline & 15 & \\
\hline
\end{tabular}

TOTAL 120 HRS.
*These courses must be selected from the list of approved General Education Courses.

\title{
Human Performance and Sport Sciences Department
}

\section*{Physical Education (Exercise Science)}

\section*{120 hour Curriculum Guide Sheet}

FRESHMAN YEAR
FALL SEMESTER SPRING SEMESTER
Courses Hours Courses Hours

ENGL 1010 Freshman English 3 ENGL 1020 Freshman English 3 HIST 2010/2030 Amer/TN History 3 HIST 2020/2030 Amer/TN History 3 MATH 1110 College Math or Above 3 HPSS 1510 Health \& Wellness 3
Humanities Elective* 3
HPSS 1010 Orientation 1
HPER 1011 Swimming(Required) or
HPER 1010-1053
Humanities Elective* 3 COMM 2200 Public Speaking 3 HPER 1010-1053 1

14
NOTE: All HPSS majors must take HPER 1011 (Swimming) or pass Swimming Competency Test

\section*{SOPHOMORE YEAR}

Natural Science Elective*
ENGL 2010-2028 Literature
Natural Science Elective* 4
Social /Behavioral Science
HPSS 2310 Anatomy \& Elective*

\section*{Physiology}

HPSS 2060 First Aid \& CPR
HPSS 2010 Sports Skills I
IPSS 3340 History \& Philosophy of PE

HPSS 2030 Sports Skills II
HPSS 2040 Sports Skills III 1
HPSS Elective / Minor** 2000

3000

\section*{JUNIOR YEAR}
\begin{tabular}{lrlr} 
HPSS 3130 Kinesiology & 3 & HPSS 3140 Physiology of Ex. & 3 \\
HPSS 2270 Rhythms \& Movement 2 & HPSS 3310 Measurement \& Eval \\
HPSS 3030 Environmental Sanit & 3 & in PE & 3 \\
HPSS 4240-4260 Coaching & 2 & HPSS 3080 Officiating Tech. & 2 \\
HPSS 3040 Elements of Safety & 2 & HPSS 3050 Family Health & 3 \\
HPSS Elective/Minor *3000/4000 & 2 & HPSS Elective/Minor** 3000/4000 & 2 \\
& & HPSS Elective/Minor** 3000/4000 & 3 \\
& \(\overline{14}\) & & 16
\end{tabular}

\section*{SENIOR YEAR}

HPSS 4020 Mgmt. \& Org. of HPER \& Sport HPSS 4006 Current Issues 3 HPSS 4150 Elements of Sport \& Sch Law
HPSS Elective/Minor** 3000/4000 3
HPSS Elective/Minor** 3000/4000 3

HPSS 4505 Senior Project 3 HPSS Elec./Minor** 3000/4000 3 HPSS Elec./Minor** 3000/4000 3 HPSS Elec./Minor** 3000/4000 3 HPSS Elec./Minor** 3000/4000 3

15

\section*{TOTAL: 120 HRS}
*These courses must be selected from the list of approved General Education Courses.
** HPSS Elective / Minor selections should be selected in consultation with, and approval of, HPSS advisor and Minor advisor.

\section*{Human Performance and Sport Sciences Department}

\section*{Health Education- \\ Teacher Education (K-12) Option (HETE)}

\section*{120 hour Curriculum Guide Sheet}

FRESHMAN YEAR
FALL SEMESTER SPRING SEMESTER
\begin{tabular}{lrlr} 
Courses & Hours & Courses & Hours \\
ENGL 1010 Freshman English & 3 & ENGL 1020 Freshman English & 3 \\
HIST 2010/2030 Amer/TN History & 3 & HIST 2020/2030 Amer/TN & 3 \\
MATH 1110 Col. Math or Above & 3 & HPSS 1510 Health \& Wellness & 3 \\
Humanities Elective* & 3 & Humanities Elective* & 3 \\
EDCI 1010 Orientation & 1 & COMM 2200 Public Speaking & 3 \\
HPER 1011 Swimming (Required) & & \\
HPER 1010-1053 & \(\frac{1}{14}\) & & - \\
& & & 15
\end{tabular}

NOTE: All HPSS majors must take HPER 1011 (Swimming) or pass Swimming Competency Test

\section*{SOPHOMORE YEAR}
\begin{tabular}{llll} 
Natural Science Elective* & 4 & Natural Science Elective* & 4 \\
ENGL 2010-2028 Literature & 3 & PSYC 2420 Human Growth \& Dev3 \\
EDCI 2010 Foundations of Ed. & 3 & HPSS 2310 Anatomy \& Phys. & 3 \\
HPSS 2060 First Aid \& CPR & 3 & HPSS 270 4 Pedagogy \& Ob. & 1 \\
Social /Behavioral Science Elec.* & 3 & HPSS 3340 Hist. \& Phil. of PE & \(\frac{3}{14}\)
\end{tabular}

NOTE: Pass Rising Junior Exam \& Praxis;
Apply for Upper Division standing \& Admission to Teacher Education

\section*{JUNIOR YEAR}

HPSS 3130 Kinesiology
HPSS 3000 School Health Pro.
HPSS 3030 Environ. Sanitation 3 HPSS 4090 Drug Education
HPSS 3730 Clinical Classroom Observation
HPSS 4210 Admin of HPER, Ath, \& Intr

HPSS 3140 Physiology of Ex. 3 HPSS 3310 Meas. \& Eval in PE 3 HPSS 3070 Health Instruction 3
HPSS 3050 Family Health 3
HPSS 4030 Educating Students w/Disabilities
HPSS 4005 Current Issues

SENIOR YEAR
\begin{tabular}{|c|c|c|}
\hline HPSS 4150 Elements of Sport \& School Law & 3 & EDCI 4700A Student Teaching Seminar \\
\hline EDRD 4910 Reading \& Study in Sec. Schools & 3 & HPSS 4724 Enhanced Stud Teaching \\
\hline HPSS 4505 Senior Project & 3 & \\
\hline HPSS 3720 Curriculum \& & & \\
\hline Methods in Health & 3 & \\
\hline EDCI 4900 Multicultural Issues & 3 & \\
\hline & 15 & \\
\hline
\end{tabular}

TOTAL 122 HRS.
*These courses must be selected from the list of approved General Education Courses.

\title{
Human Performance and Sport Sciences Department
}

\author{
Athletic Training \\ 120 hour Curriculum Guide Sheet \\ FRESHMAN YEAR \\ FALL SEMESTER SPRING SEMESTER \\ Courses Hours Courses Hours HIST 2010/2030 Amer/TN History \\ ENG 1020 Freshman English 3 Humanities Elective* CHEM 1030 General Chemistry 4 Humanities Elective* 3 HPSS 1400 Foundations of AT 2 \\ HIM 1040 Medical Terminology 3 Swimming (Required) or HPER 1010-1053 \\ 17 \\ 16
}

ENG 1010 Freshman English HPSS 1010 Orientation
BIO 1010 Intro to Bio Sciences Humanities Elective*

NOTE: All HPSS majors must take HPER 1011 (Swimming) or pass Swimming Competency Test

\section*{SOPHOMORE YEAR}

COMM 2200 Public Speaking
MATH 1110 College Algebra
PSYC 2010 General Psychology 3
HPSS 2400 Prevention \& Care of Ath Injury
HPSS 2410 AT Clinical I
HPSS 1510 Health \& Wellness
\(\begin{array}{r}1 \\ 3 \\ \hline\end{array}\)
16

ENGL 2010-2028 Literature 3 BIO 2210/2210L Human Anatomy \& Phys
HPSS 2060 First Aid \& CPR 3
HPSS 2420 AT Clinical II 1
NUFS 2010 Nutrition

NOTE: Pass Rising Junior Exam; Apply for Upper Division standing

\section*{JUNIOR YEAR}

BIO 2220/2221 Human Anatomy \& Phys.
HPSS 3410 Therapeutic Exercise
HPSS 3450 Pharmacology 3
HPSS 3460 Lower Extremity
Assessment
HPSS 3140 Physiology of Exercise3
17

HPSS 3420 Therapeutic Modal. 2
HPSS 3470 Upper Extremity
Assessment 3
HPSS 3480 Org. \& Admin. of AT 3
HPSS 3130 Kinesiology 3
HPSS Elective/Minor** 3000/4000 3
HPSS Elective/Minor** 3000/4000 3
16

\section*{SENIOR YEAR}

HPSS 4730 Field Experience HPSS 4505 Senior Project PSYC 4370 Fund. of Counseling 3 HPSS Elective/Minor** 3000/4000 3

HPSS 4007 Current Issues 3 HPSS Elective/Minor** 3000/4000 3 HPSS Elective/Minor** 3000/4000 3 HPSS Elective/Minor** 3000/4000 3

TOTAL 120 HRS.
*These courses must be selected from the list of approved General Education Courses.
** HPSS Elective / Minor selections should be selected in consultation with, and approval of, HPSS advisor and Minor advisor.

\title{
COURSE DESCRIPTIONS
}

\section*{Activity Courses}

This section describes elective courses for the general student body.

\section*{Health, Physical Education \& Recreation (HPER)}

HPER 1010 Physical Fitness Activities (1). A course designed so that students participate in exercises and various physical activities that can improve strength, flexibility and cardiovascular endurance.

HPER 1011 Elementary Swimming (1). A course designed to provide basic swim instruction, improve upon ones current swimming.

HPER 1012 Modern and Ballet Dance (1). An introduction to modern dance technique and ballet technique as well as elementary composition. The first half of the semester will be spent covering modern dance, the last half covering ballet. No prerequisites.

HPER 1013 Badminton (1). An elective course designed to teach the basic skills and strategies of badminton.

HPER 1014 Volleyball (1). An elective course designed to teach the basic skills, rules and regulations and strategies regarding power volleyball.

HPER 1015 Soccer (1). A course designed to provide students a variety of drills, skills and rules to play the game of soccer or appreciate the sport as a spectator.

HPER 1016 Golf (1). A course designed to teach elementary aspects of the game of golf. Special attention is placed on fundamentals and application of swing, strategies, rules, golf etiquette and other phases of golf.

HPER 1018 Basketball (1). A course that introduces students to the rules, regulations and basic skills necessary to participate in basketball and to improve understanding of basketball and team concept.

HPER 1019 Folk and Square Dance (1). A course designed to acquaint the student with the basic skills and techniques of folk and square dancing. Emphasis is placed on the educational and recreational aspect of folk and square dance.

HPER 1020 Softball (1). A course designed to teach the rules, strategies, fundamentals and other aspects of the game of softball.

HPER 1021 Tennis (1). A course designed to teach students the basic skills, rules, strategies, court safety and etiquette as it applies to the game of tennis.

HPER 1022 Social Dance (1). An elective course exploring the different types of social dance from an educational, recreational and sociological standpoint that can serve as a carry-over of values for all ages.

HPER 1023 Touch Football (1). An elective course that presents the modified form of football. Emphasis is on fundamental skills necessary for participation.

HPER 1030 Weight Training (1). A course designed to teach the rudiments of movement using progressive resistance training. Emphasis is on improving muscle tone, muscular endurance, and muscular strength.

HPER 1031 Racquetball (1). A course designed to give instruction in the basic techniques and skills of racquetball. Conditioning drills for agility, stamina, hand-eye coordination essential to all sports will be incorporated.

HPER 1032 Beginning Yoga (1). A course designed for instruction in the basic knowledge and skills with emphasis on yoga postures.

HPER 1034 Archery (1). A course designed to provide the student with a knowledge of and a practice in the basic skills of archery. Emphasis will be placed on rules, safety and proper equipment.

HPER 1040 Track and Field (1). A course designed to introduce students to rules, regulations and basic techniques. Emphasis will be placed on various jumps, throwing events, stride techniques, relays, sprint and distance racing.
HPER 1041 Karate (1). An elective course that studies the basic movements of Oriental Martial Arts. Emphasis on theory and practice of the mental and physical discipline related to the activity. It is taught as a sport and for self defense.

HPER 1042 Beginning Jazz and Tap Dance (1). A course designed to give the basic fundamental movements, steps and patterns of jazz and tap dance as well as to incorporate the style and the history. No prerequisite.
HPER 1043 Scuba Diving (1). A course designed to teach safety, theory, and practice of scuba diving.

HPER 1044 Intermediate Yoga (1). A course designed for students with a foundation in basic yoga body work. Instructor's approval is required.

HPER 1050, 1051, 1052, 1053 Adapted Physical Education (1, 1, 1, 1). 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.

\section*{MAJOR / CORE COURSES}

This section describes Human Performance and Sport Sciences (HPSS) courses. Lower Division courses (1000 \& 2000 level) may be enrolled in as elective or exploratory courses for the general student body. Upper Division courses ( 3000 \& 4000 level) are restricted to HPSS majors who have been accepted for Upper Division Standing. All other students may enroll only with the permission of the instructor or HPSS Department.

HPSS 1010 Orientation (1) [FORMERLY HPER 101]. A course which introduces freshmen to the fields 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.

HPSS 1400 Foundations of Athletic Training (2) [FORMERLY HPER 140]. This course provides students with an orientation to professional and clinical aspects of athletic training. Students are introduced to the professional domains of athletic training, a team concept of healthcare, and required policies and procedures.
HPSS 1510 Health and Wellness (3) [FORMERLY HEA 151]. 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.
HPSS 2010 Fundamentals and Techniques of Team Sports (1) [FORMERLY PE 201]. A course designed to teach prospective coaches and teachers how to implement a tactical approach for creating units of instruction for team sports. This includes analyzing each sport skill involved in a team sport and developing a teaching method in which the learner can be taught the proper fundamental skills, practice using drills and practice sessions and then, successfully participate in a lead-up game (elementary or secondary) of various sports.

HPSS 2020 Theory of Aquatics (1) [FORMERLY PE 202]. A course designed to develop knowledge in all aquatics disciplines (instructional \& competitive swimming, diving, water polo, etc.), proficiency in the mechanics, skills, strategies, and progressions of aquatics sports. Emphasis is on providing majors with elements of teaching techniques.
HPSS 2030 Fundamentals and Techniques of Individual Sports (1) [FORMERLY PE 203]. A course designed to teach prospective coaches and teachers how to implement a tactical approach for creating units of instruction for individual sports. This includes analyzing each skill involved individual sports and developing a teaching method in which the learner can be taught the proper fundamental skills, practice sessions and then, successfully participate in a lead-up game (elementary or secondary) of various sports.

HPSS 2040 Fundamentals and Techniques of Lifetime Sports (1) [FORMERLY PE 204]. A course designed to teach prospective coaches and teachers how to implement a tactical approach for creating ; units of instruction for individual sports. This includes analyzing each skill involved in individual sports and developing a teaching method in which the learner can be taught the proper fundamental skills, practice using drills and practice sessions and then, successfully participate in a lead-game (elementary or secondary) of various sports.

HPSS 2060 First Aid and Cardio-Pulmonary Resuscitation (3) [FORMERLY HEA 206]. A course designed to teach students to recognize and
care for breathing and cardiac emergencies in adults, infants and children; identify and care for life-threatening bleeding, sudden illness, injuries and healthy lifestyles. CPR/AED and First Aid certification from the American Red Cross may be earned through successful completion of the course.

HPSS 2225 Survey of Dance Forms: Folk and Square (2) [FORMERLY PE 222A]. A course which deals with the history, some personalities associated with (past and present) fundamental techniques, and experiences related to folk and square dance.

HPSS 2226 Survey of Dance Forms: Modern (2) [FORMERLY PE 222B]. 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.

HPSS 2227 Survey of Dance Forms: Jazz and Social Dance (2) [FORMERLY PE 222C]. 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.

HPSS 2228 Survey of Dance Forms: Tap Dance (2) [FORMERLY PE 222D]. A course which deals with the development of basic skills and understanding of related historical elements associated with the dance.

HPSS 2270 Fundamental Rhythms and Music for Dance (2) [FORMERLY PE 227]. 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.

HPSS 2310 Anatomy and Physiology (3) [FORMERLY PE 231]. 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.

HPSS 2400 Prevention and Care of Athletic Injuries (3) [formerly HPER 340] [FORMERLY HPER 240]. Introduction to the basic concepts of prevention of athletic injuries, injury recognition, and treatment necessary for the management of athletic injuries. Prerequisites: PE 231 Anatomy and Physiology.
HPSS 2410 Athletic Training Clinical I (1) [FORMERLY HPER 241]. This course covers basic athletic training skills, techniques, and protocols appropriate for entry level student athletic trainers Emergency skills, documentation, and rehabilitation techniques will be covered. This course must be taken concurrently with HPER 240.

HPSS 2420 Athletic Training Clinical II (1) [FORMERLY HPER 242]. This course covers basic athletic training skills, techniques, and protocols appropriate for entry level student athletic trainers. Preventive taping techniques and evaluation of basic injuries will be covered.

HPSS 2700 Pedagogy and Observation (1) [FORMERLY HPER 270]. Designed to foster the development of teacher candidate pedagogical skills in a variety of content settings. Emphasis will be on the implementation of lesson plans and skill progression assessments of children. Clinical practice / field experiences in selected elementary and secondary schools (PDS partners) will be incorporated. Co-requisites: PE 201, 203, or 204.

HPSS 3000 The School Health Program (3) [FORMERLY HEA 300]. 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.

HPSS 3020 Movement Exploration (2) [FORMERLY PE 302]. 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.

HPSS 3030 Environmental Sanitation (3) [FORMERLY HEA 303]. A course concerned with placing emphasis on important environmental topics: Globalization, ecosystems, human population, renewable resources, energy, pollution, and prevention, and toward a sustainable future. It includes issues regarding sanitation of food, water, waste disposal, material health, industry, pollution control, and the role of citizens in community and global stewardship projects.

HPSS 3040 Elements of Safety (2) [FORMERLY HPER 304]. 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.

HPSS 3050 Family Health (3) [FORMERLY HEA 305]. 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.

HPSS 3070 Health Instruction for the School (3) [FORMERLY HEA 307]. 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.
HPSS 3080 Officiating Techniques (2) [FORMERLY PE 308]. A course designed to teach the techniques of officiating for selected sports; and to provide practical experiences through officiating in selected activities.

HPSS 3100 Concepts of Games and Play (3) [FORMERLY PE 310]. 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. Prerequisite: Admission to Teacher Education Program.

HPSS 3130 Kinesiology (3) [FORMERLY PE 313]. A course designed to study muscles and their role in the science of human motion. This course is based on anatomical and mechanical principles with emphasis on the analysis of human movements in games, sports, other physical education skills, and basic movement activities. Laboratory experiences will also be provided to augment kinesiological concepts covered. Prerequisites: 2310.

HPSS 3140 Physiology of Exercise (3) [FORMERLY PE 314]. 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 covered. Prerequisites: HPSS 2310 or BIOL 221 and 222.

HPSS 3190 Adult Fitness (2) [FORMERLY PE 319]. A course designed to introduce concepts about health-related physical fitness and to establish, through contemporary research evidence, the connections between physical fitness and wellness; lifestyle choices and behaviors. 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 for all age levels.

HPSS 3200 Sport Psychology (3) [FORMERLY HPER 320]. Examines the effects of motivation, personality, attitudes, competition and group dynamics on sport performance, psychological effects of exercise, exercise adherence, and addiction as it relates to human performance.

HPSS 3230 Modern Dance: Techniques and Composition (2) [FORMERLY PE 323]. 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. Prerequisites: HPER 1012 or, HPSS 2225-2227.

HPSS 3240 Tap Dance: Technique and Choreography (2) [FORMERLY PE 324]. A course which includes intermediate and advanced experiences. Elective for majors and non-majors with previous experience in tap dance. Prerequisites: HPER 1042 or, HPSS 2228.

HPSS 3260 Rhythmic Performance Groups (2) [FORMERLY PE 326]. A course designed to give the student advanced techniques in ballet as well as prepare them for theory and training related to; Prerequisites: HPER 1012, or HPER 1042, or HPER 2225-7.

HPSS 3265 Rhythmic Performance Group (2) [FORMERLY PE 326A]. A course designed to give the student advanced techniques in modern dance as well as prepare them for theory and training related to. Prerequisites: HPER 1012, or HPER 1042, or HPER 2225.

HPSS 3266 Rhythmic Performance group (2) [FORMERLY PE 326B]. A course designed to give the student advanced techniques in jazz dance as well as prepare them for theory and training related to. Prerequisites: HPER 1012, or HPER 1042, or HPER 2225.

HPSS 3267 Rhythmic Performance Group (2) [FORMERLY PE 326C]. A course designed to give the student advanced techniques in tap as well as prepare them for theory and training related to dance performance. Prerequisites: HPER 1012, or HPER 1042, or HPER 2225.

HPSS 3300 Advanced Weight Training (2) [FORMERLY PE 330]. A course designed to introduce knowledge, skills, and abilities required to increase muscle endurance, muscle strength, and muscle definition. Prerequisites: HPER 1030 or approval of instructor.

HPSS 3310 Measurement and Evaluation in Physical Education (3) [FORMERLY PE 331]. A course which acquaints students with knowledge, skills, and abilities required to administer fitness assessments, as well as testing procedures available in physical education, exercise science, sports, and dance. It emphasizes the theory, application and administration of tests to evaluate the content and methods of measuring student's achievements, criteria for classification of students and grading. Required of all HPSS majors.
HPSS 3320 Life Guarding and Advanced Swimming (3) [FORMERLY PE 332]. A course designed to review, develop, and coordinate different swimming strokes, water safety skills, and techniques in aquatics. CPR/AED, First Aid, and Life Guarding certification from the American Red Cross may be earned through successful completion of the course. Prerequisite: HPER 1011 or with instructor's permission.
HPSS 3340 History and Philosophy of Physical Education (3) [FORMERLY PE 334]. 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.

HPSS 3350 Lifespan Motor Development (2) [FORMERLY PE 335]. 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.

HPSS 3410 Therapeutic Exercise (3) [FORMERLY HPER 341]. Rehabilitation skills of specific body parts will be covered. This will include utilization of rehabilitation tools and athlete/sport specific rehabilitation protocols.

HPSS 3420 Therapeutic Modalities (2) [FORMERLY HPER 342]. Specific therapeutic modalities and their use during rehabilitation will be examined. This will include gaining an understanding of the physics properties behind the use of modalities and the laws governing their use.

HPSS 3450 Pharmacology (3) [FORMERLY HPER 345]. The study of drugs (prescription and non-prescription), pharmacological applications, including awareness of indications, contraindications, precautions, and drug interactions. This course will also include government regulations relevant to treatment of the physically active.

HPSS 3460 Lower Extremity Injury Assessment \& Clinical (3) [formerly HPER 440] [FORMERLY HPER 346]. This course covers the application of anatomy, pathomechanics, and athletic training injury evaluation techniques and principles of the lower body. The clinical portion will provide laboratory applications of athletic training injury evaluation techniques and principles of the lower body.

HPSS 3470 Upper Extremity Injury Assessment \& Clinical (3) [FORMERLY HPER 347]. This course covers the application of anatomy, pathomechanics, and athletic training injury evaluation techniques and principles of the upper body. The clinical portion provides laboratory applications of athletic training injury evaluation techniques and principles of the upper body.
HPSS 3480 Organization and Administration of Athletic Training (2) [FORMERLY HPER 348]. The administration of an athletic training facility and proper organizational techniques will be covered. Topics in include, but are not limited to, budgeting, facility management, legal issues, record keeping, insurance, and technology use in the athletic training facility.

HPSS 3530 Leadership Principles (3) [formerly REC 353] [FORMERLY HPER 353]. A course designed to equip the student to manage and supervise sport and recreation programs. It provides the opportunity to apply
program planning skills and leadership techniques in a selected sport and recreation agencies.

HPSS 3550 Principles of Sport Fitness (3). This course covers the scientific training principles that must be utilized to improve conditioning and performance. The theory and practice of training for basic fitness or for specific sports with views on how athletes train to improve sport participation and performance will be discussed. This course is designed for health professionals, physical education teachers, coaches, and other individuals who desire to know how to plan and manage effective fitness-training programs.

HPSS 3600 First Aid \& CPR - Instructor Training (3) [FORMERLY HEA 360]. Designed to prepare the student to become an Instructor of American Red Cross courses in First Aid and CPR Prerequisites: HEA 206, and/or current American Red Cross First Aid and CPR certifications.

HPSS 3630 Outdoor Education (3) [formerly REC 303] [FORMERLY HPER 363]. A course designed to develop practical outdoor skills through direct experiences including: cooking skills, camp site selection, hiking skills, compass reading, rock climbing, tenting, and aquatic skills.
HPSS 3710 Curriculum \& Methods in Physical Education (3) [FORMERLY PE 371]. A course that utilizes principles and practices used to design instructions and experiences in program content. Exploration of teaching methods used to design developmentally appropriate content for students in K-12 physical education programs. Focus will be on implementation of lifetime physical education concepts which utilize teaching with skill themes, movement concepts, fitness/wellness, and sport skills to inspire students to remain physically active as adults. Observations in elementary and secondary schools required. Prerequisite: Admission to Teacher Education.

HPSS 3720 Methods and Material of Health Education (3) [FORMERLY HEA \(\mathbf{3 7 1 H} \mathrm{H}\). A course designed to prepare prospective health educators to teach using an organized, sequential K-12 plan with information and skills theory need to become health-literate, to maintain and improve their health, to prevent disease, and to reduce risky health-related behaviors. Special emphasis will be placed on developing age appropriate lesson plans for health classes. Observations are required in elementary and secondary schools. Prerequisites: Admission to Teacher Education.
HPSS 3730 Clinical Classroom Experience (2) [FORMERLY HPER 373]. Clinical, pre-student teaching experience in K-12 physical education settings. Pedagogical skills learned in PE 201, 203, 204, and 270 will be refined and implemented in teaching sport skills, fitness, movement, and wellness. Teacher candidates will be working in small groups and large group settings. Clinical practice / field experiences will be required in selected elementary and secondary schools (PDS partners). Prerequisite: PE 270.

HPSS 3750 Sociological Implications of Sports (3) [FORMERLY PE 375]. A course that deals with sociological perspectives of sports in society, theoretical bases for understanding how sports affect society and the worlds of sports. There will be some concern with issues related to gender, race, culture, politics, economics, and research in the world of sports.
HPSS 4005 Current Issues (3) [FORMERLY HPER 400A]. Covers a diverse selection of issues and complex problems that confront physical education and sport. Efforts will be made to encourage independence of thought and stimulate new insights. Emphasis will be placed on the preparation of PETE and HETE Teacher Candidate for the PRAXIS examination and editing student portfolios.
HPSS 4006 Current Issues (3) [FORMERLY HPER 400B]. Covers a diverse selection of issues and complex problems that confront physical education and sport. Efforts will be made to encourage independence of thought and stimulate new insights.
HPSS 4007 Current Issues (3) [FORMERLY HPER 400C]. Covers a diverse selection of issues and complex problems that confront physical education and sport. Efforts will be made to encourage independence of thought and stimulate new insights. Emphasis will be placed on preparing Athletic Training majors for the NATA certification examination and editing student portfolios.
HPSS 4020 Mgmt., Org. of HPER \& Sport (3) [FORMERLY HPER 402]. 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.

HPSS 4030 Educating Students with Disabilities (3) [FORMERLY HPER 403]. 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. Prerequisite: Admission to Teacher Education Program.
HPSS 4090 Drug Education (3) [FORMERLY HEA 409]. 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.

HPSS 4150 Elements of School and Sport Law (3) [FORMERLY HPER 415]. Investigation and analysis of the law and legal issues in schools for physical educators, coaches, and fitness trainers; topics include negligence theory; common defenses; product liability; contract law, constitutional law, and sport litigation.

HPSS 4240 Coaching Court Sports (2) [FORMERLY PE 424]. A course that provides an examination and study of the rules, methods of organizing practice, and management of teams; team offense and defense, strategy, and philosophy of coaching for court sports (e.g.: Basketball, Volleyball, Tennis).

HPSS 4250 Coaching Field Sports (2) [FORMERLY PE 425]. A course that provides an examination and study of the rules, methods of organizing practice, and management of teams; team offense and defense, strategy, and philosophy of coaching (e.g.: Football, Soccer, Baseball \& Softball).

HPSS 4260 Coaching Individual Sports (2) [FORMERLY PE 426]. A course that provides an examination and study of the rules, methods of organizing practice, and management of athletes; offense and defense, strategy, and philosophy of coaching (e.g., Aquatics, Track \& Field, Golf).

HPSS 4340 Planning Special Events and Demonstrations (2). A course that provides instructional planning for prospective teachers, physical fitness trainers, aquatics directors, and other exercise program providers. Practical methods for planning, directing, and producing demonstrational and school events related to instructional programs in the school, or activity programs in institutions are emphasized.

HPSS 4360 Water Safety Instructor (3) [FORMERLY PE 436]. A course designed to train instructor candidates to teach effectively the safety procedures, skills and knowledge of the American Red Cross courses in aquatics. Prerequisites: HPER 1011 and PE 202 or competency.

HPSS 4505 Senior Project Writing (3) [FORMERLY HPER 450]. 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 HPSS majors.

HPSS 4506 B Senior Project Writing (3) [FORMERLY HPER 450B]. A course designed for teacher candidates to fully develop their professional portfolio. Students are to select an academic area of interest, construct the requisite curriculum, gather and integrate support materials, and state learning goals and objectives based on the curriculum developed. This will be a cumulative project presented in a written and oral form to the faculty. It is required of all Physical Education and Health Education-Teacher Education majors.

HPSS 4720 Enhanced Student Teaching (K-12) (9) [FORMERLY PE 472]. A course designed to provide supervised student teaching in physical education in an elementary and secondary school placement. Emphasis is on the design of units, lesson plans, assessments, and teaching techniques designed in concert with an experienced teacher who will mentor and assist as student's work in the classroom.

HPSS 4730 Field Experience (3-9) [formerly REC 473] [FORMERLY HPER 473]. This course is designed to provide students with direct experience who demonstrates a career interest in Exercise Science or Athletic Training. In this placement, opportunity to integrate knowledge learned during coursework and through campus experiences in actual practice situations will be encouraged. Students are expected to earn 48 contact hours to have an in-dept field experience in a hospital-based wellness or cardiac rehabilitation program, a corporate fitness center, or other off-campus fitness/exercise or clinical settings.

\title{
Department of Psychology
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\author{
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}

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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.

\section*{ADMISSION, RETENTION, GRADUATION}

The undergraduate curriculum in psychology terminates in a Bachelor of Science Degree. All majors are required to take a total of 45 hours of psychology courses. Of this number, there are 27 hours of required psychology courses and 18 hours of elective psychology courses. The required courses include: PSYC 1010 (Orientation), PSYC 2010 (General Psychology), PSYC 2180 (EIementary Statistics) and 20 additional hours in psychology at the 3000/4000 level. The 20 hours of additional required coursework includes: PSYC 3150, 3180, 3300, 4110, 4115 or 4116,4500 , and 4810. A total of 18 hours of psychology electives are required. At least six of these elective hours must be selected from Group 1 psychology courses (PSYC 3210, 3410, 3510, 4250, 4620), and the remainder from either Group 1 or Group 2 psychology electives. Group 2 psychology electives include any 3000 or 4000 level classes not included in the required psychology major or group 1 psychology elective categories. Majors must earn a grade of C or better in all psychology courses counted towards the major. Majors who receive a grade of \(D\) or \(F\) in a required psychology course must repeat and pass the course with a grade of C or better. When a course is a prerequisite for another psychology course, a grade of \(C\) must be earned in the course before taking the psychology course for which it is a prerequisite.

Majors are required to participate in performance evaluation measures (taking various tests, responding to inquiries) designated by the Department, College or University.

\section*{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, PSYC 4360, after completing prerequisites.

\section*{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.

\section*{DEPARTMENTAL REQUIREMENTS FOR BACHELOR OF SCIENCE IN PSYCHOLOGY}

\section*{Total 120 Semester Hours}

\section*{All majors in Psychology must take the following courses.}

GENERAL EDUCATION CORE (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: Communication (9), Humanities (9), Natural Sciences (8), Math (3), American History (6), Social Science (6).

MAJOR REQUIRED CORE (27 hours) PSYC 1010, 2010, 2180, 3150, 3180, 3300, 4110, 4115 or 4116, 4500, and 4810.

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 PSYC 3210, 3410, 3510, 4250, and 4620. Group 2 courses include PSYC 3230, 3310, 3360, 3520, 3530, 4130, 4140, 4240, 4360, 4370, 4400, 4515, 4516, 4517, 4605, 4606, 4607, 4608.

GENERAL ELECTIVES (33-35 hours). These electives must include at least 12 hours of 3000 and 4000 level courses. Electives can include PSYC courses as well as courses from other departments. The advisor can recommend and will approve such electives.

UPPER DIVISION ADMISSION Upper Division Admission is granted in the semester in which the student has completed or will complete all General Education Courses and PSYC 1010, 2010, 2100 and 2180. A grade of C or higher must be made in the psychology courses. Upper Division Admission is an official action taken by the psychology department and the student will be notified in writing that admission has been granted. The following psychology courses require that the student has been given Upper Division Admission status before being permitted to enroll in them: PSYC 3150, 3180, 3300, 4110, 4115/4116, 4130, 4250, 4360, 4370, 4500, 4515, 4516, 4517, 4605, 4606, 4607, 4608, 4620, and 4810. Students must also meet any University testing or other requirements necessary for upper division admission (see advisor regarding Rising Junior Examination).

\section*{REQUIREMENTS TO TEACH PSYCHOLOGY IN SECONDARY SCHOOLS}

Students seeking endorsement to teach Psychology at the high school level must:
1. Be licensed in a specialty area of Social Studies (Admission to Teacher Education Program is required; see section on Teacher Education Admission and Retention in this catalog)
2. Major in History or Political Science;
3. Minor in Psychology (PSYC 2010 and 18 Upper Division Hours in PSYC);
4. Have the enhanced student teaching experience in the secondary school and middle school (Documentation of current professional liability insurance is required.)
5. Successfully pass the Praxis II Series Examinations: Principles of Learning and Teaching Test (PLT 7-12) and Specialty Area Test for Psychology.

\section*{MINOR REQUIREMENTS}

General Psychology 2010 plus 18 additional semester hours of 3000 and 4000 level psychology courses are required for a minor.

\section*{BACHELOR OF SCIENCE DEGREE IN PSYCHOLOGY}

\section*{Suggested Four-Year Plan}

\section*{FRESHMAN YEAR}

\section*{Fall}

PSYC 1010
ENGL 1010
HIST 2010
*Soc. Science
*Math
*Humanities

\section*{Spring}

PSYC 2010
ENGL 1020
HIST 2020
*Humanities
3
16

\section*{SOPHOMORE YEAR}

\section*{Fall}

PSYC elective
*Nat. Science
ENGL 2010 or 2020
Electives

\section*{Spring}

PSYC 2180
PSYC elective
*Nat. Science
Electives

15
* These courses must be selected from the approved courses from the category of General Education in consultation with the student's academic advisor.
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|c|}{JUNIOR YEAR} \\
\hline Fall & & Spring & \\
\hline PSYC 3180 & 3 & PSYC 4110 & 3 \\
\hline PSYC 3300 & 3 & PSYC 4115/4116 & 1 \\
\hline PSYC elective & 3 & PSYC 3150 & 3 \\
\hline Electives & 6 & PSYC electives & 3 \\
\hline & & Electives & 5 \\
\hline & 15 & & 15 \\
\hline \multicolumn{4}{|c|}{SENIOR YEAR} \\
\hline Fall & & Spring & \\
\hline PSYC 4500 & 3 & PSYC electives & 3 \\
\hline PSYC 4810 & 3 & Electives & 9 \\
\hline PSYC elective & 3 & & \\
\hline Electives & & & \\
\hline & 15 & & 12 \\
\hline
\end{tabular}
* These courses must be selected from the approved courses from the category of General Education in consultation with the student's academic advisor.

\section*{COURSE DESCRIPTIONS}

\section*{Psychology (PSYC)}

All 3000 and 4000 level courses have as a minimum prerequisite Psychology 2010 or the consent of the instructor.

PSYC 1010 Orientation (1) [formerly PSY 101]. Designed to assist freshmen and new students in their adjustment to university life while providing a historical perspective of the Tennessee State University community. Major emphasis is given to personal adjustment and development, goal-setting, study skills, time management and careers in the area of Psychology.

PSYC 2010 General Psychology (3). The basic course in introductory psychology for majors and non-majors. The course introduces students to the fundamental concepts of psychological methodology, basic psychological processes, learning memory, motivation, and emotions. The course is a prerequisite for all psychology courses.

PSYC 2100 The Psychology of Adjustment (3). [formerly PSY 210] 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, individ-
ual adjustment to life situations, societal definitions, treatment of the maladjusted, personal appraisal systems, and modification of behavior.

PSYC 2180 Elementary Statistics (3). [formerly PSY218] An introduction to statistics for the general student, with emphasis on organizing and describing numerical data, probability, sampling distributions, correlation, regression, point estimation, testing hypotheses and distribution-free methods.

PSYC 2420 Human Growth and Learning (3). [formerly PSY 242] 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.

PSYC 3120 Meas/Eval/CIrm in Public Schools (3). [formerly PSY 312] 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 2420. 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.

PSYC 3150 Principles of Learning (3). [formerly PSY315] A study of classical and operant conditioning (including reinforcement, scheduling, acquisition, extinction, generalization discrimination) and topics in complex human learning (including verbal learning, memory, problem solving, information processing and concept information.) Prerequisite: Upper Division Admission.

PSYC 3180 Computer Applications and Technical Writing (3). [formerly PSY318] A study of statistical and other software that is relevant to psychology; the use of the Internet in research, and aspects of technical writing in psychology including the use of APA style. Prerequisites are PSYC 2180 and Upper Division Admission.

PSYC 3210 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.

PSYC 3230 The Psychology of the Black Experience (3). [formerly PSY 323] 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.

PSYC 3300 Physiological Psychology (3 hrs.). [formerly PSY 330] An introduction to the study of the relationship between bodily processes and behavior. Emphasis is placed upon the basic anatomy and psychology of sensory and motor functions, motivation, emotion, learning and behavior disorders. The laboratory focuses on individual and group experience in these areas. Prerequisite: Upper Division Admission.

PSYC 3310 Principles of Human Sexuality (3). [formerly PSY 331] 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.

PSYC 3360 Introduction to the Delivery of Mental Health Services (3). [formerly PSY 336] 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.

PSYC 3410 Social Psychology (3). [formerly PSY 341] 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.

PSYC 3510 Developmental Psychology (3). [formerly PSY 351] The growth and development of the human organism from a theoretical perspective: biological, cognitive, social, and emotional development.

PSYC 3520 The Psychology of Adult Development and Aging (3). [formerly PSY 352] A study of the developmental tasks of adulthood. Empha-
sis will also be given to the search for meaning and the courage to create one's life style.

PSYC 3530 The Psychology of Death and Dying (3). [formerly PSY 353] 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.

PSYC 3750 Educational Psychology and Human Development (3). [formerly PSY 375] Principles of psychology as applied to human development and education. Issues relevant to physical, cognitive, and psychosocial development of the school-age child are integrated with developmentally appropriate practices in the classroom. Processes of teaching and learning are explored. Fifteen hours of field experience are required. Admission to Teacher Education required.

PSYC 4110 Foundations of Psychological Investigation (3). PSYC 4115 or 4116 Foundations of Psychological Investigation Lab (1) [formerly PSY 411] 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. Pre- or Co-requisite: PSYC 3180.

PSYC 4130 Human Learning and Cognitive Processes (3). [formerly PSY 413] This course is designed to be a survey of human cognition. Topics relating to attention, memory, language, problem solving, reasoning, decision making, concepts and categorization will be covered. A cross-cultural perspective will add to students' appreciation of the role of culture in cognition. Participation in web-based activities will further students' understanding of the role of empirical research in this area of psychology. (Note: Students who have taken either PSYC 4605, 4606, 4607, 4608): Special topics in Fall 2002 or Spring 2003- cannot get credit for this course).

PSYC 4140 Psychology of Stress Management (3). [formerly PSY 414] 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.

PSYC 4240 Behavior Modification (3). [formerly PSY 424] 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.

PSYC 4250 Introduction to Personality Theory (3). [formerly PSY 425] A study and analysis of the major theoretical approaches to the personality. Prerequisite: Upper Division Admission.

PSYC 4360 Field Placement in Psychology (3). [formerly PSY 436] Placement experience in a mental health setting. A minimum of nine hours per week at the practicum site is required. Prerequisites: PSYC 3210, and either 3360 or 4370, permission of instructor and Upper Division Admission.

PSYC 4370 Fundamentals of Counseling (3). [formerly PSY 437] The course will emphasize understanding the helping relationship from the viewpoint of both the client and the professional. Students will be introduced to methods of interviewing, observing and gathering information. Issues, problems and values related to the counseling process will be examined. Prerequisite: Upper Division Admission.

PSYC 4400 Drugs and Behavior (3). [formerly PSY 440] 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.

PSYC 4500 Senior Project (3). [formerly PSY 450] 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: PSYC 4110 and either 4115 or 4116.

PSYC 4515, 4516, 4517 Readings and Research in Psychology (3, 3, 3). [formerly PSY 451] Individual study and research under faculty guidance. Prerequisite 12 hrs . of upper division psychology courses, permission of instructor and Upper Division Admission.

PSYC 4605, 4606, 4607, 4608 Special Topics in Psychology (3,3,3,3). [formerly PSY 460] An intensive study of some specialized area in the field of psychology. Topics will vary.

PSYC 4620 Introduction to Psychological Tests and Measurements (3). [formerly PSY 462] A program of study designed to give the basic principles underlying psychological measurement, training in selection and use of psychological tests, and practice in both group and individual testing. This course is an intensive study of individual differences, with emphasis on intellectual, personality, and academic achievement testing. Prerequisite: Upper Division Admission.
PSYC 4810 History and Systems of Psychology (3). [formerly PSY 481] A study of the historical development of psychology as a science and profession and the fundamental concepts of various schools of psychology. Prerequisite: Upper Division Admission.

\title{
Department of Teaching and Learning
}

\section*{203 Clay Hall-Education Building Telephone (615) 963-5620}

Faculty: M. Alvarez, S. Chakraborti, B. Christian, B. Denson, C. Dickens, M. Dunn, B. Glimps, J. M. Hunter, N. Kendall, D. Mathis, N. Mayes, D. McCargar, M. Millet, M. Pangle, J. Presley, B. Quick, R. Renfro, C. Stice, C. Williams.

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.

\section*{Career Options}

The immediate career goal of those studying in the Department of Teaching and Learning is to become a \(\mathrm{K}-12\) school teacher. Eventually, however, many students pursue advanced degrees and become principals, counselors, supervisors, superintendents and university professors of education.

The basic pattern of professional education needed for teaching has certain common elements that apply to problems that all teachers face irrespective of the age level of the pupils who are under their supervision. In addition, preparation for teaching on the different educational levels and in various curriculum areas require specialized training appropriate to the different areas. The basic pattern of professional education, therefore, includes (1) core professional courses required of all persons in teacher education and (2) specialized professional courses appropriate to the different areas (see major for individual licensure requirements).

\section*{Core Professional Requirements}

In planning the core professional program, attention was given to those areas of study that are considered essential to the development, understandings and competencies needed by all teachers.

These areas include:
1. Historical, philosophical, and sociological foundations of American education.
2. Human growth and development, and the psychology of learning, including an understanding of how children grow physically, emotionally, and mentally, as well as the nurture necessary for wholesome growth. The relationship between growth and learning and new behavior patterns is also included.
3. Understanding school organization, administration, and management, and the relationship of the school to the total community.
4. Techniques of measurement, evaluation, and classroom guidance.
5. Skill in curriculum development.

The following courses are required of all persons who are enrolled in the professional teacher education program.
EDCI 2010
History and Foundations of Education
EDCI 3870
EDCI 4190
EDAD 4000
EDSE 3330
PSYC 2420
PSYC 3120
Curriculum Development
Technology in the School
Professional Rights and Responsibilities
Education of Exceptional Children
Human Growth and Learning
Meas/Eval/CIrm Public Schools

\section*{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 712 , grades \(\mathrm{K}-12\) include:
1. Materials and methods of teaching appropriate to the level of certification, including reading methodology.
2. Knowledge and understanding of learning and behavioral characteristics of disabled children
3. Supervised student teaching appropriate to an area of endorsement.
4. Specialized requirements as outlined under the area to which they apply.
5. Teacher education admission and retention requirements as specified in the introductory material included under the general heading: The College of Education.

\section*{Course Descriptions}

\section*{Curriculum and Instruction (EDCI)}

EDCI 1010 Orientation (1). [formerly EDCI 101] 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 2010 History and Foundation of Education (3). [formerly EDCI 201] 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 2100-2200 Field Study in Education (2-2). [formerly EDCI 210] 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 3510-3520 Developmental Field Experiences for Teaching (1-1). [formerly EDCI 351] The course includes field experiences in which students perform tasks related to teaching and teacher roles. The course may be taken separately or concurrently by consent of instructor but must be taken before student teaching. Prerequisite: Admission to Teacher Education. Documentation of current professional liability insurance is required.
EDCI 3870 Curriculum Development (3). [formerly EDCI 387] 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. Documentation of current professional liability insurance is required.

EDCI 3905 Methods of Elementary Teaching: Humanities and Social Studies (3). [formerly EDCI 390A] A course that addresses methods of instruction in what are broadly identified as humanities and social science areas: social studies, language arts, art, and music. Knowledge and skills are addressed in special methods associated with these disciplines and recommended practice at the elementary school level. Prerequisite: Admission to Teacher Education. Field Experience required. Course should be taken the semester before student teaching. Documentation of current professional liability insurance is required.

EDCI 3906 Methods of Elementary Teaching: Sciences and Mathematics (3). [formerly EDCI 390B] A course that addresses methods of instruction in the areas of science, mathematics, and the instructional use of technology. Knowledge and skills are addressed in the teaching of science and mathematics content areas appropriate to the elementary school learner. The use of technology, especially microcomputers as instructional tools, is incorporated. Admission to Teacher Education. Field Experience. Course should be taken the semester before student teaching. Documentation of current professional liability insurance is required.

EDCI 4190 Technology in the School (2). [formerly EDCI 419] A course that deals with computer introduction for secondary schools.
EDCI 4200 Introduction of Word Processing in Elementary Education (1-3). [formerly EDCI 420] A course designed to explore how word processing can benefit the elementary school student.

EDCI 4705 Educational Seminar (3). [formerly EDCI 470A] 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 4721, Student Teaching in the Secondary School. Prerequisite: Admission to Teacher Education.

EDCI 4706 Educational Seminar (3). [formerly EDCI 470B] A course that presents a study and analysis of the basic course content of courses taught in the elementary schools. Taken concurrently with EDCI 4720 Student Teaching in the Elementary School. Prerequisite: Admission to Teacher Education.

EDCI 4720 Enhanced Student Teaching in the Elementary School (12). [formerly EDCI 472M] 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 experiences are held regularly. This course is open only to seniors and teachers with some experiences. Prerequisite: Completion of professional education requirements and Admission to Teacher Education. Documentation of current professional liability insurance is required. Passing scores on Praxis II examinations.
EDCI 4721 Enhanced Student Teaching in the Secondary Schools, Grades 7 through 12 (12). [formerly EDCI 472N] 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. Prerequisite: Completion of professional education requirements and Admission to Teacher Education. Documentation of current professional liability insurance is required. Passing scores on Praxis II examinations.

EDCI 4900 Multicultural Education (3). [formerly EDCI 490] 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.

\section*{Special Education (EDSE)}

EDSE 3330 Education of Exceptional Children (3). [formerly EDSE 333] A course that explores principles, characteristics, and special needs; local and state programs for diagnosis and care; educational provisions in regular or special classes, home teaching, social and vocational guidance. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

\section*{Reading Education (EDRD)}

EDRD 3100 Strategies for Successful Test-taking (1). [formerly EDRD 310] 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 4190 Exploring the Language Learning Process (3). [formerly EDRD 419] A course that covers current theory concerning the nature of reading, language, and learning as well as an overview of school readinglanguage arts programs.

EDRD 4240 Teaching Reading in the Elementary School (3). [formerly EDRD 424] A course that includes methods, materials and modern practices and trends in the teaching of reading at the elementary school level. Required only for students pursuing teacher certification in grades K-9 or K-12. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDRD 4820 Teaching Reading Language Arts to Exceptional Learners (4). [formerly EDRD 482] A course that covers language characteristics and the special reading-language arts needs attendant with the exceptional learner. The course is designed especially for the regular classroom teacher. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.
EDRD 4900 Directed Individualized Study in the Teaching of Reading (1-3). [formerly EDRD 490] An individualized study. Consent of Instructor. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDRD 4910 Reading and Study in Secondary Schools (3). [formerly EDRD 491] A course designed for all subject matter teachers. Teaching strategies, designs, and materials for teaching comprehension, advanced study skills and vocabulary; formal and informal teaching pupil abilities and interests are covered. Required only for students pursuing teaching certification 7-12. Prerequisite: Admission to Teacher Education. Field experience is required. Documentation of current professional liability insurance is required.

\title{
COLLEGE OF ENGINEERING, TECHNOLOGY AND COMPUTER SCIENCE
}

\author{
Decatur B. Rogers, Ph.D., Dean \\ ET 230 Andrew P. Torrence Hall \\ 615-963-5401
}

General Statement (College): Engineering is the profession in which knowledge of mathematics and natural science is applied with judgment to develop ways to economically utilize the materials and forces of nature for the benefit of mankind.

The College of Engineering, Technology, and Computer Science offers Bachelor of Science degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, Computer Science and Aeronautical and Industrial Technology with concentrations in Aviation Management, Aviation Flight and Industrial Technology. The College also offers concentrations in Computer Engineering, Environmental Engineering, and Manufacturing Engineering.

The College's curricula in these programs are structured to graduate quality students capable of taking their places in the mainstream of the engineering/technology/computer science profession. Students are prepared to satisfy the manpower needs of industry and to tackle the complex technical challenges facing a technology based society.

The educational goal of the College is to prepare students to think critically, interpret knowledge, pursue lifelong learning, and function effectively and productively as members of a global society, as professionals in a technology based work force.

The educational goals of the College of Engineering, Technology and Computer Science include the following:
1. To familiarize the student with the systematic scientific approach to problem-solving, including the use of modern tools and current technology.
2. To provide the student with a strong foundation in engineering/ technology/ computer science fundamentals.
3. To aid students to develop habits of orderliness, carefulness and objectivity.
4. To aid students to develop professional attitudes, effective communication skills, and professional ethics, including the understanding of the engineering/technology/computer science profession.
5. To aid students to develop an understanding and a sensitivity for social, 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.

\section*{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 may include a variety of realistic constraints, such as economic and environmental 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 1011 Introduction to Engineering II, and continues in the sophomore year with ENGR 2010 Thermodynamics (or ENGR 2250 Transport Phenomena) and ENGR 2110 Statistics (or ENGR 2130 Combined Statistics and Mechanics of Materials).

Engineering design continues in the junior year with the required course ENGR 3200 Introduction to Design where upper divisions students are once again introduced to the design process in a much more rigorous and comprehensive manner, building upon concepts introduced at the freshman and sophomore levels. Specialization in each department begins in the junior year with departmental design courses. Program specific design courses are listed in each department curriculum. Further specialization takes place in the senior year. Each department offers at least one course which is \(100 \%\) engineering design. The engineering design sequence is completed with a two-semester capstone design course. An integral part of the design experience is the introduction of ethical, economical, social and safety factors required to make a design successful. These concepts are introduced during the freshman year, reinforced during the junior year and integrated into design projects in the junior level and senior level design courses. At each level, a formal written report and a formal oral presentation is required to communicate the design.

Admissions/Retention Requirements: All engineering students who plan to take upper division engineering courses, 3000 and 4000 level courses, must have passed the Engineering Entrance Examination with a minimum score of \(75 \%\) on each part (calculus, chemistry, and physics) of the examination. Students must successfully complete the Rising Junior Examination (RJE) before taking the Engineering Entrance Examination.

Engineering Entrance Examination: The eligibility criteria for taking the Engineering Entrance Examination are:
1. Minimum grade of " \(C\) " in each of the following courses: CHEM 1110, 1111; MATH 1915, 1925; PHYS 2110, 2111,2120.
2. Minimum cumulative GPA of 2.5 and a minimum cumulative GPA of 2.5 for the group of courses listed above in Item 1 at the time of taking the Engineering Entrance Examination.
3. Completion and submission of the engineering entrance examination eligibility form to the Dean's Office at least one week prior to the examination.
4. A student must earn a grade of \(B\) or better in several of the following courses: CHEM 1110, 1111, MATH 1915, MATH 1925, PHYS 2110/2111, and PHYS 2120/2121 to meet the minimum cumulative 2.5 GPA requirement for this group of courses.
5. Completing the Rising Junior Examination (RJE)

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 1110; MATH 1915, 1925; PHYS 2110, 2120 before the examination can be taken a third and final time.

Admission of Transfer Students: Transfer students from other institutions of higher education who plan to enter the College of Engineering, Technology and Computer Science must meet University admission criteria. Engineering transfer students must first take and pass the Engineering Entrance Examination before taking 3000 and 4000 level courses.

\section*{Specific College Requirements:}
1. No student will be allowed to take any departmental courses, major courses, engineering courses, mathematics, and/or science courses without having successfully completed the proper prerequisites for those courses with a grade of " C " or better.
2. Students earning a grade of " \(D\) " or lower in a mathematics course(s), science course(s), departmental course(s), or a major course(s) must repeat that course(s) the very next time the course(s) is offered.
3. All College students must take and successfully complete all components of the Rising Junior Examination during the junior year.
4. Each student must complete a practicum prior to graduation. A practicum may include, but is not limited to, an industrial internship, co-operative education experience, research experience, assistant in an engineering or technology laboratory, and other engineering/technology practical experiences. The practicum must be approved in advance by the student's academic advisor and department head. The practical experience must be at least eight (8) continuous weeks in length. A comprehensive report on at least one practicum is required. The report must be cosigned by a supervisor. The practicum report is to be given to the student's faculty advisor. The Dean's office will assist students in locating a practicum.

Engineering Programs Core Requirements: All engineering students are required to take the following engineering core courses: Mathematics (20 semester hours): MATH 1915, 1925, 2115, 2125, 3120, ENGR 3400; Science (12 semester hours): CHEM 1110, 1111; PHYS 2110, 2111, 2120, 2121; Engineering Science ( 18 semester hours): ENGR 2000, 2001, 2010*, 2110* 2120, 3300; Design (5 semester hours): ENGR 3200, 4500, 4510; Humanities ( 9 semester hours of which three (3) hours must be a sophomore literature course from the approved Humanities/Fine Arts list); Social Science ( 6 semester hours); History ( 6 semester hours): HIST 2010, 2020 or 2030, Social Science Elective** (6); Other ( 15 semester hours): ENGL 1010, 1020, COMM 2200; ENGR 1001, 1011, 1151, 2211 or 2221 or 2231, 4201***, 4900; Engineering Orientation (1) Total Engineering Core - 91 semester hours.
*Electrical Engineering majors will take ENGR 2250
**Humanities and Social Science electives must be chosen from an approved list with the approval of the academic advisor.
***ENGR 4201 is only offered during the fall semester (see graduation requirements).

Aeronautical and Industrial Technology Core Requirements: Mathematics and Physical Science (18 semester hours): MATH 1710, 1720, CHEM 1110, 1111, PHYS 2010, 2011, 2020, 2021; Communication ( 9 semester hours): ENGL 1010, 1020, COMM 2200; Humanities and Social Science (12 semester hours): HIST 2010, 2020; ENGL 2110, 2120; Management Core (6 semester hours): MGMT 3010, 4050; Technical Core ( 31 semester hours): ENGR 1001, 1011, 1151, 4500, 4510, 4900; COMP 3000, AITT 2000, 2001, 2200, 2201, 2350, 2500, 3110; Other PSYC 2010; \& HPSS/AFROTC/BAND; Total Technology Core - 76 semester hours.

Computer Science Requirements: Communication (12 semester hours): ENGL 1010, 1020; Foreign Language (3); COMM 2200, Humanities/Fine Arts ( 9 semester hours): ENGL 2110, 2120, PHIL 2010, Social/Behavioral Sciences (6 semester hours): PSYC 2010, ECON 2010; History (6 semester hours):HIST 2010, 2020; Natural Sciences ( 12 semester hours): CHEM 1110,1111, PHYS 2110, 2111, 2120, 2121; Engineering Orientation (1); Mathematics (21 semester hours): MATH 1115, 1915, 1925, 2115, 3610, STAT 3110, COMP 3200;Computer Science ( 32 semester hours): ENGR 1001, 1011, COMP 2040, 2140, 2240, 2600, 3560, 3040, 3310, 3190, 4100, 4500, 4510, ENGR 4900; Concentration (12 Hours), Total Computer Science (47 Hours). Technical electives (6 Hours).

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

Students may graduate with a maximum of two "D" grades earned in the last two semesters of the senior year. All other "D" grades earned in courses prior to the senior year must be repeated the very next time the courses are offered until a minimum grade of " \(C\) " is earned. If a graduating senior earns more than two grades of "D" during the senior year, that senior will not graduate until that senior has only two grades of "D".

All College graduating seniors must take and successfully complete all components of the ETS Exit Examination during the senior year.

Engineering students must take and pass ENGR 4201 EIT Review Laboratory and they must take the Fundamental of Engineering Examination the same semester they take ENGR 4201 EIT Review Laboratory course.

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). The Bachelor of Science degree programs in Aeronautical and Industrial Technology are accredited by the National Association of Industrial Technology (NAIT).

\section*{ENGINEERING COURSE DESCRIPTIONS}

ENGR 1000, Engineering Orientation (1). This course is to provide all Engineering, Technology, and Computer Science students with information about the University policies, to assist them in adjusting to the University community, and to acquaint the students with the environment as an integral part of educational development.

ENGR 1001, ENGR 1011 Introduction to Engineering I and II (1-1). An overview of the College of Engineering, Technology and Computer Science, its academic support services, admission and retention standards, introduction to the engineering profession including engineering economics, probability and statistics, the programming and use of computers for word processing of technical report writing, spread sheets for data processing, and structured programming to aid scientific problem solving. Introduction to all departments including laboratory experiments. Completion of minor design project is required. Co requisite MATH 1710

ENGR 1151 Computer Engineering Graphics and Analysis (1). A course is designed to develop the fundamental skills of graphics communication by manual and computer means. Sketching techniques to develop orthographic and pictorial graphics skills, standard technical drawing methods, dimensioning techniques, working drawings development skills, and lettering capability will be the fundamental focus of the course. Corequisite ENGR 1001
ENGR 2000, ENGR 2001 Circuits I and Lab (3-1). Fundamental concepts of charge, current, voltage and power; passive and active circuit elements, phasors and impedance; mesh and nodal analysis; Thevenin's and Norton's Theorems; superposition; source transformations, natural and forced response of RL, RC, and RLC circuits average and effective values of periodic wave form; polyphase circuits. Prerequisites: ENGR 2211 or 2221 or 2231, MATH 2125, PHYS 2120, Co requisite MATH 3120.
ENGR 2010 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: PHYS 2120, 2121, ENGR 2211 or 2221 or 2231.

ENGR 2110 Statics (4). Statics of particles; statics of rigid bodies in three dimensions; centroids and centers of gravity; friction and moment of inertia. Prerequisites: MATH 1925, PHYS 2110, 2111, ENGR 1001.

ENGR 2120 Dynamics (4). Study of the kinematics and kinematics of particles and rigid bodies; Principle of work and energy; Principle of impulse and momentum; Introduction to mechanical vibrations. Prerequisite: ENGR 2110 or 2130.

ENGR 2211 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 of 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 1915, ENGR 1011.

ENGR 2221 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 1915, ENGR 1011.
ENGR 2231 Engineering Visual 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 1915, ENGR 1011.

ENGR 2250 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: PHYS 2120, 2121, ENGR 2211 or ENGR 2221 or ENGR 2231.
ENGR 3100: Global Engineering Project Management (3). An overview of techniques and global sociological concepts of engineering project management. The course is intended to develop analytical skills including economic analysis, project screening and selection, organization and project structure resource managements and project control as well as global sociology theories relating to social structure, social organization, and role of the individual and social institution in the global setting. Prerequisite: Junior standing.

ENGR 3200 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 2000, ENGR 2010 (or ENGR 2250), ENGR 2120, ENGR 2211 or 2221 or 2231.

ENGR 3300 Materials Science (2). An introductory course on properties of materials, selection of materials, structure of crystalline and noncrystalline solids; mechanical behavior, electronics behavior, chemical behavior, stability and failure of materials Fundamentals of fluid flow. Prerequisites: CHEM 1110. Prerequisites: PHYS 2120, 2121, ENGR 2211 or ENGR 2221 or ENGR 2231, MATH 1925

ENGR 3400 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 3120, ENGR 2211 or 2221 or 2231.

ENGR 3520 - AN INTRODUCTION TO NETWORK SECURITY: This course will introduce the various common security issues that are of concern in computer networks. Subjects to be covered will range from SYN floods, node authentication, address spoofing, service authentication, sniffing and routing to securing data during transmission. Software flaws will be exploited using common techniques such as buffer overruns. Intrusion detection, firewalls and securing an Operating System will also be discussed. The course will also cover the issue of ethics throughout the semester. An emphasis will be placed on the applications that are currently implemented within corporations for securing their networks. There will be several required reading documents that will help the students further prepare for the class during the semester. Prerequisite: Junior or Senior status with experience in ENGR 2231 or a programming equivalent.

ENGR 4110-A,B,C,D,E,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 4201 Engineer in Training Laboratory (1). A course designed to prepare students for the Fundamentals of Engineering Examination, a partial requirement for obtaining license as a professional engineer. This courses is only offered during the fall semester. Prerequisite: Graduating Senior.

ENGR 4230 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 4300 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 2125.
ENGR 4400 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 2125.

ENGR 4500 Capstone Design Project I (1). An engineering capstone design project I leading to completion of the project in ENGR 4510. A written report and an oral defense of the proposed design project are required. Prerequisites: Graduating Senior, ENGR 3200.

ENGR 4510 Capstone Design Project II (1). A continuation of capstone design project I leading to completion of the project. A written report and an oral defense of the project are required. Prerequisite: ENGR 4500.

ENGR 4900 Professional Development Seminar (1). Discussion of case studies, professionalism, professional ethics, professional development activities required in industry. Prerequisite: Graduating Senior.

\title{
Aeronautical and Industrial Technology
}

\section*{William L. Anneseley, Ph.D., Department Head 204 Industrial Arts Building 615-963-5371}

Faculty: R. Consigny, J. McBryan
General Statement: A Bachelor of Science Degree (B.S.) in Aeronautical and Industrial Technology is offered with three (3) Concentrations: Industrial Electronics Technology, Aviation Management, and Aviation Flight Training.

The department programs draw upon the principles and applications of sound business management, arts and sciences and the latest in technology. These principles are applied in the proper utilization of products, services and the management of equipment and personnel.

The educational objectives for the Department of Aeronautical and Industrial Technology are as follows:
1. To provide the student with the knowledge of physical sciences, mathematics and engineering courses so that he/she has the capability to apply those principles within the aeronautical and industrial sector,
2. To familiarize the student with the systematic scientific approach to the identification and solution of practical problems encountered in the working environment,
3. To guide the student in determining the most effective ways for an organization to use the basic factors of production, people, machines, materials information, and energy in the making or processing a product,
4. To assist the student in developing managerial skills,
5. To develop professional attitudes, ethical character and a through understanding of the individual's role in society from both a national and international perspective,
6. To provide the student with intellectual challenges designed to stimulate a curiosity and desire for lifelong learning, and
7. To provide students with opportunities which will prepare them to interact effectively in multi-cultural and multi-discipline environments.

Elective Courses: In addition to the three concentrations, there are elective courses in the following areas: Aviation Management, Airport Management, Aviation Meteorology, Private, Commercial, Instrument, Multi-engine, CFI, CFII, Theory of Flight and Engines, Aviation Legislation and Aviation Safety.

The Department of Aeronautical and Industrial Technology is affiliated with the following organizations: The University Aviation Association, The National Association of Industrial Technology, The Council on Aviation Accreditation and the Tennessee Aviation Association.

The Industrial Electronics Technology Concentration prepares students for positions in business and industry that require a broad technical and management background. It emphasizes the maintenance, operation and management of systems and sub-systems within the industrial and manufacturing sector.

The Aviation Science Programs are designated to provide a coordinated program combining liberal arts with concentrations in ei-
ther Flight Training or Aviation Management. These concentrations lead to a Bachelor of Science Degree. Students interested in future positions in industry-related aviation, especially as either pilots or as managers, will benefit from these concentrations. Tennessee State University is recognized by the Federal Aviation Administration as an Aviation Education Resource Center. Additionally, the University holds an FAR Part 141 Air Agency Certificate (TUOS674K) from the Federal Aviation Administration to conduct pilot ground school training.

Flight training is conducted through affiliate flight training schools located within a ten-mile radius of the main campus. Flight fees represent an additional cost to the student and are subject to market driven forces. For a list of affiliate flight schools and related costs, please contact Dr. William L. Anneseley, Department Head.

Academic credit for pilot certificates and ratings will be in accordance with FAR Part 141 or 61 and in accordance with pertinent University policies. Incoming freshman and transfer students must make an appointment with the Department Head in order to have their FAA Certificates properly evaluated and documented.

\section*{Departmental Requirements for \\ Bachelor of Science in Aeronautical and Industrial Technology Industrial Electronics Technology Core}

\section*{42 Semester hours}

Major Core: (industrial) A minimum of 42 semester hours including: ENGR 1001, 1011, 1151, 4500, 4510, 4900; AITT 2000, 2001, 2200, 2201, 3110, 3310, 3311, 3320, 3321, 3350, 3351, 3480, 4040, 4170, 4800.

\section*{Core Requirements reflect the standards of the National Association of Industrial Technology (NAIT).}

\section*{Four Year Plan:}

\section*{Bachelor of Science Degree in Aeronautical and Industrial Technology Industrial Electronics Technology}

\section*{FRESHMAN YEAR}

\section*{FALL SEMESTER}

SPRING SEMESTER

Courses
ENGR 1000
HR
MATH 1710
MATH 1720
ENGL 1020
CHEM 1110
CHEM 1111
ENGR 1011 -
HUMANITIES/FINE ARTS
ELECTIVE
HPSS/ROTC/BAND

\section*{SOPHOMORE YEAR}

\section*{FALL SEMESTER} Courses
MATH 1915
PHYS 2010
SEMESTER

PHYS 2011
AITT 2000
AITT 2001
ENGL 1010
ENGR 1001
ENGR 1151
HUMANITIES/FINE ARTS

\section*{ENGL 2110} Course

HR
PHYS 2021
HIST 2010
COMM 2200
PSYC 2010
AITT 2200

\section*{JUNIOR YEAR}

FALL SEMESTER
Courses
HIST 2020
AITT 3310
AITT 3311
AITT 3350
AITT 3351
AITT 3200

FALL SEMESTER
Courses
AITT 3110
AITT 4040
ENGL 3105
ENGR 4500
ENGR 4900
MGMT 4050
TOTAL HOURS 120
Departmental Requirements for Bachelor of Science in Aeronautical and Industrial Technology Aviation Management 46 Semester hours

Major Core: (management) A minimum of 46 semester hours including: ENGR 1001, 1011, 1151, 4500, 4510, 4900; AITT 2350, 2500, 3070, 3080, 3110, 3120, 3480, 3700, 3900, 3950, 4020, 4180, 4400.

Core requirements reflect the standards of the Federal Aviation Administration (FAA), Council on Aviation Accreditation (CAA), and the University Aviation Association (UAA).

\section*{Four Year Plan:}

Bachelor of Science Degree in
Aeronautical and Industrial Technology
Aviation Management
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|c|}{FRESHMAN YEAR} \\
\hline FALL SEMESTER & & SPRING SEMESTER & \\
\hline Courses & HR & Courses & HR \\
\hline ENGR 1000 & 1 & MATH 1720 & \\
\hline ENGR 1001 & 1 & ENGL 1020 & \\
\hline ENGR 1151 & 1 & CHEM 1110 & \\
\hline MATH 1710 & 3 & CHEM 1111 & \\
\hline ENGL 1010 & 3 & ENGR 1011 & \\
\hline HUMANITIES/FINE & & HUMANITIES/FINE & \\
\hline ARTS ELECTIVE & 3 & ARTS ELECTIVE & 3 \\
\hline HPSS/ROTC/BAND & 1 & HPSS/ROTC/BAND & \\
\hline & 13 & & 15 \\
\hline
\end{tabular}

SOPHOMORE YEAR

FALL SEMESTER
Courses
AITT 2350
AITT 2500
PHYS 2010
PHYS 2011
ACCT 2010
HIST 2010

SPRING SEMESTER
HR
3 COMM 2200
HR
PHYS 2020
PHYS 2021
ACCT 2020
HIST 2020
ENGL 2110

FALL SEMESTER
HR
HR
SPRING SEMESTER

AITT 3320 3
AITT 3321
AITT 3480
MGMT 3010
SOCIAL/BEHAVIORAL SCIENCE ELECTIVE COMP 3000

14
SENIOR YEAR
SPRING SEMESTER HR
Courses

AITT 4800
3
ENGR 4510
AITT 4170
1
MGMT 4070
3000-4000 TECHNICAL OR
NON TECHNICAL ELECTIVE
\(\frac{6}{16}\)
FALL SEMESTER
Courses
ENGR 4500
ENGR 4900
MGMT 4050
AITT 3110
ENGL 3105
AITT 3741
Courses
COMP 3000
ECON 2010
AITT 3070
AITT 3120
SOCIAL/BEHAVIORAL
SCIENCE ELECTIVE

\section*{JUNIOR YEAR}

SPRING SEMESTER
\begin{tabular}{rlr} 
HR & Courses & HR \\
3 & MGMT 3010 & 3 \\
3 & AITT 3080 & 3 \\
3 & AITT 3480 & 3 \\
3 & AITT 3950 & 3 \\
& AITT 3700 & 3 \\
\(\mathbf{3}\) & & -15
\end{tabular}

\section*{SENIOR YEAR}

SPRING SEMESTER
\begin{tabular}{rlr} 
HR & Courses & HR \\
1 & ENGR 4510 & 1 \\
1 & MGMT 4070 & 3 \\
3 & AITT 4020 & 3 \\
3 & AITT 4180 & 3 \\
3 & AITT 4400 & 3 \\
\(\frac{3}{14}\) & AITT 3900 & \(\frac{3}{16}\)
\end{tabular}

TOTAL HOURS 120
Departmental Requirements for Bachelor of Science in Aeronautical and Industrial Technology
Aviation Flight
Major Core: (flight) A minimum of 57 semester hours including: ENGR 1001, 1011, 1151, 4500, 4510, 4900; AITT 2350, 2500, 2531, 2532, 2533, 3070, 3120, 3480, 3520, 3550, 3560, 3570, 3508, 3600, 3700, 3810, 3900, 3950, 4400.

Core requirements reflect the standards of the Federal Aviation Administration (FAA), Council on Aviation Accreditation (CAA), and the University Aviation Association (UAA).

\section*{Four Year Plan:}

Bachelor of Science Degree in
Aeronautical and Industrial Technology
Aviation Flight

\section*{FRESHMAN YEAR}
\[
\overline{15}
\]

FALL SEMESTER
Courses
ENGR 1000
ENGR 1001
ENGR 1151
MATH 1710
ENGL 1010
HUMANITIES/FINE
ARTS ELECTIVE
HPSS/ROTC/BAND
\begin{tabular}{rlr} 
& \multicolumn{1}{l}{ SPRING SEMESTER } & \\
HR & Courses & HR \\
1 & MATH 1720 & 3 \\
1 & ENGL 1020 & 3 \\
1 & CHEM 1110 & 3 \\
3 & CHEM 1111 & 1 \\
3 & ENGR 1011 & 1 \\
& HUMANITIES/FINE & 3 \\
3 & ARTS ELECTIVE & 3 \\
\(\frac{1}{13}\) & HPSS/ROTC/BAND & \(\underline{1}\) \\
\hline
\end{tabular}

\section*{SOPHOMORE YEAR}

FALL SEMESTER
Courses
AITT 2350
AITT 2500
PHYS 2010
PHYS 2011
ENGL 2110
HIST 2010
AITT 2531

SPRING SEMESTER

HR Courses HR
COMM 22003
AITT 2532
AITT 2533
PHYS 2020
PHYS 2021
HIST 2020
AITT 3520
ECON 2010

\section*{JUNIOR YEAR}

\section*{FALL SEMESTER}

Courses
AITT 3070
AITT 3120
AITT 3550
SOCIAL/BEHAVIORAL
SCIENCE ELECTIVE
AITT 3571

SPRING SEMESTER
Courses HR

MGMT 3010
R
AITT 3581
AITT 3700
AITT 3950
AITT 3480

\section*{SENIOR YEAR}

SPRING SEMESTER
FALL SEMESTER
Courses
HR
AITT 3560
ENGR 4500
ENGR 4900
AITT 3601
AITT 3810
ENGL 3105

TOTAL HOURS 120

\section*{COURSE DESCRIPTIONS}

AITT 2000, 2001 CIRCUITS ANALYSIS (3-1). Fundamental concepts of change, current, voltage and power, mesh and nodal analysis: Kirchhoff's laws, Thevenin's and Norton's Theorems, superposition, source transformations, natural and forced response of RL, RC and RLC circuits, transient and steady state analysis of linear circuits. Prerequisites: MATH 1050.

AITT 2200, 2201 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: AITT 2000, 2001.

AITT 2350 GENERAL AVIATION OPERATIONS (3). Lectures deal with facilities, management, and finance, legal and insurance aspects of general aviation. The lectures focus on sales, line service, air taxi and flight schools. One or more field trips to general aviation operations will be held. A semester project is required.

AITT 2500 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.

AITT 2531 PRIVATE PILOT FLIGHT I (1). This course consists of flight instruction and ground tutoring necessary for the student to accomplish his/her first solo flight. Lessons include elements of flight principles, pre-and-post flight procedures, taxiing and ground handling, use of flight controls, basic maneuvers, take-offs, and landings. Introduction to aircraft systems, radio communications, and air traffic control procedures. Principal Topics Covered: Consist of flight instruction and ground tutoring for first solo flight. Prerequisite: AITT 2500.

AITT 2532 PRIVATE PILOT FLIGHT II (1). This course is a continuation of Private Pilot Flight I, designed to prepare the student for solo crosscountry flight. Lessons provide greater proficiency in maneuvers, stalls, take-offs and landings, and emergency procedures. Introduction to night flight, various types of navigation and VOR tracking. Flight planning, crosscountry flying culminating in solo cross-country. Principal Topics Covered: Designed to prepare students for solo cross-country flights. Prerequisite: AITT 2531.

AITT 2533 PRIVATE PILOT FLIGHT III (1). Continuation of Primary Flight II with emphasis on cross-country navigation, flying, flight planning and solo practice to gain proficiency in all basic maneuvers. Lessons include VFR radio and navigation, control of aircraft solely by reference to instruments. Private Pilot qualifications are completed. Principal Topics Covered: AITT 2532: Final preparation (ground tutoring and flight lessons) in preparation for the Federal Aviation Administration Flight Test. Prerequisite: AITT 2532

AITT 3010 STATIC AND STRENGTHS OF MATERIALS (4). Statics of particles and rigid bodies in two and three dimensions. Stress-strain relation, displacements in truss, shafts, and beams. Prerequisite: MATH 1050.

AITT 3070 AVIATION MANAGEMENT (3). A study of the basic principals and existing practices used in managing and marketing as applied to the aviation industry. Includes problems, current issues and future trends related to aviation operations, planning and economic, and resource considerations.

AITT 3080 AIRPORT MANAGEMENT (3). Introductory course designed to acquaint the student with basic concept of airport planning and management. A comprehensive survey of a typical community with eye toward present and future business potential is made. This includes the social and economic characteristics, the political and governmental influences, and various stages and types of airport construction.

AITT 3090 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. Prerequisite: CHEM 1110, 1111

AITT 3110 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.

AITT 3120 HUMAN FACTORS IN AVIATION (3). A study of the psychological and physiological effects that flight imposes on a pilot and aircrews. Also studied are information processing and display effects on the human being; the ability of flight crews to time-share their cognitive process and react under stress. Included is a study of various control manipulation, sensitivity and ease of movement. Prerequisite: PSYC 2010.

AITT 3140 INDUSTRIAL \& PRODUCT MANAGEMENT (3). The problems of production, planning, controlling money, personnel, materials and machines are studied from the viewpoint of modern total quality control. Prerequisite: AITT 3380.

AITT 3200 INTRODUCTION TO ROBOTICS (3). A study of robot structure, kinematics, dynamics, programming interfacing and applications. Two hours lecture and three hours laboratory. Prerequisites: MATH 1050, AITT 2000, 2001.

AITT 3210 ROBOTICS II (3). A continuation of AIT 3200 and a more advanced study of robot structures, kinetics, dynamics, programming interfacing and applications. Two hours lecture and three hours laboratory. Prerequisite: AITT 3200.

AITT 3250 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.

AITT 3260 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: AITT 3250.

AITT 3270 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.
AITT 3280 COMPUTER NUMERICAL CONTROL (3). An introductory study of NC, CNC programming, simulation and tooling. Computer-aided programming and simulations.

AITT 3310, 3311 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: AITT 2200.

AITT 3320, 3321 BASIC ELECTRONICS II (3). Multistage amplifiers, frequency response, feedback, stability, and linear amplifiers are studied. Operational amplifiers and filters are introduced. Prerequisites: AITT 3310, 3311.

AITT 3340 HYDRAULICS \& PNEUMATICS (3). An introductory study of components, circuits and safety of fluid power systems. Basic principles of fluid statics and dynamics. Analysis of functions of components such as
distribution systems, pumps, actuators and valves. Hydraulic and pneumatic circuits design and analysis. Fluid power maintenance and safety. Prerequisite: MATH 1050
AITT 3350, 3351 DIGITAL LOGIC SYSTEMS (3-1). Analysis of digital systems, combinational and sequential circuits, and stored program concepts. Prerequisite: AITT 2000, 2001.

AITT 3380 MANUFACTURING TECHNOLOGY (3). Emphasis on the development of skills in planning manufacturing processes, setting up fixtures and operating various machine tools.
aitt 3400 COMmunications systems technology (3). Principles of noise, oscillators, modulation, power vacuum tube amplifiers and circuitry. Transmission line and antennas. Prerequisite: AIT 3320.

AITT 3450 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)

AITT 3480 STATISTICAL QUALITY CONTROL (3). An introduction to the basic statistical methods, control charts, sampling techniques and the implementation of statistical process control programs as relates to today's TQM. Prerequisite: MATH 1050

AITT 3500 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 and considerations.
AITT 3520 INSTRUMENT GROUND INSTRUCTION (3). A study and review of the operations, regulations (FARs) and procedures necessary to perform competently as an instrument pilot. Prepares students for the instrument pilot written examination. Prerequisite: Private Pilot License or AITT 2500.

AITT 3550 COMMERCIAL GROUND INSTRUCTION (3). Ground instruction covering navigation systems, communications, principals of instrument flying, air traffic control procedures, approach and departure procedures, and FAA regulations. Prerequisite: Private Pilot License.

AITT 3560 FLIGHT INSTRUCTOR GROUND (3). Ground instruction on FAA regulations and publications, weather, advanced flight, computer operations, radio navigation, advanced aircraft and engine performance, and fundamentals of instructing. Prerequisite: Commercial Pilot's License with Instrument Rating.

AITT 3571 INSTRUMENT FLIGHT LAB (3). Flight and simulator training to perfect complex flight maneuvers using aircraft maximum performance and precision control as necessary to perform under instrument weather conditions. Prerequisite: Private Pilot License.

AITT 3581 COMMERCIAL FLIGHT LAB (3). A continuation course of AIT 3571, providing the additional flight and simulator training as required to perform as a commercial pilot with a multi-engine and instrument rating.
AITT 3591 MULTI-ENGINE FLIGHT LAB (1). A continuation course providing the additional flight and simulator training and practice as required to perform as a commercial pilot with a multi-engine and instrument rating.

AITT 3601 CFI FLIGHT LAB (2). A flight training course providing the additional flight, simulator training and practice as required to perform as a flight instructor for single engine airplane training. Prerequisite: Commercial Pilot License, Instrument Rating.
AITT 3700 AVIATION METEOROLOGY (3). Properties and conditions of the atmosphere, landforms and topography leading to an understanding of weather conditions. Prerequisites: PHY 2020, 2021
AITT 3741, 3742 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.
AITT 3810 THEORY OF FLIGHT \& ENGINES (3). The laws of aerodynamics and nature as applied to aviation. The principals, familiarization and operation of the internal combustion engine and turbine engines.

AITT 3840 AIRCRAFT SYSTEMS ANALYSIS (3). Analysis of structure, mechanical, electrical and hydraulic systems of aircraft. Procedures for inspection, maintenance and repair. Study of appropriate FARs.
AITT 3900 AVIATION LEGISLATION (3). Legal concepts including federal, state and local legislation related to the operations, contracts, insurance and liability, regulatory statues and case law.

AITT 3950 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.
AITT 4000 AIRCRAFT STRUCTURAL FACTORS (3). A detailed examination of aircraft development with emphasis on Manufacturing to include designs, materials selection, modification, maintenance and flight-testing. Additional topics include dynamic and static stress testing procedures, design loading, fatigue, and corrosion. Prerequisite: AIT 2500.
AITT 4020 AIRLINE OPERATIONS (3). An in-depth study of U.S. Air Carrier Operations. The economics, organization, and regulation of domestic air carriers are covered in detail. Air Carrier training programs, route structure, sizing a line, and present and future projections are explored within this course. Prerequisite: AITT 3070, 3120, MGMT 3010 or consent of instructor.
AITT 4040 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: AITT 2200, 2201,COMP 2220.
AITT 4100 FLUID POWER CONTROL \& INTERFACE (3). A study of fluid power system control using microcomputers, microprocessors and programmable controllers. Prerequisite: COMP 2220, AITT 3340.

AITT 4170 LINEAR INTEGRATED CIRCUITS (3). Ideal operational amplifiers, biasing, ,comparators, oscillators and filters are studied. Phase locked loops are introduced. Prerequisite: AITT 3320, 3321.

AITT 4180 AVIATION MARKETING MANAGEMENT (3). Selling and pricing business aviation services and creative marketing strategy are studied in an analytical approach to advertising, sales force administration, promotion, distribution, retailing, logistics, wholesaling, product planning, price policies, market research and consumer behavior. Prerequisite: AITT 4020, MGMT 3010.

AITT 4200 COMPUTER INTERFACING \& PERIPHERALS (3). Applications of microprocessors to equipment with an emphasis on interfacing equipment. Prerequisite: AITT 4800.
AITT 4210 DATA COMMUNICATIONS (3). An introduction to data communications hardware including synchronous/asynchronous communication, protocol, local area network controllers \& modem. Prerequisite: AITT 4800.

AITT 4300 DIGITAL COMPUTER STRUCTURES (3). Organization and description of computers from the register transfer level through microprogramming, memory organization and I/O examples of current popular computers. Prerequisite: AITT 3350, 3351.
AITT 4400 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 FARs operations, and facilities.
AITT 4410 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. Prerequisite: AITT 2200, 2201.
AITT 4420 AVIONICS (3). A course which covers the principles of electronics and electronic circuits element as used in aircraft and aerospace vehicles for communication, navigation and direction finding equipment. Prerequisite: AITT 3400.
AITT 4640 CFI INSTRUMENTS (3). A flight and ground school-training course providing training required to perform as an instructor for instrument training. Prerequisite: Commercial License/Instrument Rating.

AITT 4670 CFI MULTI-ENGINE (3). A flight and ground school training course providing training required to perform as an instructor for multi-engine training.

AITT 4781, 4782 SPECIAL TOPICS IN INDUSTRIAL TECHNOLOGY (3). Special subject presented to cover current problems of unique advances in the leading edge of technology. Prerequisites: Senior standing and consent of instructor.

AITT 4800 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. Prerequisite: AITT 3350, 3351.

\title{
Department of Architectural and Facilities Engineering
}

\title{
Nipha Kumar: Interim Department Head ET 242A A. P. Torrence Hall 615-963-5411
}

Faculty: H. Jones, D. Martin, M. Samuchin
General Statement: The Department of Architectural and Facilities Engineering offers a program that prepares the student to approach, evaluate and complete the architectural engineering analysis, planning, design and construction management of various types of facilities/buildings. The four-year curriculum provides a program that emphasizes the fundamentals and design of building systems including structural design, mechanical and electrical systems design, construction and project management, and architectural design. Using these fundamentals, the student applies engineering principals to the design of a facility/building infrastructure. This provides the student with an understanding of the design process from planning through construction. The Bachelor of Science Degree in Architectural Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. [EAC/ABET]

The Educational Objectives for the Department of Architectural and Facilities Engineering are as follows:
1. To provide the student with the knowledge of physical sciences, mathematics, and engineering science so that he/she has the capability to delineate and solve architectural and related engineering problems.
2. To familiarize the student with the systematic scientific approach to the identification and solution of practical problems in architectural engineering.
3. To provide the student with experience through the systematic application of engineering fundamentals to the design of architectural and related engineering components and systems.
4. To develop professional attitudes, ethical character, effective communication and an understanding of the engineer's responsibility to society.
5. To provide the student with intellectual challenges designed to arouse curiosity and a desire for lifelong learning.
6. To provide the student with experiences which will prepare them to function effectively in multicultural and multidiscipline groups.
7. To provide the student with the hands-on experiential learning activities with traditional and modern architectural and facilities engineering, state of the art technologies and software to enhance architectural engineering, planning, design, construction and management problem solving.

The outcomes of the program require that graduates demonstrate the following:
(a) An ability to apply knowledge of mathematics, science, and engineering.
(b) An ability to design and conduct experiments, as well as to analyze and interpret data.
(c) An ability to design a system, component, or process to meet desired needs.
(d) An ability to function on multi disciplinary teams.
(e) An ability to identify, formulate, and solve engineering problems.
(f) An understanding of professional and ethical responsibility.
(g) An ability to communicate effectively.
(h) The broad education necessary to understand the impact of engineering solutions in a global and societal context.
(i) A recognition of the need for, and an ability to engage in life long learning.
(j) A knowledge of contemporary issues.
(k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
(I) Knowledge of codes and standards.
(m) Business Sense.
(n) A security sense and capability of integrating it into architectural engineering design.

Engineering Design Experience: Extraordinary opportunities are available through close contact with other engineering courses and research programs offered by the College of Engineering, Technology and Computer Science. The Architectural Engineering curriculum integrates 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 Architectural Engineering program has in place a series of required engineering design courses which are integrated throughout its curriculum.

The Architectural Engineering design experience begins in the freshman year with ENGR 1011-Introduction To Engineering II, and continues into the sophomore year with ENGR 2010-Thermodynamics and ENGR 2110-Statics. During the junior year the design experience continues with ENGR 3200-Introduction To Design, AREN 3011-Architectural Design I, AREN 3501-Architectural CAD, AREN 4430-Lighting and Power Systems for Facilities, and MEEN 4200-Heating and Air-conditioning. Further required specialization in design takes place during the senior year with AREN 3021-Architectural Design II, AREN 3420- Steel and Reinforced Concrete Design, and one (1) Design Option Elective, which can be selected from the following: AREN 3430-Masonry and Reinforced Concrete Design, AREN 3440-Structural Steel and Wood Design, AREN 4420-Building Engineering Systems, AREN 4450-Energy Conservation in Buildings, and AREN 4460 Manufacturing Facilities Layout Planning and Design. The design sequence is completed with a two semester discipline specific capstone design course ENGR 4500 and ENGR 4510.

AFE students shall demonstrate their competence with a portfolio, of design projects, which demonstrates proficiency in: (1) structural design, (2) building mechanical systems (HVAC) design, and (3) building electrical systems (Lighting and Power Systems for Facilities) design. The Building Systems Design Portfolio will be submitted to the faculty advisor one semester prior to graduation

The graduate of the Architectural Engineering program 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 128 Credit Hours.

Major Core: A minimum of 37 Semester Credit Hours are required including AREN 1111, 3011, 3021, 3420, 3501, 4300, 4310, 4430, 4470 and AREN Elective; CVEN 3100, 3120, 3121, 3410; MEEN 4200.

Engineering Core: 91 Semester Credit Hours. See College's Engineering Core Requirement.

\section*{Bachelor of Science Degree in Architectural Engineering}

\section*{FRESHMAN YEAR}

\section*{FALL SEMESTER}

\section*{Courses}

ENGL 1010
MATH 1915
CHEM 1110
CHEM 1111
ENGR 1001
ENGR 1151
ENGR 1000

\section*{SUMMER SESSION}

PHYS 21203
PHYS \(2121 \quad 1\)
MATH 2115
\(\frac{3}{7}\)

\section*{SOPHOMORE YEAR}

MATH 2125
COMM 2200
ENGR 2110
ENGR2211
or 2221 or 2231
ENGL 2110
HIST 2020

SPRING SEMESTER
HR
Courses
HR
ENGL 10203
MATH \(1925 \quad 4\)
PHYS 21103
PHYS \(2111 \quad 1\)
ENGR 1011 1
AREN 1111 1
HIST \(2010 \quad \underline{3}\)
16

17 15 15
All students are required to pass the ENGINEERING ENTRANCE EXAMINATION prior to enrolling in Engineering Upper [300-400] level courses. Also they are required to take the Rising Junior Examination (RJE).

\section*{JUNIOR YEAR}

AREN 3011
CVEN 3100
CVEN 3120
CVEN 3121
ENGR 3200
ENGR 3300
ENGL 2120

AREN 3021
AREN 3420
ENGR 3400
*ENGR 4201
ENGR 4500
ENGR 4900
**Social Science
Elective
Elective
13

\section*{SENIOR YEAR}
(1) All Architectural Engineoring majors must be advised by their acad advisor before completion of the registration process.
(2) Technical Elective must be chosen from the following courses with approval from advisor (AREN 3430, 3440, 4420, 4460 and ENGR 3100)
(3) *Students must take the Fundamental of Engineering (FE) Examination in the same semester ENGR 4201 is taken and one semester before graduation. A student must provide evidence that he/she has filed an application to take the FE exam before filing for graduation. ENGR 4201 is offered only during fall semester.
(4) **Social-Behavioral Science and Humanities Elective courses must be chosen from a list of general education courses approved by the University.
(5) Students must provide proof of practicum experience of a minimum of continuous eight (8) weeks.
(6) Students must also take ETS examination in final year.

\section*{COURSE DESCRIPTIONS}

AREN 1111 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 1151.

AREN 3011 Architectural Design I (2). Principles of design and systematic approach to problem solving of architectural design. Emphasis is on form and space relationships, structural elements, building materials and methods of construction, building and site relationships. Six laboratory hours per week. Prerequisites: ENGR 1151, AREN 1111.

AREN 3021 Architectural Design II (2). 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. Six laboratory hours per week. Prerequisites: AREN 3011, AREN 3501.

AREN 3420 Steel and Reinforced Concrete Design (3). Introduction to the design of structural steel and reinforced concrete members and systems. Behavior and design of beams, slabs, columns, tension member, and footings. Prerequisites: CVEN 3410.
AREN 3430 - ADVANCED STEEL AND REINFORCED CONCRETE DESIGN (3). Design of structural steel and reinforced concrete members and systems American Institute of Steel Construction (AISC) and American Concrete Institute (ACI) specifications for both lateral and gravity loads. Prerequisite: AREN 3420 or equivalent.

AREN 3440 - WOOD AND MASONRY DESIGN (3). The design of wood and masonry structural members and systems. Prerequisite: CVEN 3120.

AREN 3501 Architectural CAD (2). Design solutions of architectural problems using computer graphics as 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 1151, AREN 1111, AREN 3011.

AREN 4300 Building Materials and Construction (3). A study of the materials and construction methods used in the building construction industry. Codes, standards, and guidelines that regulate the manufacture, use as a building component, and installation requirements are included. The course covers the use of sustainable and energy conserving products in the design of building systems. Prerequisite: Junior Standing.

AREN 4310 Architectural History (2). A survey of architectural styles of the past to the present time on the comparative methods. Emphasis include the geographical, geological, climatic, religious, social and political influences. Prerequisite: Junior Standing.

AREN 4420 Building Engineering Systems (3). Water supply and drainage systems; fire safety and security, and acoustics.

AREN 4430 Lighting and Power Systems for Facilities (3). Principles and practices of electrical circuits and equipment design for buildings. Practical use of Electrical Codes for the design and sizing of power distribution, load characters, transformers, motors, generators, and control systems for single-and three-phase systems. Prerequisites: ENGR 2000 and ENGR 2001.

AREN 4450 Energy Conservation in Buildings (3). Energy use patterns for commercial, educational, medical, and industrial buildings. Various utility rate structures and the relevant LEED and USGBD standards are explored. Energy auditing techniques along with the effect of operation and maintenance on building energy use. Design projects are required. Prerequisite: Junior Standing.

AREN 4460 Manufacturing Facilities Layout, Planning and Design (3). The planning layout and design of industrial manufacturing facilities will focus on defining facility requirements, site location, workflow and work station analysis, personnel, legal and environmental issues. Emphasis is placed on utilizing computer graphics and data analysis to interactively optimize production flow paths, alternative layouts of plants and machines, storage areas, and other material and personnel flow. Prerequisites: AREN 3011.

AREN 4470 Construction 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: Junior Standing.

\title{
Department of Civil and Environmental Engineering
}

\author{
FAROUK MISHU, Ph.D., HEAD ET 108, A.P. TORRENCE HALL 615-963-5421
}

Faculty: F. Chen, E. Isibor, P. Paily, R. Painter
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 civil and related engineering problems.
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 design experience through the systematic application of engineering fundamentals to the design of civil and environmental components and systems.
4. To develop professional attitudes, ethical character, effective communication and an understanding of the engineer's responsibility to society.
5. To provide the student with intellectual challenges designed to arouse curiosity and a desire for lifelong learning.
6. To provide students with experiences which will prepare them to function effectively in multicultural and multidiscipline groups.
7. To provide students with the hands-on experiential learning activities with traditional and modern civil and environmental engineering practices incorporating state of the art technologies and software.

The outcomes of the program require that the graduating student demonstrate the following:
a. Ability to apply knowledge of mathematics, science, and engineering;
b. Ability to design and conduct experiments, as well as, to analyze and interpret data;
c Ability to design a system, component, or process to meet needs;
d. Ability to function on multidisciplinary teams;
e. Ability to identify, formulate, and solve engineering problems;
f. Understanding of professional and ethical responsibility;
g. Ability to communicate effectively;
h. Broad education necessary to understand the impact of engineering solutions in a global and societal context;
i. Recognition of the need of an ability to engage in life-long learning;
j. Knowledge of contemporary issues;
k. Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice;
I. Ability to understand, and use codes and standards in the analysis and design process;
m . A business sense and understanding of the economics of industry; and
n. A security sense and capability of integrating it into mechanical design.

\section*{Engineering Design Experience}

The engineering design experience is stressed throughout the entire curriculum formally and informally. Freshmen are introduced to design in ENGR 1011 Introduction to Engineering II. Open-ended problems are assigned to the students in various courses in order to develop their creativity. Specifically, in ENGR 3200 Introduction to design, a design project problem is assigned which requires formulation, specifications and considerations of alternative solutions by each individual student. In Introduction to Design, the student is introduced to economic analysis and statistical analysis in the context of an engineering design. Design problems become more complex as the Civil Engineering student advances through the curriculum and takes the following design courses: CVEN 3200 Transportation Engineering, CVEN 3250 Hydraulics Engineering, CVEN 3350 Hydrology, CVEN 3420 Reinforced Concrete Design, CVEN 4250 Water and Waste Water Engineering, CVEN 4320 Highway Engineering, and one design elective course.
The student applies the above knowledge in a capstone design of a complete system. The Capstone Design, which consists of two semester sequence of ENGR 4500 and ENGR 4510, is done under the guidance of a faculty advisor or an industrialist and faculty advisor. The student must first present his/her design proposal for acceptance by the advisor and the department head. Every student is required to make an oral presentation on his/her project to students, faculty, and/or jury of practitioners in a formal setting. The student also presents a written report for approval by his/her advisor, department head and College Dean before a final grade is given.

\section*{Design Electives:}

CVEN 3440 Steel Design
CVEN \(4280 \quad\) Solid Waste Management
CVEN 4290 Air Pollution
CVEN 4350 Hazardous Waste Management
CVEN \(4440 \quad\) Foundation Engineering
CVEN \(4520 \quad\) Civil Engineering Design
Other Engineering courses approved by the department

\section*{Departmental Requirements for Bachelor of Science-}

Civil and Environmental Engineering
37 Semester Hours
Four Year Plan: Total hours = 128
FRESHMAN YEAR

\section*{FALL SEMESTER}

SPRING SEMESTER
Courses
ENGL 1010
MATH 1915
CHEM 110
Courses
ENGL 1020
MATH 1925
CHEM 1111
PHYS 2110
ENGR 1001
PHYS 2111
ENGR 1151
ENGR 1011
ENGR 1000

\section*{SUMMER SESSION}
\begin{tabular}{lr} 
PHYS 2120 & 3 \\
PHYS 2121 & 1 \\
MATH 2115 & \(\frac{3}{7}\)
\end{tabular}

\section*{SOPHOMORE YEAR}

ENGL 2110
\begin{tabular}{rl}
3 & ENGR 2000 \\
4 & ENGR 2001 \\
1 & ENGR 2010 \\
3 & ENGR 2120 \\
\(\frac{3}{14}\) & MATH 3120
\end{tabular}

ENGR 2110
ENGR 2231
MATH 2125
COMM 2200
14
\begin{tabular}{l}
3 \\
3 \\
\hline
\end{tabular}

All students are required to pass the ENGINEERING ENTRANCE
EXAMINATION prior to enrolling in engineering upper level (300-400)
courses. Students are also required to take the Rising Junior
Examination (RJE)

CVEN 3000
CVEN 3100
CVEN3120
CVEN 3121
ENGR 3200
ENGR 3300
ENGL 2120

CVEN 4250
SENIOR YEAR

CVEN 4320
\begin{tabular}{lr} 
CVEN 3250 & 3 \\
CVEN 3350 & 3 \\
CVEN 3420 & 3 \\
ENGR 4510 & 1 \\
Social Science. Elective*** & 3 \\
Humanities electives** & 3 \\
& -16
\end{tabular}

ENGR 4201 FE*
ENGR 4900
Social Science
Elective***
Design TECH ELEC**

\section*{JUNIOR YEAR}

1416
*A student must have completed an application to take the FE exam offered by the State Board in the same semester ENGR 4201 is taken.
**This elective must be chosen from an approved General Education list of Humanities courses.
\({ }^{* * *}\) This elective must be chosen from an approved General Education list of social Science courses.
A student must take ETS examination during the final year.
A practicum is required for eight (8) continuous weeks.

\section*{COURSE DESCRIPTIONS}

CVEN 3000 Introduction to Environmental Engineering (2). Methods to recognize, analyze and solve environmental problems related to air and water. Introduction to regulatory criteria for governing pollution. Prerequisite: Junior Standing. Co-requisite CVEN 3100.
CVEN 3100 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. Prerequisites: ENGR 2010, ENGR 2110; Co-requisite: ENGR 2120.

CVEN 3120 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 2110.

CVEN 3121 Mechanics of Materials Lab (1). A laboratory based on CVEN 3120 lecture material, one 3-hour lab per week. Co-requisite: CVEN 3120.

CVEN 3130 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: CVEN 3120.

CVEN 3131 Soil Mechanics Lab (1). Laboratory based on CVEN 3130 lecture material, one 3-hour lab per week. Co-requisite: CVEN 3130.

CVEN 3200 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. Prerequisite: ENGR 2120, Co-requisites: ENGR 3200.

CVEN 3250 Hydraulic Engineering (3). Analysis and design of flow in single and multiple pipes, and uniform and non-uniform flow in open channels; pump performance and pump selection; concept of drag; model testing. Prerequisite: CVEN 3100; Corequisites: ENGR 3200, ENGR 3400.

CVEN 3350 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: CVEN 3100; Co-requisite: ENGR 3200, ENGR 3400.

CVEN 3410 Theory of Structures I (3). Reactions, shear forces and moments in determinate structures from gravity and lateral loads, influence lines, moving loads, deflections of beams, trusses and frames, introduction to matrix methods of structural analysis. Prerequisite: CVEN 3120,ENGR 3400
CVEN 3420 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. Prerequisite: CVEN 3410; Co-requisite: ENGR 3200.

CVEN 3440 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. Prerequisite: CVEN 3410; Co-requisite: ENGR 3200.

CVEN 4250 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: CVEN 3000, CVEN 3100; Co-requisites: ENGR 3200.

CVEN 4280 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: CVEN 3000; Co-requisite ENGR 3200.

CVEN 4290 Air Pollution Control (3). Sources of primary and secondary air pollution; production of air pollutants from combustion processes. air pollution control devices; air quality modeling. Prerequisite: CVEN 3000; Co-requisite: ENGR 3200.

CVEN 4320 Highway Engineering (3). An introduction to the concepts of design, construction, and maintenance of highway facilities including the integration and application of various engineering principles and techniques for comprehensive team projects. The course will include an introduction to some of the most recent technologies available and responsive to the needs of highway engineering. Prerequisite: CVEN 3200.

CVEN 4350 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: CVEN 3000.

CVEN 4361 Environmental Engineering Laboratory (1). Basics of wet chemical analysis of water samples; titrametric and spectrometric analysis; evaluation of processes such as coagulations, thickening, adsorption and gas transfer, etc. three hours of lab. Prerequisite: CVEN 3000.

CVEN 4440 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. Prerequisite: CVEN 3130; Co-requisites: ENGR 3200

CVEN 4520 Civil Engineering Design (3). Civil engineering design implementation in one or more of the following areas: structures, geotechnical, water, environmental, and transportation. Prerequisite: Consent of Instructor.

\section*{Department of Computer Science}

\author{
Amir Gamshadi, PhD., Interim Head 05, McCord Hall 615-963-5800
}

Faculty: W. Chen, H. Miao, T. Rogers, A. Sarayloo, A. Sekmen, G. Shao, A. Thomas, M. Williams, F. Yao

General Statement: The Computer Science Department offers a BS degree in Computer Science. The CS program provides CS majors with a broad based knowledge in various contemporary computer science fields such as computer architecture and organization, algorithm design and analysis, computer programming, database management systems, and computer networks and data communication. The CS programs includes adequate courses from mathematics, natural sciences, ethics, communications, and other general educations to provide the base knowledge required for understanding computer science topics, for gaining the skills required for entering in diverse careers in private and public sectors and pursue graduate studies.

\section*{CS Program Objectives}

The educational objectives of the Department of Computer Science are consistent with the objectives and outcomes of the College of Engineering and TSU and are as follows:
1. To provide students with the basic knowledge in Mathematical and Natural Science topics that are required for problem solving and understanding of the computer science studies.
2. To provide CS students with fundamentals of computer science so that, they can solve complex problems and develop algorithms using top-down structured design and object oriented design.
3. To provide students with hands-on computer science experiences so that they can implement algorithms and produce application software.
4. To provide students with oral and writing skills required for effective communication and productive functioning in teams and complex working environments.
5. To make students aware of the social issues, ethical conducts, and their professional responsibilities to their society and the international community.
6. To prepare students so that they may pursue graduate studies and understand and appreciate benefits of life-long learning.

\section*{CS Program Outcomes}

The program enables students to achieve, by the time of graduation:
(a) An ability to apply knowledge of computing and mathematics appropriate to the discipline
(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
(c) An ability to design, implement and evaluate a computerbased system, process, component, or program to meet desired needs
(d) An ability to function effectively on teams to accomplish a common goal
(e) An understanding of professional, ethical, and social responsibilities
(f) An ability to communicate effectively
(g) An ability to analyze the impact of computing on individuals, organizations, and society, including ethical, legal, security, and global policy issues
(h) Recognition of the need for and an ability to engage in continuing professional development
(i) An ability to use current techniques, skills, and tools necessary for computing practice.

\section*{Program Requirements}

A minimum of 120 semester credit hours are required for completion of the BS degree in Computer Science. The distribution of these credits is outlined below.
Engineering Orientation 01
Communication 12
Humanities / Fine Arts 09
Social / Behavioral Sciences 06
History 06
Natural Sciences 12
Mathematics 20
CS Core courses 36
CS Concentration 06
Computer Electives 06
Technical Elective 06
Total 120

\section*{Communication (12)}

ENGL 1010 Freshman English I (Composition) (3)
ENGL 1020 Freshman English II (Composition) (3)
COMM 2200 Public Speaking) (3)
A course in a foreign language (3)

\section*{Humanities/Fine Arts (9)}
1. ENGL 2110 American Literature I (3)
2. ENGL 2120 American Literature II (3)
3. PHIL 2010 Introduction to Philosophy (3)

Social/Behavioral Sciences (6)
1. PSYC 2010 General Psychology (3)
2. ECON 2010 Principles of Economics (3)

\section*{History (6)}
1. HIST 2010 American History I (3)
2. HIST 2020 American History II (3)

Natural Sciences (12)
1. CHEM 1110 \& 1111 General Chemistry I and Laboratory \((3,1)\)
2. PHYS 2110, PHYS 2120 General Physics III \((3,3)\)
3. PHYS 2111, PHYS 2121 General Physics I, II Laboratory (1, 1)

Orientation (1)
1. ENGR 1000 Orientation (1)

Mathematics (20)
1. MATH 1915 Calculus \& Analytic Geometry (4)
2. MATH 1925 Calculus II (4)
3. MATH 2115 Calculus III (3)
4. STAT 3110 Probability and Statistics I (3)
5. MATH 3610 Linear Algebra I (3)
6. COMP 3200 Discrete Mathematics (3)

\section*{Computer Science (48)}

Computer science courses are grouped into 3 categories: CS Core courses (36), CS concentration courses (6). And CS elective courses (6). Two main concentration areas are included. These are: Business concentration and Software Engineering Concentration.

\section*{Computer Science (Core 3 6)}
1. COMP 2040 Introduction to Computer, Problem Solving and Computer Use (3)
2. COMP 2140 Structured Problem Solving and Programming (3)
3. COMP 2240 Object Oriented Programming (3)
4. COMP 2400 Computer Organization I (3)
5. COMP 2600 Assembly Language (3)
6. COMP 3030 Windows Programming (3)

7 COMP 3560 Automata and Formal Languages (3)
8. COMP 3040 Data Structures and Algorithms (3)
9. COMP 3190 Ethics and Professionalism in Computing (3)
10. COMP 3310 Data Communication and Computer Networks (3)
11. COMP 4100 Operating Systems (3)
12. COMP 4500 (Senior Project I (1)
13. COMP 4510 (Senior Project II (1)
14. ENGR 4900 Professional Development Seminar (1)

\section*{Concentrations (6)}

\section*{Business}
1. BISI 3230 Management Information Systems (3)
2. COMP 3710 Relational Databases (3)

\section*{Software Engineering}
1. COMP 4300 Software Engineering (3)
2. COMP 4700 Algorithms (3)

\section*{Technical Electives}

Every CS major must take a minimum of 12 credit hours of technical elective courses. 6 credit hours of these credit hours must be taken from computer science elective courses. The remaining 6 credit hours can be selected from Technology, Engineering, Technical Writing, or other courses. Elective courses must be approved by student advisor before they can be taken.

\section*{A Suggested Four Year Plan}

\section*{FRESHMAN YEAR}

\section*{FALL SEMESTER \\ Course}

ENGL 1010
HIST 2010
MATH 1915
COMP 2040
ENGR 1000
TOTAL
HR
3
3
4
3 CHEM 1110/1111
\begin{tabular}{ll} 
CHEM 1110/1111 & 4 \\
COMP 2140 & 3 \\
\hline 17
\end{tabular}
14

\section*{SPRING SEMESTER}

Course
HR
ENGL 10203
HIST 20203
MATH \(1925 \quad 4\) \(\frac{3}{17}\)

\section*{SOPHOMORE YEAR}

\section*{FALL SEMESTER}

ENGL 2110
COMM 2200
COMP 2240
COMP 3190
MATH 2115
TOTAL

\section*{JUNIOR YEAR}

FALL SEMESTER
PHYS 2110,2111
STAT 3110
COMP 3040
COMP 2400
CONCENTRATION I
TOTAL
SPRING SEMESTER
PHYS 2120,2121 4
COMP 33103
COMP 26003
COMP 3200
CONCENTRATION II
16

\section*{SENIOR YEAR}

FALL SEMESTER
COMP 4500
COMP 3560
COMP 4100
ENGR 4900
Elective one
Elective two
TOTAL
In addition to the University requirements for graduation, the following specific College graduation requirements must be met by students in the college:

Students may graduate with a maximum of two D" grades earned in the last two semesters of the senior year. All other D" grades earned in courses prior to the senior year must be repeated the
very next time the courses are offered until a minimum grade of \(C\) is earned, It a graduating senior earns more than two grades of \(D\) during the senior year, that senior will not graduate until that senior has only two grades of "D".

\section*{COURSE DESCRIPTIONS}

COMP 1210 Introduction to Computing (3). This course is for non-CS majors. The purpose is to introduce students to computer hardware and use. Topics covered include: Computer hardware, operating systems and some of the commonly used application software such as a word Processor, an Internet browser, an email manager, a presentation manager and a spreadsheet processor. Course includes hands-on work with computers. Not open to CS majors. Offered every semester. Prerequisite: high school algebra.

COMP 2040 Introduction to Computer, Problem Solving and Computer use (3). This is the first course for CS majors. The purpose is to introduce students to essential of computer hardware, operating systems and problem solving. Topics to be offered are binary, decimal and hexadecimal numbers, computer memory and data storage methods, problem solving and algorithm development, Windows and the UNIX operating systems and their uses. Prerequisite is ENGR 1001.

COMP 2140 Structured Problem Solving and Programming (3). This course discusses basic structures of an object oriented programming language and an integrated development software. Students will use computer labs to implementation programs. Basic language structures needed for translating single-function and multi-function algorithms involving decisions and loops are discussed. Discussions will be in the context of programming language concepts. Prerequisite: COMP 2040 or equivalent.

COMP 2240 Object Oriented Programming (3). This is the continuation of COMP 2140. The remaining structures of the language used in COMP 2140, including object oriented design, detail discussions of classes and methods (functions), inheritance and polymorphism, exception handling, one-dimensional and multi-dimensional arrays and their uses, strings, matrices, and hashing will be discussed. Discussions will be in the context of programming language concepts. Prerequisite: COMP 2140 or equivalent.
COMP 2400 Computer Organization I (3). This course introduces the structures and working principles of the different hardware units of a computer. Computer systems organization, the digital logic level (gates and circuits, memory), micro-architecture level (data path, microinstructions), The instruction set architecture level (instruction format, addressing) and parallel computer architectures are discussed. Prerequisites: COMP 2140.

COMP 2600 Assembly Language (3). This course introduces low level programming through an assembly programming language. Topics include: quick review of main memory and CPU, use of memory, data types, data processing, addressing, compilation and linking processes. Prerequisite: COMP 2400.
COMP 2630 Selective Programming Languages (1-2). The purpose of this course is to teach all components of a selected programming language. Some of the languages to be offered are Visual Basic, C, C++, Smalltalk, Scheme, Common Lisp, Prolog. CSO majors can take the course but credits cannot be applied towards graduation requirements. Prerequisite: COMP 2040.
COMP 3000 Computer Programming for non-CS majors (3). This course is a computer programming for non-CS majors. Topics covered include: Introduction to computer hardware, problem solving and algorithm development, translating algorithms using an object oriented programming language. Schedule will include two lecture hours and two lab sessions. Prerequisite: High school algebra. Offered on demand.

COMP 3030 Event Driven Programming (3). This course introduces basics of visual programming, also known as event driven programming, using the programming language used in COMP 2140 and 2240. Topics discussed include: Language facilities for visual programming, messages and message handling, message loop, creating windows including dialog boxes, constructing controls within windows, graphics and I/O with documents. Prerequisite: COMP 2240 or equivalent.

COMP 3040 Data Structures (3). This course introduces basic data structures. Topics discussed are: abstract data types, implementation of stack and queue data structures with arrays and linked lists, binary trees, heaps, and primary queues, some sorting and searching algorithms and their implementations. Prerequisite: COMP 2240 or equivalent. Offered fall and spring

COMP 3050 Programming Languages (3). This course presents fundamental concepts of programming languages. Topics include: Syntax, Semantics, memory management, parameter passing methods, new programming language extensions (object oriented programming, event driven programming) and comparison of existing programming languages. Prerequisite: COMP 3040.

COMP 3170 Applied Operating Systems (1-2). This course is designed for presenting advanced features of some commonly used operating systems and their uses. It can be taken more than one time, provided each time a different operating system is taught. Examples of operating systems to be offered are MS Windows, LINUX, and UNIX. Prerequisite: COMP 2040.

COMP 3190 Ethics and Professionalism in Computing (3). This course presents the important topics of communications and ethics for computer professionals. Topics discussed include: Introduction and definitions, Ethics for CS professionals and computer users, Computer and Internet Crime, privacy, freedom of expression, intellectual property, Software development, employer /employee issues, software engineering and IEEE code of ethics and professional practice: Prerequisite: COMP 2040.

COMP 3200 Discrete Mathematics (3). This course presents discrete mathematical structures for computer science. Topics include: sets functions and relations, congruence, logic and proof methods, Boolean algebra, graphs and trees and their applications in computer science. Prerequisite: Math 1915 and COMP 2240.

COMP 3310 Data Communications and Computer Networks (3). This course presents basic concepts of data communications and computer networks. Topics include: Definitions, signals, encoding and modulation, digital data transmission and transmission media, error detection and control, types of networks, structure of an open network model, data link and data link protocols. Prerequisite: COMP 2400.

COMP 3410 Advanced Computer Organization (3). This course focuses on advanced computer organization and architecture. Topics include RISC and CISC architectures, 1-bus and multi-bus processor design, pipelining, microprogramming, memory system, and performance measures. Students will work in teams on design projects. Prerequisite: COMP 2400.

COMP 3500 Digital Logic Design (3). Review of Boolean algebra and digital logic gates, Switching algebra, combinational and sequential logic design, minimization methods. Prerequisite: COMP 2400.

COMP 3560 Automata and Formal Languages (3). The purpose of this course is to teach concepts of formal languages and automata. Topics include: mathematical preliminaries, deterministic and nondeterministic finite acceptors, regular expressions, regular languages and grammars, context free grammars and languages, Turing machines.. Prerequisite: COMP 3200.

COMP 3650 Microcomputers (3). This course is designed for teaching the personal computer hardware and software essentials. Topics include: Structures of the PC system board, main memory, CPU, the bus systems, expansion slots, secondary memory units (disks, CD and DVDs, ...), other hardware devices, basics of the PC operating systems, PC management, repair and maintenance. Prerequisite: COMP 2040.

COMP 3710 Relational Databases (3). This course presents basic principles of relational databases and a relational database management system. Topics include basic definitions of database systems, relations and their operations, design of and implementation of a relational database, creating queries and the SQL (structured Query Language). Prerequisite: COMP 3200.

COMP 3900 Numerical Analysis (3). This course is for programming some mathematical problems including solutions of non-linear equation and simultaneous linear equations, matrix related computations, numerical differentiation and integration, interpolation and approximation. Prerequisites: COMP 2140 and MATH 3610.

COMP 4100 Operating Systems I (3). This course presents theory of operating systems. Topics include: 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: COMP 2400, COMP 3040.

COMP 4200 Compiler Construction (3). This course is for teaching fundamentals of writing compilers for programming languages. Topics include:
lexical analysis, parsing, semantic analysis and code generation. Prerequisites: COMP 3560.

COMP 4300 Software Engineering (3). This course presents principles of producing efficient and reliable software systems. Topics include: 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: COMP 3040.

COMP 4400 Artificial Intelligence (3). An introduction to the core concepts of AI. Topics include expert systems, game playing, planning, vision, machine learning, neural networks, and robotics. Prerequisite: COMP 3040.

COMP 4440 Mobile Robotics (3). This course provides students with hands-on experience in mobile robot design, implementation, and testing. It covers mobile robot topics such as robot hardware, robot sensing, actuation, embedded system programming, and algorithms for localization, path planning, and mapping. It briefly covers multi-robot systems. Students are expected to work in laboratory in teams to build and test increasingly complex LEGO-based mobile robots and compete in an end-of-semester robot contest.
COMP 4450 Computer Network Architecture (3). Network design and types, circuits switching, bridges, routers, control signaling, traffic control, LANs, MANs, WANs and digital networks. Prerequisite: COMP 3310.

COMP 4500(ENGR 4500) Senior Project I (1). Each CS major must start working on a research project on the first semester of the graduating year. The project is to be completed in COMP 4510 in the second semester of the graduating year. A written report and an oral defense of the project are required. Prerequisite: graduating senior.
COMP 4510(ENGR 4510) Senior project II (1). This course is the continuation of the COMP 4500. The project started in COMP 4500 must be completed. The report must be presented and orally defended. Prerequisite: COMP 4500. (New Course)

COMP 4550 Computer Network Protocols (3). Basic flow control, types of protocols, routing, transports, contention, redundancy checks, encryption and decryption, viruses and internet protocols. Prerequisites: COMP 4450 and COMP 3200.

COMP4600 Game Programming (3). This course provides the basic programming structures that are used to create games, 3D objects, computer animations and to implement sound into games and animations.
COMP 4610 Object Oriented and Hybrid Database Systems (3). This course presents Object Oriented and hybrid database concepts. Topics include: definitions of objects and attributes, methods and messages, classes, object-oriented data models, architectural issues, the Object-Oriented Database System Manifesto, Object-Oriented Database Design, Object-Oriented Database Management Systems, Object/Relational Database Management Systems, SQL3. Prerequisite: COMP 3710. Offered AIternate years.

COMP 4700 Algorithms (3). The purpose of the course is to teach principles of algorithm design and algorithm analysis. Topics include: Some basic algorithms, such as sorting and searching, pattern matching, Classes of P, NP, NP-complete, intractable problems and some algorithm design techniques, such as dynamic programming, greedy algorithms. Prerequisites: COMP 3040. Offered in alternate years or as demanded.

COMP 4750 Computer Network Management (3). Network interfacing, measuring failures and availability, reliability, security, maintenance, network statistics, reconfiguration and documentation. Prerequisites: COMP 3310. Offered in spring.

COMP 4800 Computer Graphics (3). This course presents basics, including mathematical topics used in writing graphics software. Topics include: Introduction, Passive and interactive computer graphics, programming, hardware, user languages and output devices, transformations, algorithms, object modeling, storage and manipulations and image processing. Prerequisite: COMP 3040.

COMP 4910 Special Topics (1 to 3). This course is for teaching important emerging computer science topics that are not covered in other CS courses. Prerequisites: junior or senior status and successful completion of at least 18 hours of CS courses.

\title{
Department of Electrical and Computer Engineering
}

\author{
Satinderpaul Singh Devgan, Ph.D., P.E., Head ET-214F A.P. Torrence Hall 615-963-5362
}

Faculty: M. Bodruzzaman, L. Hong, M. J. Malkani, D.R. Marpaka, M.S. Zein-Sabatto

General Statement: The mission of the Department of Electrical and Computer Engineering, commensurate with the mission of the University and the College of Engineering, Technology and Computer Science, is to provide quality Electrical Engineering, Computer and Information Systems Engineering, and Biomedical Engineering education, pursue basic and applied research (inquiry) in selected and focused critical areas, and to engage in service to its constituents.

The program in electrical engineering systematically builds upon the knowledge acquired in basic sciences, mathematics, and engineering sciences to provide the students a broad base in the various areas of electrical engineering. The program also offers a concentration in Computer Engineering 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.

\section*{The educational objectives of the program are as follows:}

The goal of the Department of Electrical and Computer Engineering at Tennessee State University is to offer a high quality, broadbased program in electrical engineering, complemented by basic and applied research and public service to prepare its graduates for starting positions in industry, government and/or pursue graduate study in related fields. The Program Educational Objectives (PEO) of the Electrical Engineering (EE) program are:
1. To provide the student with the knowledge of natural sciences, mathematics, engineering and computer science so that the student has the capability to systematically delineate and solve electrical and related engineering problems.
2. To provide the student with a broad-based background in electrical engineering with experiences in the design, development and analysis of electrical and computer systems, subsystems and components.
3. To provide the students with an engineering education to function as educated members of a global society, with awareness of the contemporary issues, professional responsibility, ethics, impact of technology on society, and the need for life long learning.
4. To provide the students with skills to function as members of multidisciplinary teams, and to communicate effectively using available modern tools.

The outcomes of the program require that the graduating student demonstrate the following:
a. an ability to systematically apply knowledge of mathematics, science and engineering sciences to solve problems
b. an ability to plan, design, and conduct engineering experiments as well as to analyze and interpret data and report results
c. an ability to systematically identify, formulate, design and demonstrate electrical engineering systems, subsystems,
components and/or processes that meet desired performance, cost, time and safety requirements
d. an ability to function on multidisciplinary teams
e. an ability to identify, formulate and solve engineering and electrical engineering problems
f. an understanding of professional and ethical responsibility
g. an ability to communicate technical information through professional quality reports, oral presentations and interaction with audience
h. the broad education necessary to understand the impact of electrical engineering solutions in a global and societal context
i. a recognition of the need for and an ability to engage in lifelong learning
j. a knowledge of contemporary issues
k. an ability to use modern techniques, skills and tools including computer based tools for analysis and design
I. Knowledge of probability and statistics, numerical analysis and their applications
m . familiarity with appropriate Codes and Standards
n . Awareness of business environment in which engineering systems are designed and developed.
o. a sense of security and capability to integrate it into electrical system design

Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision making process (often iterative). The fundamental elements of the design process are the establishment of objectives and criteria, synthesis, construction, testing and evaluation and should include a variety of realistic constraints, such as economic factors, safety, reliability, aesthetics, ethics and social impact.

Engineering design experience is integrated throughout the curriculum starting with definition of engineering and engineering design in ENGR 1011 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 2130 Combined Statics and Mechanics of Materials course. In the junior year, design process and methodology are covered in a required ENGR 3200 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 EECE 2120 Circuits II, EECE 3100, 3101 Design of Digital Logic Systems and Lab., EECE 3300, 3301 Electronics and Lab., EECE 3410 Energy Conversion, EECE 3420 Power Systems, EECE 4000, 4001 Control Systems I and Lab., EECE 3500 Communication Systems, EECE 4300 Digital Computer Structures, EECE 4310 Software Engineering, EECE 4800 Introduction to Microprocessors and group design projects in EECE 4101 Electrical Systems Design Laboratory ( \(100 \%\) design) courses. These design experiences lead to a culminating major, meaningful design experience in a required two semester sequence of program specific ENGR 4500, ENGR 4510 Capstone Design Project I, II courses in the senior year. Students' communication skills are also developed through required written reports in laboratory courses, design project reports, formal oral presentation and bound written report for ENGR 4510-Capstone Design Project II course.

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

\section*{Departmental Requirements for Bachelor of Science Electrical Engineering \\ 128 Semester Hours}

MAJOR CORE: A minimum of 37 semester hours including: EECE 2120, 3061, 3100, 3101, 3200, 3210, 3300, 3301, 3410, 3420, 3500, 4000, 4001, 4101; Guided Electives.

MAJOR CORE FOR CONCENTRATION IN COMPUTERS ENGINEERING: A minimum of 37 semester hours including: EECE 2120, 3061, 3100, 3101, 3200, 3210, 3300, 3301, 3500, 4101, 4300, 4310, 4800, COMP 3200; Guided Elective.

TECHNICAL ELECTIVES: A minimum of 5 semester hours. Choose two from the following with the approval of the advisor: EECE 3330, 3430, 4020, 4100, 4320, 4350, 4410, 4600, 4800. Only one 3 credit hour technical elective is needed for concentration in computer engineering.

\section*{Four Year Plan:}

\section*{Bachelor of Science in Electrical Engineering}
\begin{tabular}{lrrr} 
& \multicolumn{2}{c}{ FRESHMAN YEAR } \\
FALL SEMESTER & \multicolumn{2}{c}{ SPRING SEMESTER } & \\
Courses & HR & Courses & HR \\
ENGL 1010 & 3 & ENGL 1020 & 3 \\
MATH 1915 & 4 & MATH 1925 & 4 \\
CHEM 1110 & 3 & PHYS 2110 & 3 \\
CHEM 1111 & 1 & PHYS 2111 & 1 \\
ENGR 1151 & 1 & HIST 2010 & 3 \\
ENGR 1001 & 1 & ENGR 1011 & 1 \\
ENGR 1000 & \(\underline{14}\) & & 1 \\
& & & 15
\end{tabular}

\section*{SUMMER SESSION}

PHYS 2120
3
PHYS 2121
MATH 2115

SOPHOMORE YEAR

FALL SEMESTER
Courses
MATH 2125
COMM 2200
ENGR 2130 or 2110
ENGR 2231
ENGL 2110
HIST 2020

SPRING SEMESTER
HR

\section*{Courses}

MATH 3120
HR
3
ENGR 20003
ENGR 2001
ENGR 2120
1
ENGR \(2250 \quad 4\)
4
15
All students are required to take the Rising Junior Examination (RJE) before taking and passing the Engineering Entrance Examination prior to enrolling in upper level \((300-400)\) major and engineering courses.

\section*{JUNIOR YEAR}

EECE 2120
EECE 3100
EECE 3101
ENGR 3200
ENGR 3300
EECE 3061
Social Science Elective (2)
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EECE 3200
EECE 3300
EECE 3301
EECE 3210
ENGR 3400
ENGL 2120

## SENIOR YEAR

EECE 3410
EECE 3500
EECE 4000
EECE 4001
EECE 4101
ENGR 4500
ENGR 4201(3)
Social Science Elective (2)

EECE 3420
ENGR 4510
ENGR 4900
Technical Elective (1)
Technical Elective (1)
Humanities Elective (2)
(3) The student must file an application and take the Fundamentals of Engineering (FE) examination in the same semester ENGR 4201 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 4201 is offered only during the fall semester.
(4) Student must provide proof of practicum experience of a minimum of continuous eight (8) weeks.
(5) Student must also take the ETS examination in Final year.

## Four Year Plan:

## Bachelor of Science in Electrical Engineering with Concentration in Computer Engineering

## Courses <br> ENGL 1010 <br> MATH 1915 <br> CHEM 1110 <br> CHEM 1111 <br> ENGR 1151 <br> ENGR 1001 <br> ENGR 1000 <br> SUMMER SESSION

FALL SEMESTER

## FRESHMAN YEAR

| PHYS 2120 | 3 |
| :--- | ---: |
| PHYS 2121 | 1 |
| MATH 2115 | 3 |

SPRING SEMESTER
HR Courses HR
ENGL 10203

SOPHOMORE YEAR

MATH 2125
COMM 2200
ENGR 2130 or 2110
ENGR 2231
ENGL 2110
HIST 2020

MATH 3120
ENGR 2000
ENGR 2001
ENGR 2120
ENGR 2250
(1) Technical and design electives must be chosen from the following courses with approval from advisor. (EECE 3330, 3430, 4010,4020, 4100, 4300, 4310, 4320, 4350, 4410, 4600, 4800)
(2) Social Science and Humanities Electives must be chosen from an approved list of general education courses.

All students are required to take the Rising Junior Examination (RJE) before taking and passing the Engineering Entrance Examination prior to enrolling in upper level (300 and 400) major and engineering courses. Also they are to take the Rising Junior Examination (RJE).

JUNIOR YEAR
EECE 2120
EECE 3200
EECE 3100
EECE 3300
EECE 3301
EECE 3210
ENGR 3400
ENGL 2120

## SENIOR YEAR

EECE 4310
EECE 3500
EECE 4500
EECE 4101
ENGR 4201(3)
Technical Elective (1)
COMP 3200

EECE 4300
ENGR 45101

ENGR 4900

Humanities Elective (2)
Social Science

Elective (2)
3
(1) Technical and design electives must be chosen from the following courses with approval from advisor. (EECE 3330, 3420, 3430, 4010,4020, 4100, 4150, 4320, 4350, 4410, 4600.
(2) Social Science and Humanities Electives must be chosen from an approved list of general education courses.
(3) The student must file an application and take the Fundamentals of Engineering (FE) examination in the same semester ENGR 4201 is taken and one semester before graduation. The student must provide evidence

GR 3300
EECE 3061
Social Science Elective (2)
EECE
that he/she has filed the application to take the FE examination before filing for graduation. ENGR 4201 is offered only during the fall semester.
(4) Student must provide proof of practicum experience of a minimum of continuous eight (8) week.
(5) Student must also take the ETS examination in final year.

## COURSE DESCRIPTIONS

EECE 2120 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 2000, 2001, MATH 3120 ..

EECE 3061 Advanced Programming Lab (1). Application of concepts of programming using I/O files, object oriented programming, algorithm analysis and data structures. Class projects involve software development and implementation. Prerequisite: EEE, ENGR 2221 or 2231.

EECE 3100, 3101 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. VHDL Simulation, Micro-coding and assembly language programming. Lecture: 3 credits. Prerequisites: ENGR 2000, 2001. Co-requisites: ENGR 3200, EECE 3101. Laboratory: 1 credit. Prerequisite: ENGR 2001. Co-requisites: EECE 3100, ENGR 3200.

EECE 3200 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: EECE 2120.

EECE 3210 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: EECE 2120.

EECE 3300, 3301 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 opamp circuits; transfer functions, analog computer and active filters. Prerequisites: EECE 2120, ENGR 3200, 3300. Co-requisite: EECE 3301. Laboratory: 1 credit. Prerequisites: EECE 2120, ENGR 3200, 3300. Corequisite: EECE 3300.
EECE 3330 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: EECE 3300, 3301. Co-requisite: EECE 3410. (Check with department about frequency of offering)
EECE 3410 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 threephase induction motors, synchronous machines and direct current machines, two-phase servo motors. Prerequisite: EECE 2120, ENGR 3200.

EECE 3420 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: EECE 3410, ENGR 3400. Corequisite: EECE 3210.

EECE 3430 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: EECE 3410.
EECE 3500 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: EECE 3200, ENGR 3200.

EECE 4000 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: EECE 3200, ENGR 2130, 3200. Co-requisites: EECE 3410, 4001.

EECE 4001 Control Systems Laboratory (1). Experimental analysis of A.C. and D.C. servo systems, design of compensation and control systems, PLC and robotic applications. Prerequisites: EECE 3200, ENGR 2130, 3200. Co-requisites: EECE 3410, 4000.

EECE 4020 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: EECE 4000.

EECE 4100 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: EECE 3200, ENGR 3200. Co-requisite: EECE 3500.

EECE 4101 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, EECE 3300, 3301, ENGR 3200. Corequisite: EECE 3500, 4000.

EECE 4150 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: EECE 3100, 3101, 3300, 3301.(Check with department about frequency of offering).
EECE 4300 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: EECE 3100, 3101, ENGR 3200.

EECE 4310 Software Engineering (3). 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: EECE 3061. Co-requisite: ENGR 3200.

EECE 4320 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 co-processing techniques. Prerequisites: EECE 3100, 3101, ENGR 3200. (Check with department about frequency of offering).
EECE 4350 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: EECE 3061, EECE 3100, 3101, ENGR 3200.
EECE 4410 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: EECE 3410. (Check with department about frequency of offering).

EECE 4600 Introduction to Biomedical Engineering (3). A multidisciplinary course of biomedical engineering which include: basics of
anatomy and physiology, bio-electric phenomena, biomedical sensors, bio-signal processing, medical imaging, physiological modeling, biotechnology and rehabilitation engineering. Laboratory experiments for biomedical project design are also part of this course. Lecture 3 Credits. Prerequisites: Senior Standing.
EECE 4800 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: EECE 3100, 3101, ENGR 3200.

# Department of Mechanical and Manufacturing Engineering 

Hamid R. Hamidzadeh, Ph.D., Head ET 136 A. P. Torrance Hall 615-963-5391

Faculty: Y. Clark, L. Onyebueke, D. Rogers, A. Shirkhodaie.

General Statement: The Mechanical Engineering program systemically builds upon the knowledge acquired in the study of the physical sciences, mathematics, and engineering sciences to provide the student with a broad base in the various areas of mechanical and manufacturing 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 mechanical design or manufacturing engineering or thermal-fluid systems design.

The educational objectives for the department of Mechanical and Manufacturing 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, effective communication, and an understanding of the engineer's responsibility to society and the impact of technology on society;
5. To provide the student with intellectual challenges and contemporary issues designed to arouse curiosity and a desire for life-long learning as a responsible engineer;
6. To provide students with experiences which will prepare them to function effectively in multicultural and multidiscipline teams with effective communication skills; and
7. To provide students with hands-on experimental learning activities with traditional and modern mechanical and manufacturing machinery, state-of-the-art technologies to enhance engineering problem solving including man-machine interface problems.

The outcomes of the program require that the graduating students demonstrate the following:
a. Ability to apply knowledge of mathematics, science, and engineering;
b. Ability to design and conduct experiments, as well as, to analyze and interpret data;
c. Ability to design a system, component, or process to meet needs;
d. Ability to function on multidisciplinary teams;
e. Ability to identify, model, and solve engineering problems;
f. Understanding of professional and ethical responsibilities;
g. Ability to communicate effectively;
h. Broad education necessary to understand the impact of engineering solutions in a global and societal context;
i. Recognition of the need of an ability to engage in life-long learning;
j. Knowledge of contemporary issues;
k. Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice;
I. Ability to understand, and use codes and standards in the analysis and design process;
m . A business sense and understanding of the economics of industry; and
n . A security sense and capability of integrating it into mechanical design.

Mechanical Engineering Design Experience: A major curriculum objective is to provide mechanical engineering students with the ability to systematically apply engineering fundamentals to the design of mechanical, thermal, and manufacturing components and/or systems. Courses with engineering design content are integrated throughout the mechanical engineering curriculum.

The engineering design experience begins in the freshman year with ENGR 1011-Introduction to Engineering II. The design experience continues in the sophomore year with ENGR 2010-Thermodynamics, ENGR 2110-Statics, and ENGR 2120-Dynamics.

The sequence is followed in the Junior year with an interdisciplinary design course: ENGR 3200-Introduction to Design.

The Mechanical Design and Manufacturing sequence begins in the junior year with MEEN 3210-Mechanism Design, CVEN 3120Mechanics of Materials, MEEN 3220-Design of Machine Elements, MEEN 3250 Computer Aided Design, and follows in the senior year with MEEN 4230-Machine Design. Students may take an elective course of MEEN 4800-Advanced Machine Design with $100 \%$ design content and a technical elective course of MEEN $4100-$ Instrumentation and Automatic Controls or MEEN 4700-Mechanical Vibration.

The Thermal Design sequence builds on ENGR 2010-Thermodynamics, CVEN 3100-Fluid Mechanics with two senior level thermal design courses MEEN 4150-Heat Transfer, MEEN 4250-Thermal-Fluid Systems Design, and an elective course with $100 \%$ design content MEEN 4200-Heating and Air Conditioning.

The mechanical engineering design requirement is completed with two semester capstone design courses ENGR 4500, 4510Capstone Design I \& II, which draw upon previous course work. An integral part of the design experience is the introduction of ethics, economics, social issues, and safety factors which are required to make a design successful. These concepts are introduced during the freshman year ENGR 1001, ENGR 1011-Introduction to Engineering I \& II, and reinforced during the junior year. ENGR 3200Introduction to Design is integrated into design projects in junior and senior level design courses. At each level, a formal written report and a formal oral presentation are required to communicate the design.

The Bachelor of Science degree program in Mechanical Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC of ABET).

## Degree Requirements For Bachelor of Science in Mechanical Engineering: <br> 128 Semester Hours <br> Engineering Core: 91 semester hours <br> Major Core: 37 semester hours

TECHNICAL ELECTIVES: Choose one from the following: MEEN $4100,4120,4300,4400,4600,4700$, EECE 4020 or any other approved by the advisor and Department Head.

DESIGN ELECTIVES: Choose one from the following: MEEN 4200, 4800.

## Bachelor of Science Degree in Mechanical Engineering

## Four Year Plan

## FALL SEMESTER

## Courses

ENGL 1010
MATH 1915
CHEM 1110
CHEM 1111
ENGR 1001
ENGR 1151
ENGR 1000

## FRESHMAN YEAR


SUMMER SEMESTER
PHYS 2120
PHYS 2121
MATH 2115

## SOPHOMORE YEAR

MATH 2125
MATH 3120
COMM 2200
ENGR 2110
ENGR 2211, 2221, 2231
ENGL 2110

ENGR 2000
ENGR 2001 -
ENGR $2010 \quad 4$
ENGR 2120

SPRING SEMESTER
HR
ENGL 1020
MATH 1925

PHYS $2111 \quad 1$
ENGR $1011 \quad 1$
HIST 2010
$\square \frac{3}{14}$
**Electives from Social Science must be chosen from General Education list of social science courses approved by the University. Every student must take the Fundamentals of Engineering (FE) examination in the same semester ENGR 4201 is taken and one semester before graduation. Each student must demonstrate that she/he has filed an application to take the FE before filing for graduation. ENGR 4201 is offered during the fall semester.
Every student must take ETS examination during the final year.
A practicum is required for eight (8) continuous weeks.

## COURSE DESCRIPTIONS

MEEN 3100 Materials Processing (2). Introduction to Manufacturing systems and the primary and secondary manufacturing processes. Prerequisite ENGR 3300, Co-requisite: MEEN 3511.

MEEN 3210 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 different gear trains. Design projects required. Prerequisite ENGR 2120.

MEEN 3220 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, and springs will be considered along with bearing selection and lubrication. Design projects required. Prerequisites: MEEN 3210, CVEN 3120.

MEEN 3250 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 3400.

MEEN 3511 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: ENGR 2211 or 2221 or 2231. Co-requisite: ENGR 3200

MEEN 3521 Manufacturing Processes Laboratory (1). Introduction to basic processing methods used to shape engineering materials. Use of lathes, milling, drilling, tapping, welding and casting. Basic testing of mechanical properties of materials. Prerequisite: ENGR 3300, ENGR 3200, MEEN 3511. Co-requisite: MEEN 3100.

MEEN 4011 Mechatronics Laboratory (1). Introduction to advanced instrumentations used by engineers including displacement, acceleration, and force transducers, strain gauges, thermocouples, oscilloscopes, and data acquisition systems. Behavior of zeroth, first, and second order systems. Measurement of vibration and sound. Prerequisites: ENGR 2000, 2001, MEEN 3511.
MEEN 4021 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 and heat pumps, and solar energy system. Prerequisite: CVEN 3100.

MEEN 4100 Instrumentation and Automatic Controls (3). Dynamic models and response of instruments and dynamic systems; transfer function and state space representation of mechanical, thermal, and electromechanical systems; time and frequency responses of systems; linear analysis of simple closed-loop systems; stability criteria; improvement of systems performance; and design of simple dynamic systems. Prerequisites: MATH 3120, ENGR 2000, 2001.

MEEN 4120 Mechanical Metallurgy (3). Introduction to various measures of strength. Topics include mechanical testing of poly-crystalline materials, plastic deformation of metals, and elementary geometry of dislocations. Prerequisites: ENGR 3300, CVEN 3120.

MEEN 4150 Heat Transfer (3). Introduction of heat transfer mechanisms: conduction heat transfer including steady state; one, two, and three dimensional conduction and conduction in the unsteady state; convection heat transfer including forced and free convection; radiation heat transfer, and heat exchangers. Prerequisites: CVEN 3100, ENGR 3400.

MEEN 4200 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: MEEN 4150.

MEEN 4230 Machine Design (3). The design of machine parts including shafting, gears, brakes, clutches, flywheels, and frames. Design projects required. Prerequisites: MEEN 3220, 3250.

MEEN 4250 Thermal Fluid Systems Design (3). Application of analytical techniques, the design of thermal devices, and thermal-fluids engineering systems. Design projects required. Prerequisite: MEEN 4150.

MEEN 4300 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 2010, CVEN 3100.

MEEN 4400 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: MEEN 3100.

MEEN 4600 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: CVEN 3100.

MEEN 4700 Mechanical Vibration (3). Free and forced vibrations of systems with one and multi degrees of freedom. Modal analysis. Vibration measurements. Vibration of distributed systems. Passive and active vibration controls. Design considerations. Prerequisites: MATH 3120, ENGR 2120.

MEEN 4800 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 of indeterminate structures and introduction to fracture mechanics. Design projects required. Prerequisite: MEEN 4230.

# COLLEGE OF HEALTH SCIENCES 

Kathleen A. McEnerney, D.A., Dean<br>161 Clement Hall<br>615-963-5924

General Statement: The College of Health Sciences was established in 1974 as the School of Allied Health Professions Program offerings in the College include Cardio-Respiratory Care Sciences, Dental Hygiene, Health Care Administration and Planning, Health Sciences, Health Information Management, Medical Technology, Occupational Therapy, Physical Therapy, and Speech Pathology and Audiology. The College 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. The goals of the College of Health Sciences 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 College 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 College.
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 College of Health Sciences offers programs in seven undergraduate health related fields and three graduate fields. (See Graduate Catalogue for information on graduate degree programs in Occupational Therapy, Physical Therapy and Speech and Hearing Sciences.) Five of the seven programs require completion of a pre-professional curriculum as prerequisite to admission to the professional/clinical level program. In addition to meeting the criteria for admission to Tennessee State University, prospective students must also apply to the specific department in accordance with departmental admissions criteria. Admission to professional programs is a competitive process in addition to and separate from the University's admissions process. Completion of the prerequisites for any health sciences 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:

HEALTH SCIENCES PROGRAMS

| Program | Level <br> of Entry | Application <br> Deadline | Starting <br> Semester | Degree <br> Awarded | *Professional <br> Examination |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Cardio-Respiratory <br> Care Sciences <br> Dental Hygiene | Junior <br> Freshman | June 30 <br> January 15 | Fall | Fall | B.S. |

* Certified Respiratory Therapist Exam/Registered Respiratory Therapist Board Examination National Board Dental Hygiene Examination (National \& Regional) National Registration Examination for Registered Health Information Administrators American Society of Clinical Pathologists Board of Registry Examination, National Certifying Agency, or American Medical Technologist National Board Certification for Occupational Therapy.


# Department of Cardio-Respiratory Care Sciences 

Thomas John, Ph.D., R.R.T., Head 328 Industrial Arts Building 615-963-7431

Faculty: D. Chatterji, B. John

General Statement: 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 field of Respiratory Care needs respiratory care practitioners to administer various treatment modalities and medications, perform diagnostic procedures, and/or manage sophisticated lifesupport equipment. Although the majority of respiratory care practitioners are employed by hospitals; opportunities to practice outside of the standard hospital setting are developing.

The student who satisfactorily completes all the courses in the curriculum by the end of the fourth year is awarded the Certificate of Completion. The program director will make the recommendation to the dean of the College of Health Sciences when the student is ready for such a certificate. Students must also pass Discipline Exam with $75 \%$ in order to receive the degree.

## ADMISSIONS REQUIREMENTS

Students who wish to pursue the Cardio-Respiratory Care Sciences (CRCS) major may apply to the CRCS 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 junior year. Applications for admission are accepted from students who meet the following application requirements:

Admission to Tennessee State University.
A minimum high school grade point average of 2.5 on a 4.0 scale.

One year of high school algebra, biology, and chemistry.
Completion of first two years CRCS curriculum with a grade point average of 2.5 on a 4.0 scale.

A "C" or better grade in supporting science courses.
Two letters of recommendation from instructors who have taught the applicant.

An interview with the CRCS Admissions and Retention Committee or its designee.

Applicants will be screened by the CRCS Admissions and Retention Committee and will be advised of the final decision regarding acceptance into the program by a representative of the Committee.

## Criminal Background Check

A criminal background check is a requirement at most of the affiliated clinical sites for training. Based on the results of these checks an affiliated clinical site may determine not to allow your inability to successfully complete the requirement of this program. Additionally, a criminal background may preclude licensure or employment.

## 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 admission 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 "C."
4. In addition to the above, a Tennessee State University student seeking to transfer into Cardio-Respiratory Care Sciences 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. Students who have already taken the required science and general education courses may be able to accelerate their studies, but 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 rotations, students may be assigned to off-campus facilities. Students are responsible for transportation costs, clinic attire, and other expenses related to clinical experiences. Students are also expected to obtain membership in the American Association for Respiratory Care (AARC).

## RETENTION POLICY

1. Students who earn a non-passing grade in any supporting science course or any CRCS 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 provided 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 any 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 Sciences course or failure to register for any semester without prior written approval from the department head.
g. Failure to comply with clinical and/or academic policies set by the Department.
3. Students who have been dismissed from the program due to poor academic performance must reapply for admission during the next application cycle and compete for space in a subsequent class. Students who request readmission should present to the Admissions Committee evidence of a substantial change in circumstances that could lead to improved academic performance.

National Board Exam: Students who pass the Certificate of Completion Exam and complete all the required courses for the BS degree are eligible to sit for the National Board Examinations.

General Education Core Courses (41 credit hours): ENGL 1010, 1020; ENGL Literature; HIST 2010, 2020; Humanities 6 semester hours; MATH 1110; PSYC 2010; SOCI 2010; BIOL 2210, 2211, 2220, 2221; COMM 2200.

Additional Required Courses (12 credit hours): HLSC 1000; CHEM 1110, 1111; BIOL 2400, 2401; PSYC 2180.

Major Core Courses ( 67 credit hours): CRCS 1000, 2014, 2030, 2044, 2110, 2120, 2320, 3010, 3011, 3015, 3016, 3024, 3030, 3040, 3050, 3110, 3120, 3224, 4224, 4264, 4320, 4410, 4420, 4500.

## Cardio-Respiratory Care Sciences Bachelor of Science Degree

Plan I*

## FRESHMAN YEAR

## Fall Semester

HLSC 1000
BIOL 2210/2211
ENGL 1010
CHEM 1110/1111
CRCS 1000

Spring Semester
1
1 MATH 1110
4/0 BIOL 2220/2221
ENGL 1020
Humanities/
Fine Arts
14

## SOPHOMORE YEAR

Fall Semester
COMM 2200
BIOL 2400/2401
HIST 2010
Humanities/
Fine Arts

## Fall Semester

COMM 2200
BIOL 2400/2401
Humanities/
Fine Arts

## Fall Semester

CRCS 2014
CRCS 2030
CRCS 2031
CRCS 2110
CRCS 3010
Spring Semester
3 ENGL Literature
4/0 SOCI 2010
3 HIST 2020
PSYC 2010
3
13

## JUNIOR YEAR

## CRCS 3011

PSYC 2180

## Spring Semester

CRCS $2044 \quad 4$
CRCS 2120
CRCS 23203
CRCS 30153
CRCS 30203
$\overline{16}$

## Summer Session

CRCS 30303
CRCS 3050

## SENIOR YEAR

| Fall Semester |  | Spring Semester |  |
| :--- | ---: | :--- | :--- |
| CRCS 3016 | 2 | CRCS 3224 | 4 |
| CRCS 3024 | 4 | CRCS 4224 | 3 |
| CRCS 3030 | 3 | CRCS 4410 | 3 |
| CRCS 4264 | 3 | CRCS 4420 | 3 |
| CRCS 3120 | 1 | CRCS 4500 | 3 |
| CRCS 3130 | 2 |  |  |
| CRCS 4320 | 3 | -16 |  |

## Cardio-Respiratory Care Sciences Bachelor of Science Degree

## Suggested Plan II

*All associate level transfer students who satisfactorily complete 2 years of college are required to enroll in CRCS courses outlined in the junior and senior years listed in Plan I.
*Transfer credits may be given for all equivalent courses taken at the associate degree level. Transfer students should contact the CRCS department for policy details. Transfer students must take all the remaining general education and science courses not taken at the associate level to fulfill the courses requirements for Plan I.

## ACCREDITATION

The Cardio-Respiratory Care Sciences program is accredited by the Commission on Accreditation of Allied Health Education Programs.

## COURSE DESCRIPTIONS

## Cardio-Respiratory Care Sciences (CRCS)

CRCS 1000 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. (Formerly CCS 100) Prerequisite: Consent of Instructor.
CRCS 2014 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 during the last 8 weeks of the semester. (Formerly CCS 104) Co requisite: CRCS 3010.

CRCS 2030 Pulmonary Function Testing and Evaluation (3) A course designed to expose the student to the pulmonary function testing, evaluation, and assessment. It includes spirometry, diffusion studies, flow volume loops, helium dilution, nitrogen washouts, and the instructional sequence necessary to become certified in ABG analysis. (Formerly CCS 203) Prerequisites: BIOL 2210, 2211, 2220, 2221; CHEM 1110, 1111; MATH 1110.

CRCS 2031 Pulmonary Function Testing and Evaluation Laboratory (1) A course designed to expose the student to pulmonary function testing, evaluation, and assessment. This lab course includes spirometry, flow volume loops and ABG analysis. Co requisite: CRCS 2030.

CRCS 2044 Cardio-Respiratory Care Sciences Clinical II (4) This course provides the Cardio-Respiratory Care Sciences student with opportunities to practice basic respiratory care procedures. The student will get experience 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. Prerequisite: CRCS , 3010, 3011.
CRCS 2110 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. (Formerly CCS 211) Co requisite: CCS 2030, 2031.

CRCS 2120 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. (Formerly CCS 212) Prerequisites: CHEM 1110, 1110; BIOL 2210, 2211, 2220, 2221; BIOL 2400, 2401.

CRCS 2320 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. (Formerly CCS 232) Prerequisites: BIOL 2210, 2211, 2220 2221; CHEM 1110, 1111.

CRCS 3010 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. (Formerly CCS 101) Prerequisites: BIOL 2210, 2211, 2220, 2221; CHEM 1010, 1011; MATH 1110.

CRCS 3011 Cardio-Respiratory Care Technology Lab (1) Course content will include laboratory study of equipment taught in Technology I and Patient assessment. Co requisite: CRCS 3010.

CRCS 3015 Mechanical Ventilation I (3) A comprehensive course covering the principles, operation and application of devices used to provide ventilatory assistance and support. Course includes an in-depth study of patient-ventilator interface, artificial airways, establishing the need for and discontinuance of mechanical ventilation. This course includes a laboratory segment. (Formerly CCS 301a) Co-rerequisite: CRCS 2320.

CRCS 3016 Mechanical Ventilation II (2) This course presents material on the application of mechanical ventilation with regard to patient diagnosis and changes in condition. Course includes discussions of case studies and patient management involving various modes of mechanical ventilation, presentation of recent advances in mechanical ventilation, and an emphasis on troubleshooting equipment and patient problems. (Formerly CCS 301b) Prerequisite: CRCS 3015.

CRCS 3020 Cardio-Respiratory Care Technology II and Laboratory (3) A study which includes the principles of the operation and usage of various respiratory cae modalities such as aerosol therapy, IPPB, IS, PD\&C, manual resuscitators, sterilization techniques and classification of mechanical ventilators. The student will also be instructed in CPR and patient assessment (Formerly CCS 201) Prerequisite: CRCS 3010, 3011.

CRCS 3024 Cardio-Respiratory Care Sciences Clinical III (4) A 24 hour/week supervised clinical application of patient care skills developed in CRCS 2030, 2044, 2120, 2320, and 3006 for 10 weeks. This course provides the student with opportunities to refine procedures and evaluation skills including applied respiratory pharmacology, bedside spirometry, PFT, ABG analysis, and pre-post operative evaluation. IPPB and mechanical ventilation also will be practiced. (Formerly CCS 302) Prerequisites: CRCS 3010, 3011, 3020.

CRCS 3030 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. (Formerly CCS 303) Prerequisite: CRCS 3015.
CRCS 3040 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. (Formerly CCS 304) Prerequisites: CRCS 2110, 3015.

CRCS 3050 Case-Based Seminar (2) This course presents a discussion of cases and topics relevant to respiratory care. (Formerly CCS 305) Prerequisites: CRCS 2110, 3015.

CRCS 3224 Cardio-Respiratory Care Clinical IV (4) A 24 hour/week supervised clinical practicum for 10 weeks designed to provide performance competencies in the administration of respiratory care to critically ill patients and pediatric respiratory care. (Formerly CCS 322) Prerequisite: CRCS 3024.
CRCS 4224 Advanced Critical Care Management (3) An advanced clinical course where the student is exposed to continuous and extensive crit-
ical care patient management during the last six weeks of the semester. (Formerly CCS 422) Co requisite: CRCS 3224.

CRCS 4264 Advanced Pulmonary Function Testing and Pulmonary Rehabilitation (3) An advanced clinical course where the student can develop emphasis on methodology of diagnosis of respiratory diseases, including advanced pulmonary physiology and pathology during the last six weeks of the semester. The student is exposed to pulmonary exercise testing and rehabilitation procedures. (Formerly CCS 426) Prerequisite: CRCS 2030, 2031. Co requisite: CRCS 4320.

CRCS 4320 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. (Formerly CCS 432) Prerequisites: CRCS 2030, 2031, 2110.

CRCS 4410 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. Students should pass this course also to receive Certificate of Completion (Formerly CCS 441) Prerequisites: CRCS 3015, 3016.

CRCS 4420 Professional Exams Seminar (3) This course shall prepare students for professional credentialing exams CRT \& RRT examinations. These exams are equivalent to Certificate of Completion exams, CRT \& RRT. Prerequisites: All CRCS junior and senior year fall semester courses.

CRCS 4500 Senior Project (3) An approved directed independent study project. The students will collect clinical data, analyze and write a detailed paper with references from pertinent journals. (Formerly CCS 450) Prerequisites: All CRCS junior and senior year fall semester courses.

## DENTAL HYGIENE

## Marian W. Patton, R.D.H., Ed.D., Head 219 Clement Hall 615-963-5801

Faculty: J. Brinson, T.C. Newbern, R. Word, .A. Lewis, Clinical Supervisors: O. Maxwell, J. Williams, R. Wilson (Meharry Faculty: B. Ballard, C. Williams

General Statement: Two degree programs are offered by the Department of Dental Hygiene: the Associate of Applied Science and the Bachelor of Science Degree Completion. Students accepted into the Bachelor of Science degree program are graduates of accredited associate degree Dental Hygiene programs. The Bachelor of Science Degree/ Completion may serve as a foundation for further study.
"The Dental Hygienist is a licensed oral health care professional who integrates the roles of clinician, educator, consumer advocate, manager, change agent and researcher to prevent oral disease and to promote health." (Dental Hygiene Theory and Practice, Saunders, St. Louis, MO 2003)

Graduates of the Dental Hygiene Program are eligible for the Na tional Board Dental Hygiene Examination and Regional/State Board Examinations throughout the country.

## MISSION STATEMENT

The Department of Dental Hygiene is committed to ensure an educational program of excellence to its students. The Department further pledges to provide for the ongoing oral health care to all populations, especially those designated as under-served through community service with regard to cultural diversity. We pledge to continue promotion of Dental Hygiene as a profession; and promotion of lifelong learning.

## Goals

To develop a well-prepared dental hygiene professional who is sensitive to the delivery of quality care.

To encourage the student to think independently and to participate in critical thinking, problem solving, and lifelong learning.

To promote the effective use of technology throughout the curriculum among faculty and students.

To promote a positive value system that will foster ethical behavior throughout the dental hygiene career and life.

To provide oral health care to all, including populations designated as underserved.

To promote Dental Hygiene as a profession through service learning and civic engagement.

## ADMISSION/RETENTION REQUIREMENTS

A student must be accepted into the University before applying to the Dental Hygiene Associate Degree Program. Applications to the Department of Dental Hygiene must be received by January 15th of the year for which admission is being requested. Any applications received after the January 15th deadline are will be 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.

NOTE: Acceptance to the University does not ensure 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 chairperson of the Committee on Dental Hygiene Admissions.

## 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 in order to be considered for admission:

1. A minimum high school grade point average of 2.5 and college 2.7 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. (A high school transcript that indicates the above courses is required; and if you are deficient in any of these courses, one semester of each at the college level will be accepted).
5. A composite score of 19 on the ACT, or an equivalent score on the SAT.

## College Prerequisites and Other Requirements

1. *One semester of college English Composition.
2. *One year of Anatomy and Physiology.
3. *One semester of Microbiology.
4. *One semester of Humanities.
5. **One letter of recommendation from science teachers describing the applicant's potential for success in the Dental Hygiene curriculum.
6. One character recommendation.
7. An autobiographical sketch in the applicant's handwriting; 100 words or more
8. A complete health evaluation on the official forms provided by the Department of Dental Hygiene once an applicant is admitted to the program.
9. A personal interview. Interviews may be arranged for applicants who live beyond 300 miles of the University.
10. A criminal background check will be required once an applicant is admitted into the program.

ANY TRANSFER CREDITS WILL BE EVALUATED BY THE OFFICE OF ADMISSIONS ONCE OFFICIAL COLLEGE TRANSCRIPTS ARE SUBMITTED.
*COURSES PREREQUISITES REQUIRED FOR THE AAS DEGREE IN DENTAL HYGIENE. THESE COURSES MUST BE COMPLETED BEFORE ACCEPTANCE INTO THE PROGRAM. ANATOMY AND PHYSIOLOGY I \& II AND MICROBIOLOTY MUST HAVE BEEN TAKEN WITHIN THE LAST 5 YEARS UPON APPLYING TO THE PROGRAM. ALL PREREQUISITE COURSES MUST BE COMPLETED AND PASSED WITH A GRADE OF "C" OR BETTER BEFORE ACCEPTANCE INTO THE PROGRAM.
**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 Completion Program

Applicants to the baccalaureate degree completion program must be graduates of an accredited associate degree Dental Hygiene Program. 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 graduates.)
3. Official college transcript(s). (May not be required of recent TSU graduates.).

The following advanced dental hygiene courses (3000-4000 level) require National Board Certification and/or Tennessee State Licensure: DHYG 3010, DHYG 4020, 4110, and DHYG 4120.

## 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 if 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 or to retake courses.
6. Admission to advanced standing may necessitate auditing or taking for credit courses which the Committee on Curriculum may deem necessary to ensure adequate preparation for continued dental hygiene study.

## Retention/Progression Policy

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) are unable to progress. Dismissal from the program may result from documented poor studentship.

Recommendations for advancement are the charge of the Dental Hygiene Evaluation Committee, which meets following mid-term and the final examination periods.

Students who have been dismissed from the Dental Hygiene program are eligible for reconsideration only under extenuating circumstances.

Students who earn a non-passing grade in any supporting science course or any Dental Hygiene course will not be permitted to take the next sequential course(s).

Students will be dismissed from the professional program for either of the following:

Failure to maintain a cumulative grade point average of 2.0 or above
A grade of less than " $C$ " in 2 or more major field courses.
A grade of less than " $C$ " in more than one clinical experience.
A grade of less than "C" in a course that has been repeated.
Withdrawal from any Dental Hygiene course or failure to register for any semester without prior written approval from the Department.

Students who have been dismissed from the program due to poor academic performance may reapply for admission during the next application cycle and compete for space in a subsequent class. Students requesting readmission should write the Admissions Committee showing evidence of substantial change in circumstances that could lead to improved academic performance.

## Readmission Policy

A student who earns a failing grade in a dental hygiene course and wants to re-apply must do so, in writing, to the Program Director for reentry at least six weeks before the beginning of the semester reentry is requested. An updated transcript is required. Readmissions are based on previous performance in dental hygiene courses, faculty recommendations, successful completion of college core courses, and available faculty and clinical resources. There is no guarantee that any student will be readmitted.

Once readmitted, a student who earns a second failing grade in any dental hygiene course at TSU cannot continue in the program.

Students who withdraw from the program may be reviewed, (one time only), by the faculty to determine, on an individual basis, if they are eligible for re-admission to the program.

## Departmental Requirements for Associate of Applied Science Degree in Dental Hygiene

## +FRESHMAN YEAR

## Fall Semester

HLSC 1000
CHEM 1010/1011
DHYG 1010/1014
DHYG 1030
DHYG 1110
SPCH 2200
BIOL 2210/2221**
ENGL 1010**

Summer Session
DHYG 10502
DHYG 1134
BIOL 2400/2401**

Spring Semester
DHYG 1020/1024 2/2
DHYG 10402
DHYG 11002
DHYG 11402
NUFS 21103
PSYC 20103
BIOL 2220/2221** 4/0
$\overline{20}$

## Fall Semester

CHEM 2500
DHYG 2010/2014
DHYG 2050
DHYG 2110
DHYG 2100

## +SOPHOMORE YEAR

## 79 Credit Hours for AAS Degree

**These courses must be taken prior to acceptance in to the Dental Hygiene Program.

## Departmental Requirements for Bachelor of Science in Dental Hygiene

+BS Degree Completion Program
41 Credit hours are needed for completion of the B.S. degree in Dental Hygiene

This number may vary for students from other programs
+Students pursuing the degree completion for the Bachelor of Science degree in Dental Hygiene must successfully complete 79 credit hours during the freshman and sophomore years. See courses listed in under the." Departmental Requirements.

In addition, core courses and general education courses required for completion are:

## COURSE

CREDIT HOURS
DHYG 3010 3
HIST 2010
MATH 11103
ENGL 1020
DHYG 4120
PSYC 2180
PSYC 2180
ENGL 2010
HIST 20203
Humanities/Fine Arts 3
EDCI 3870
HLSC 4900
HLSC 4500
HPSS Activity
Total Hours Required for BS: 120

## ACCREDITATION

The Dental Hygiene program is accredited by the Commission on Dental Accreditation (and has been granted the accreditation status of "approval without reporting requirements"). The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

## COURSE DESCRIPTIONS

DHYG 1010 Dental Hygiene Lecture (3). An introduction to basic concepts, methods, materials, and techniques of dental hygiene care. (Formerly DH 101).

DHYG 1014 Pre-Clinical Dental Hygiene (2). Clinical simulation of dental hygiene using mannequin heads and student partners. Taken concurrently with DHYG 1010. (Formerly DH 101C).
DHYG 1020 Dental Hygiene Lecture (2). A continuation of DHYG 1010 lecture, including dental hygiene care for patients with special needs and first aid procedures. (Formerly DH 102) Prerequisites: CHEM 1010, 1011, and satisfactory completion of all prescribed first semester curriculum.

DHYG 1024 Clinical Dental Hygiene (2). Supervised application of the practice of dental hygiene on patients within the clinical setting. Taken concurrently with DHYG 1020. (Formerly DH 102C) Prerequisite: Satisfactory completion of prescribed first semester curriculum. (SL)

DHYG 1030 Radiology (2). Lecture, group, and individually supervised practice covering $x$-ray production, radiation hygiene, exposing, developing, mounting, reading and interpretation of intra-oral radiographs. (Formerly DH 103) Taken concurrently with DHYG 1024. Prerequisite: Satisfactory completion of prescribed first semester curriculum.

DHYG 1040 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. (Formerly DH 104) Taken as designated in the first year curriculum. Prerequisite: Satisfactory completion of first semester curriculum.

DHYG 1050 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. (Formerly DH 105) Prerequisite: Satisfactory completion of the prescribed first two semesters of studies.

DHYG 1100 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. (Formerly DH 110) Taken concurrently with prescribed courses of the first semester, first year curriculum.

DHYG 1110 Tooth Morphology (2). A study of the nomenclature, form and structure of the permanent and deciduous dentition and their supporting and related structures. (Formerly DH 111) Taken concurrently with other prescribed courses of the first semester, first year curriculum.
DHYG 1134 Clinical Dental Hygiene (1). This course is designed to be a continuation of freshman clinical experiences and provides a bridge to the sophomore year. (Formerly DH 113C). Prerequisite: Satisfactory completion of prescribed first two semesters of study.

DHYG 1140 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. (Formerly DH 114) Prerequisite: Satisfactory completion of prescribed first semester curriculum.

DHYG 2010 Dental Hygiene Lecture (2). This course Includes several modules; ethics, jurisprudence, and special patients. (Formerly DH 201) Prerequisite: Satisfactory completion of the prescribed first year of study.
DHYG 2014 Clinical Dental Hygiene (3). Supervised competency-based application of the practice of clinical dental hygiene. (Formerly DH 201C) Prerequisite: Satisfactory completion of the prescribed first two semesters of studies. DHYG 2010 and 2100 must be taken concurrently. (SL)
DHYG 2020 Dental Hygiene Lecture (2). This course discusses methods of pain control which includes administration and monitoring of nitrous oxide analgesic and administration of regional anesthesia. (Formerly DH 202) Prerequisites: Satisfactory completion of first semester sophomore courses. DHYG 2024 must be taken concurrently.
DHYG 2024 Clinical Dental Hygiene (3). A progressive continuation of competency based supervised applications of clinical dental hygiene and expanded periodontics (Formerly DH 202C and 205C) Prerequisite: DHYG 1050, 2050, and satisfactory completion of first semester sophomore courses. DHYG 2020 must be taken concurrently.

DHYG 2050 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. (Formerly DH 205) Prerequisites: DHYG 1050 and satisfactory completion of the prescribed first year of study.
DHYG 2100 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. (Formerly DH 210) Prerequisite: Satisfactory completion of prescribed first year of study.

DHYG 2110 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. (Formerly DH 211) Prerequisite: Completion of the prescribed first year curriculum.(SL)
DHYG 2150 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. (Formerly DH 215) Prerequisite: Satisfactory completion of first semester sophomore courses.

DHYG 3010 Curriculum Concepts in Dental Hygiene and Allied Health Education (3). A course designed to explore theories of learning, teaching strategies, and evaluation techniques as applied to dental hygiene and allied health education. (Formerly DH 301) Prerequisite: EDCI 3870.

DHYG 4020 Dental Hygiene Externship (3). One hour of seminar and four hours externship. An application of dental hygiene techniques to various setting, e.g., hospitals, health centers and DHYG 4020 Clinics. Experiences will be individualized and designed to meet student proposed career goals. (Formerly DH 402).
DHYG 4120 Teaching Practicum (3). One hour lecture and 4 hours of practicum. A teaching practicum designed to provide practical experience in the clinical and classroom settings for baccalaureate students. (Formerly DH 412) Prerequisite: DHYG 3010.

# Department of Health Administration and Health Sciences 

# Rosemary Theriot, Ed.D., MSPH, Head Avon Williams Campus, 4th Floor 615-963-2151 

## Health Care Administration and Planning

Faculty: T. Foxx, A. Samuels

General Statement: The Health Care Administration and Planning (HCAP) program is designed to prepare individuals for leadership roles in the health care field. The curriculum includes instruction in health management, business, decision making, and health planning. An emphasis is placed on those management and decision-making techniques which lead to effectiveness and efficiency in a supervisory position.

The BS degree in Health Care Administration and Planning is awarded after satisfactory completion of a minimum of 120 semester hours including one summer field placement at the end of the junior year and the completion of 30 semester hours of coursework in the major. Graduates are prepared to assume entry level management positions in various health care settings or to continue their education in a variety of disciplines in masters' degree programs.

## ADMISSION REQUIREMENTS

Students who wish to pursue the HCAP major must first be accepted for admission to Tennessee State University. Applications for admission to the Program are accepted from students who have completed the first year prerequisites (including transfers). The HCAP Admissions Committee will consider applications from candidates who present the following qualifications:

Acceptance to Tennessee State University.
Completion of first year HCAP curriculum with a grade point average of 2.5 (on a 4.0 scale) Consideration will be given to relevant work experience when considering applicants who fall below this requirement.

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).

An interview by the Admissions Committee or an out-of-town agency designated by the Committee.

Acceptable scores on the Rising Junior Exam.

## RETENTION POLICY

The Health Care Administration and Planning program retention policy requires the following:

Students must maintain a minimum cumulative grade point average of 2.0.

Students must earn a C or better in all major courses, supporting Science, Business, 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.

Students who earn a grade less than C in HCAP courses for more than one semester will be dismissed from the program.

Students who have been dismissed from the HCAP program may apply for readmission. Students who request readmission should present evidence to the Admissions Committee of substantial change in circumstances warranting reconsideration.

## Criminal Background Check

A criminal background check may be a requirement at some affiliated clinical sites for training. Based on the results of the check, an affiliated clinical site may determine to not allow your presence at their facility. This could result in your inability to successfully complete the requirements of this program. In addition, a criminal background may preclude licensure or employment

## Departmental Requirements for the Bachelor of Science Degree in Health Care Administration \& Planning

Major Core Courses: (42 credit hours) HCAP 2010, 2100, 3100, 3200, 3310, 3900, 4000, 4010, 4200, 4500, 4700, 4800, 4900; HCAP Elective

## Suggested Four-Year Plan:

## Bachelor of Science Degree in Health Care Administration and Planning

## FRESHMAN YEAR

## Fall Semester

HLSC 1000
HIMA 1010
BIOL 2210/2211
ENGL 1010
HIST 2010
MATH 1110
HPER Activity

## Spring Semester

Humanities/
Fine Arts
BIOL 2220/2221
ENGL 1020
HIST 2020
COMM 2200

## SOPHOMORE YEAR

Spring Semester
Fall Semester
ECON 2010
ENGL Literature
HCAP 2010
POLI 2010
SOCI 2010

## ECON 2020

BISI 2150
HCAP 2100
HIMA 1040
Humanities/Fine Arts

## JUNIOR YEAR

## Fall Semester <br> ACCT 2010 <br> HCAP 3100 <br> HCAP 3200 <br> HCAP 4200 <br> MGMT 3010

Spring Semester
ACCT 2020
HCAP 3900
HCAP 4500
HCAP 4800

Summer Session
HCAP 4000
6
(Field Placement Practicum)

## SENIOR YEAR

Fall Semester
Spring Semester
HCAP 3310
HCAP 4700
Elective*
SOCI 3000
MGMT 4030
HCAP 4900
SOCI 2300
MGMT 4040
HCAP 4010
*Recommended Electives (choose one)
HCAP 3800 Introduction to Public Health
HLSC 4300 Introduction to Epidemiology
HLSC 3020 Critical Health Issues
HLSC 3040 Maternal and Child Health
HLSC 4020 Environmental and Sanitary Health
HLSC 4500 Contemporary Issues in Clinical Geriatric Care
MGMT 4050 Organization Behavior
MGMT 3020 Operations Management
SOWK 4700 Social Gerontology

## ACCREDITATION

The Health Care Administration and Planning Program is certified by the Association of University Programs in Health Administration (AUPHA)

## COURSE DESCRIPTIONS

## Health Care Administration \& Planning (HCAP)

HCAP 2010 Introduction to Health Care Organization (3). Provides an overview of the American Health System with an emphasis on acquainting students with various aspects of the entire health care field, including terminology, facilities, placements, and people. The subject areas include a 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. (Formerly HCA 201) Prerequisites: HLSC 1000; HIMA 1010.

HCAP 2100 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. (Formerly HCA 210) Prerequisites: HLSC 1000; HIMA 1010; HCAP 2010.

HCAP 3100 Health Care Economics (3). The economics of the health care industry will be reviewed with an emphasis on the supply and demand for healthcare services. Critical issues that will be examined include: the evolution of the healthcare industry in the United States, economic mechanisms of the industry, methods of payment, cost effectiveness, cost/benefit analysis, national health insurance plans, financial incentives for
physician reimbursements, and governmental subsidization and control. The economics of the present health care system will also be analyzed in relation to poor and minority groups. The United States healthcare system will be discussed from the evaluation of the World Health Organization. (Formerly HCA 310) Prerequisites: HLSC 1000; HCAP 2010, 2100; ECON 2010.

HCAP 3200 Introduction to Facilities Law (3). This course provides an introduction to the specifics of health related legislation and programs which includes the 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 of patient rights by the health care system will be examined. The topics also include malpractice suits and legislation, HIPAA compliance, e-health, collection of bills, labor laws, and informed consent medical and surgical procedures. (Formerly HCA 320) Prerequisites: HCAP 2010, 2100.

HCAP 3310 Sociology of Health, Illness, and Disease (3). This course will examine social and behavioral implications of illness and disease as it relates to diverse populations from prenatal care to palliative care. Topics will include utilization of health services as it relates to gender, age, religion, socioeconomic status, race, and ethnicity; health behavior and belief; and barriers to communication between the health provider and patient. (Formerly HCA 330) Prerequisites: HCAP 2010; SOCI 2010.

HCAP 3900 Communication and Technical Writing (3). This course will examine techniques in developing written documents commonly prepared by the health administrator. Students will be exposed to technical writing skills required in preparing documents such as letters, memos, emails, reports, proposals, and resumes. Oral presentation skills will also be emphasized. Also, attention will be given to the development of writing skills and the special communication needs of individual students. (Formerly HCA 390) Prerequisites: ENGL 1010, 1020; COMM 2200.

HCAP 4000 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 newly acquired normative and cognitive skills in an actual working situation. The areas from which students may choose are hospitals, state and federal government agencies, long-term care facilities, intermediate care facilities, group practices, insurance companies, the pharmaceutical industry, medical programs, and 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 a minimum of 21 credit hours of HCAP major courses, and get their advisor's approval and the approval of the department head. Students will not be permitted to enroll in any coursework while enrolled in the internship. Students who would like their work experience in health care considered as a substitute for the internship must submit their request in the first semester of their junior year to the department head for approval. (Formerly HCA 400).
HCAP 4010 Field Placement Capstone Course (1). The capstone course is designed to help students understand the role of health care managers by incorporating the principles and theories in the classroom with their practical experiences in the internship. Current issues and trends in health administration will be addressed through directed readings, case analysis, fieldtrips, and guest speakers. Prerequisites: HCAP 4000 and/or permission of instructor.
HCAP 4200 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 the health care systems approach to decision making, the establishment of management principles to complex and normative organizations; the understanding of demographic changes in the workforce and patient populations will be discussed. Also, the different levels of administrative management techniques will be discussed in this course. (Formerly HCA 420) Prerequisites: HCAP 2010, 2100; ECON 2010; ACCT 2010; BISI 2150. [Service Learning Course]
HCAP 4500 Health Care Finance (3). The purpose of this course is to provide a solid foundation in health care finance and facilitate the student's understanding of financial management techniques. Upon the completion of this course, students will have a basic understanding of: cost inflation; selecting and tracking stocks; 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; different forms of physician reimbursements; access to capital and debt financing; evaluation of financing alternatives;
health planning and cost control. (Formerly HCA 450) Prerequisites: ACCT 2110, 2120; ECON 2010, 2020; HCAP 2010, 3100.

HCAP 4700 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 is related to accessibility and availability of health and the aspects of administration in long-term care facilities. (Formerly HCA 470) Prerequisites: HCAP 2010; HIMA 1010, 1040.

HCAP 4800 Principles of Managed Care Organizations (3). This course provides an overview of managed care and its past and current impact on the U.S. health care system. Topics include the impact of managed care on the role and relationships of primary care doctors, specialists, and hospitals; the origins of health maintenance organizations and other managed care organizations; and consumer patient protection laws. This course also explores public policy, regulatory, and financial managed care issues. (Formerly HCA 480) Prerequisites: HLSC 1000; ECON 2010; HCAP 2010.

HCAP 4900 Health Care Research (3). An introduction to research design will be provided with an emphasis on the application of statistical and research techniques to problems of concern to the health care system. Students will be required to carry out a research problem to completion. (Formerly HCA 490) Prerequisites: Senior standing; SOCI 3000 or PSYC 2180.

## Health Care Administration and Planning Elective

HCAP 3800 Introduction to Public Health (3). This course is designed to help students develop an understanding and appreciation for the factors that affect health status and the personal and professional factors that contribute to personal and community health. Students will review existing and emerging theoretical perspectives relative to the interconnections between socioeconomic status (age, race/ethnicity, level of education, income) and current health care indicators. The course will allow students to evaluate future changes that may impact the provision of public health services and the practical application of principles for health care organizations. An overview of personal and public health issues will be covered including minority health concerns, the role of culture in influencing the adaptation of health attitudes, practices and behaviors, health objectives for the year 2010, and career opportunities in public health. (Formerly HCA 380) Prerequisite: Permission of the instructor.

## Health Sciences

## Bachelor of Science Degree Program

Faculty: R. Briggs, B. Chakravorty, M. Kanu

The Department of Health Administration and Health Sciences offers the Bachelor of Science degree in Health Sciences. Students may obtain the BS in Health Sciences by completing a total of 120 credit hours. The BS in Health Sciences will provide: (1) the knowledge base and skills development for those seeking entry and intermediate-level professional and service positions in health care agencies, organizations, and institutions in public, private, and non-profit sectors; (2) a degree completion program for asso-ciate-degree credentialed healthcare practitioners pursuing career advancement or career change; and (3) a pre-professional program for students preparing to enter programs for which the master's degree is the licensing credential. Students may choose concentrations in Physical Sciences, Public Health, Therapeutic Studies and a General track.

## ADMISSION REQUIREMENTS

Students who wish to pursue the Health Sciences major must first be accepted for admission to Tennessee State University. Applications for admission to the Program are accepted from students who have completed all general education prerequisites (including transfers). The Health Sciences Admission Committee will consider applications of candidates who present the following qualifications:

## RETENTION POLICY

 age of 2.0.Acceptance to Tennessee State University.
Completion of first year Health Sciences curriculum with a grade point average of 2.5 (on a 4.0 scale).

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.

Acceptable scores on the Rising Junior Exam.

The Health Sciences program retention policy requires the following:
Students must maintain a minimum cumulative grade point aver-

Students must earn a C or better in all major courses, supporting Science, Business, 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.

Students who earn a grade less than C in Health Sciences courses for more than one semester will be dismissed from

Students who have been dismissed from the Health Sciences program may apply for readmission. Students who request readmission should present evidence to the Admissions Committee of substantial change in circumstances warranting

Suggested four-year plans for the BS in Health Sciences is as

## Bachelor of Science in Health Sciences (General Concentration)

## FRESHMAN YEAR

Spring Semester
1 CHEM 1110/1111
4/0 BIOL 2220/2221
ENGL 1020
SOCI 2010 HPER Activity

Fall Semester
HCAP 3310
HPSS 3030
HLSC 4040
HLSC Elective
Guided Elective

## SENIOR YEAR

| Spring Semester |  |  |
| :--- | :--- | ---: |
| 3 | HCAP 4900 |  |
| 3 | HPSS 4090 | 3 |
| 3 | HLSC Elective | 3 |
| 3 | Guided Elective | 3 |
| $\frac{3}{15}$ |  | - |

## Bachelor of Science in Health Sciences (Physical Sciences Concentration)

FRESHMAN YEAR

Fall Semester<br>HLSC 1000<br>ENGL 1010<br>CHEM 1000/1001<br>COMM 2200<br>BIOL 1110/1111<br>Computer Literacy

Spring Sem
Spring Semester
PSYC 2010

## SOPHOMORE YEAR

## Fall Semester

ENGL Literature
PHIL 1030
HCAP 2010
HIST 2010
BIOL 2210/2211

## Fall Semester

PHYS 2010/2011
HCAP 3800
HLSC 3000
HLSC 3100
HLSC 4300

3/1
$1-1$
3
-
-

## Fall Semester

PSYC 2180
PSYC 3360
HLSC 3050
HCAP 3310

Spring Semester
SOCI 2010
3
Humanities/
Fine Arts
HIST 20203
4/0 BIOL 2220/2221
HIMA 1040
16

## JUNIOR YEAR

## Spring Semester

3/1 PHYS 2020/2021
HCAP 3100 3/1
HPSS 31403
HLSC Elective

## SENIOR YEAR

## Spring Semester

the program. reconsideration. follows:

## Fall Semester

HLSC 1000
BIOL 2210/2211
ENGL 1010
MATH 1110 HPER Activity Computer Literacy

## SOPHOMORE YEAR

Fall Semester
HIST 2010
PSYC 2010
ENGL Literature
HCAP 2010
Humanities/
Fine Arts
HIMA 1040

Fall Semester
HCAP 3800
PSYC 3360
HLSC 3100
HLSC 3110
HLSC 3200

Spring Semester
HIST 2020

Humanities/

> Fine Arts

## JUNIOR YEAR

| Spring Semester |  |  |
| :--- | :--- | ---: |
| 3 | HLSC 4500 |  |
| 3 | HCAP 3100 | 3 |
| 3 | HLSC 4300 | 3 |
| 3 | HLSC Elective | 3 |
| $\frac{3}{\mathbf{3} 5}$ | PSYC 3510 | $\frac{3}{15}$ |

## Bachelor of Science in Health Sciences

 (Public Health Concentration)
## FRESHMAN YEAR

## Fall Semester

Spring Semester

HLSC 1000
ENGL 1010
HIST 2010
Natural Sciences
Humanities/
Fine Arts

## PSYC 2010

ENGL 1020
HIST 2020
3
4
ciences II
Humanities/
Fine Arts
COMM 2200

## SOPHOMORE YEAR

Fall Semester
ENGL Literature
HIMA 1010
SOCI 2010
BIOL 2210/2211
MATH 1110

Spring Semester
3 Social/Behavior
Sciences
HCAP 2010
BIOL 2220/2221
PSYC 2180
Computer Literacy
14

## JUNIOR YEAR

## Fall Semester

NUFS 2110
HCAP 3800
PSYC 3360
HCAP 3100
HIMA 1040

HLSC 3020
HLSC 3050
HLSC 4040
HLSC Elective
HLSC Elective

Fall Semester

Spring Semester
HLSC 3010
HLSC $4300 \quad 3$
HLSC 3040
HLSC Elective
-
15

## SENIOR YEAR

Spring Semester
HLSC 4010
HCAP 4900
HLSC 3060
HLSC 4020
HLSC Elective

## Bachelor of Science in Health Sciences

 (Therapeutic Studies Concentration)
## FRESHMAN YEAR

## Fall Semester

HLSC 1000
ENGL 1010
MATH 1110
SOCI 2010
Natural Sciences I
HPER Activity

Spring Semester
Humanities/Fine Arts
ENGL 1020
HCAP 2010
PSYC 2010
Natural Sciences II

## HEALTH SCIENCES COURSE DESCRIPTIONS (HLSC)

HLSC 1000 Orientation to Health Sciences (1) A requirement for all entering freshman Health Sciences majors or transfer students with less than 60 transfer credits. This course presents an overview of the allied health field, the history/development of allied health professions, and the historical development of the College of Health Sciences (formerly School of Allied Health Professions) at Tennessee State University. Students will be introduced to values, ethics, and professionalism required for health care providers as well as TSU policies, procedures, and student support services relative to academic success. (Formerly AHP 100)

HLSC 2140 Physics Principles for Health Sciences (3) This course provides students with the opportunity to learn basic physics principles including those of lever systems, laws of motion, forces and force interactions, temperature, and heat. These concepts are then applied to the environment and the human body so that students may acquire a sound basis for their subsequent work in HLSC 4140, Biomechanics and Gross Anatomy. Prerequisite: MATH 1110.

HLSC 3000 Ethics and Professionalism in Health Sciences (3) This course presents current issues and information on professionalism and medical ethics for Health Sciences professionals. Specific areas that will be investigated include: what it means to be a professional, career development strategies, the role of service for the professional, ethical issues for healthcare providers, the ongoing process of developing an ethical practice, withdrawing care from the terminally ill, and other current issues in the national media. Prerequisite: Admission is open to all students formally admitted to Health Sciences Program or by permission of the instructor.

HLSC 3010 Consumer Health (3) This course provides students with the following: (1) a model for making informed consumer health related decisions; (2) current information involving informed decisions; and (3) mechanisms for continued consumer awareness and protection, i.e., sources of accurate consumer information and lists of consumer information and protection agencies. This course also examines the benefits and/or hazards associated with health related products, services and information presently available to the consumer. The methods and techniques of health fraud are analyzed. Emphasis is placed on the development of individual criteria for the potential selection and purchase of health products and services. Field trips may be required. Prerequisites: HCAP 3800 and junior standing.

HLSC 3020 Critical Issues in Health Care (3) This course examines current and future health issues within the United States. The purpose of the course is to expose students to some of the critical issues that will impact healthcare in the future. Some of these issues include the aging of the population, the supply and demand of heath care providers, the growing diversity of the U.S. population, the use of medical and information technologies in health care, and many more. Prerequisites: HCAP 3800; HLSC 3050, or permission of Instructor.

HLSC 3040 Maternal and Child Health (3) This course describes the biological and physiological basis for health care to MCH populations including pregnant women, infants, and individuals through age 21. Using an evidence-based approach to MCH care, this course examines the use of current epidemiologic and analytic literature to evaluate the effectiveness of interventions and technologies used to prevent, diagnose, and treat clinical problems of women, mothers, infants, children, and adolescents. The course addresses the role of nutrition in the prevention of chronic diseases in women and children and its influence on normal childhood growth and development. Prerequisites: Completion of Natural Sciences requirement or consent of the instructor.

HLSC 3050 Health Promotion and Disease Prevention (3) This course introduces students to the basic concepts of epidemiology, health promotion, disease prevention, and their impact on the health status of culturally diverse and vulnerable individuals, families, small groups and communities. The focus is on health problems and potential interventions throughout the life of an individual. The principles of teaching/learning and the process of critical thinking are incorporated as they apply to the health professional. Prerequisite: HCAP 3800.
HLSC 3060 International Health (3) This course examines major trends and issues related to international health including health care systems, nutrition, family planning, distribution and the nature of communicable and chronic diseases, and preventive measures in selected countries. Special

## Fall Semester

HLSC Elective
HCAP 3310 or
PHIL 3360
HLSC 3110
HCAP 3800
Guided Elective

| Spring Semester |  |
| :--- | ---: |
| HIST 2020 | 3 |
| ENGL Literature | 3 |
| HIMA 1040 | 3 |
| BIOL 2210/2211 | 4 |
| COMM 2200 | 3 |
|  | -16 |

PSYC 3300

## SENIOR YEAR

Spring Semester
HCAP 4900
HLSC Elective
HLSC Elective
HLSC 4300
emphasis is placed on problems that can be prevented through health education programs. Prerequisite: None.

HLSC 3100 Complementary and Alternative Approaches to Health Care (3) This course serves as an introduction to a variety of health care options currently available in our society. Students will explore basic concepts of pharmacology, nutritional supplements, homeopathy, psychological effects on health, oriental medicine, techniques of healing movements, healing touch, and manipulation techniques. Students will be exposed to a variety of viewpoints and encouraged to critically evaluate different theories of health and health care. Prerequisites: Completion of Natural Sciences requirement.

HLSC 3110 Health Conditions in Function and Disability (3) To function within the health care system, health providers must be able to articulate their profession's concept of health within the context of medical management of common health conditions. Students learn how to search the World Wide Web to locate instructional resources and to gather clinically related evidence to solve problems. In this process, they learn about the underlying pathophysiology, diagnostic, and treatment procedures, while collaborating with other students in completion of online and face-toface assignments. As students examine the internal and external factors that impact human health, they can learn about the care of common health conditions and roles of various practitioners. Prerequisites: Completion of Natural Sciences.

HLSC 4010 Introduction to Biostatistics (3) This course will examine the application of statistics based on three factors: (1) collecting, summarizing, presenting, analyzing, and interpreting data; (2) measuring central tendency and variation; and (3) investigating binomial and normal probability distributions, which are essential to today's health care professional. The topics include probability, confidence intervals and hypothesis testing using t-tests, chi-square, correlation, and regression. A brief introduction to ANOVA and multivariate analysis and emphasis on practical applications are discussed. Laboratory use of the personal computer in statistical problem solving is required. Prerequisite: MATH 1110.

HLSC 4020 Introduction to Environmental Health (3) This course provides an overview of the major areas of environmental health. The areas of emphasis include food protection, air, water and land pollution, hazardous waste, population concerns, and noise and radiation hazards. Prerequisite: None.
HLSC 4040 Public Health Policy (3) This course discusses the politics of health policy in terms of legislative and executive processes at the local, state and federal level; key forces involved including economic, social, ethical and political factors; and central players of importance, including special interest groups, lobbyists, the press, elected officials, legislative staff and public agencies. Prerequisite: HCAP 3800 or permission of instructor.

HLSC 4060 Principles of Geographic Information Systems for Health Organizations (3) This course provides a comprehensive overview of the concepts, functions, applications, technologies, and trends pertaining to automated geographic information systems (GIS) applicable to health sciences. Topics include GIS hardware and software considerations, data resources, and technical issues and applications in GIS. Prerequisite: None.

HLSC 4300 Introduction to 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. An emphasis will be placed on various methods used in current epidemiologic studies of chronic diseases, public health, vital statistics, environmental sanitation and communicable disease control on a local, national, and global basis. (Formerly HCA 430) Prerequisites: BIOL 2210, 2211, 2220, 2221; HCAP 2010; HIMA 1010, 1040; SOCI 3000.

HLSC 4500 Contemporary Issues in Clinical Geriatric Care (3) This course provides an assessment of geriatric issues important to health care professionals. Normal aging, disease processes associated with aging, psycho-social factors, health care service delivery, advocacy and other relevant considerations will be addressed with the goal of enhancing a practitioners' effectiveness in working with the geriatric population. Prerequisite: None.

# DEPARTMENT OF HEALTH INFORMATION MANAGEMENT 

Elizabeth Kunnu, Ed.S., RHIA, Head 314 Industrial Arts Building

Faculty: C. Fouche'
General Statement: Health Information Management (HIM) is the profession that focuses on health care data and the management of healthcare information resources. Health Information Management professionals collect, integrate, and analyze primary and secondary health care data, disseminate information, and manage information resources related to the research, planning, financing, and evaluation of health care services.

Job opportunities: Health Information Management professionals, as part of a quality patient care team, work as HIM department director, HIM system manager, data quality manager, information security/privacy officer, educator, consultant, health data analyst, quality improvement analyst, physician office manager, claims and reimbursement coordinator in a variety of health care settings. The settings include hospitals, outpatient clinics, managed-care organizations, consulting firms, accounting firms, medical group practices, hospice and home healthcare agencies, long-term care facilities, correctional facilities, pharmaceutical companies, rehabilitation facilities, behavioral healthcare organizations, healthcare research facilities, insurance companies, law firms, or state and federal healthcare agencies.

The Department of Health Information Management offers a fouryear program leading to the Bachelor of Science degree. Its goals are to prepare students as competent, confident, innovative and contributing health information professionals who can identify and use a variety of information management resources and technologies to accomplish the objectives of various health care facilities and related organizations; and to prepare students for the National Certification Examination for credentialing by the American Health Information Management Association.
The Health Information Management curriculum takes a careerladder approach and is divided into a technical phase and a professional phase. It is designed to accommodate high school graduates, transfer students, graduates from accredited community colleges who have completed prerequisite science courses, and Registered Health Information Technicians (RHITs) who wish to progress to the professional level of a Health Information Administrators. The curriculum is comprised of general education, management principles, computer technology/information systems, professional education requirements and integrated supervised professional practice.

The Bachelor of Science degree is awarded after satisfactory completion of 120 credit hours. Graduates of this program are required to demonstrate entry-level competencies for Registered Health Information Administrators (RHIAs) and are eligible to sit for the National Certification Examination administered by the American Health Information Management Association (AHIMA). The graduates are strongly encouraged to take the National Certification 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 Health Information Management Program. Option I is for freshmen and transfers. Option II is for students who have completed an associate degree in Health Information Technology. In addition to

University admission criteria, the program admission and retention requirements include:

## Entering Freshman

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.

A minimum composite test score of 19 on the ACT. (This may change according to University entrance requirements.)

First-time freshmen are required to have successfully completed any remedial or developmental courses before consideration for unconditional admission into the HIM program.

## Transfer Students

Applications will be accepted from students transferring from other colleges, universities or other departments at Tennessee State University.

Transfers, students changing their major to HIM, and continuing students are required to have successfully completed any remedial or developmental courses before consideration for unconditional admission into the program.

Applicants must have a minimum cumulative grade-point average of 2.5 on a 4.0 scale.

Students transferring from other departments within Tennessee State University are required to complete change-of-major form.

## Advanced Standing

Students who already have a degree in health related and other fields may be admitted to the program if they meet admission criteria.

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 60 semester credit hours including directed practice. These individuals are required to complete general education requirements for a BS degree, as well as management, sciences, other prerequisite courses for the program and all the 3000-4000 level courses as indicated in the curriculum.

## Additional Requirements

Submission of application to the program is due by June 30 for fall semester and December 1 for spring semester

Two letters of recommendation from persons (non-family member) who know the applicant.

A personal interview by Admission and Retention Committee or its designee.

Applicants will be informed of the final decision regarding acceptance into the program.

Responsible for transportation expenses and other costs relating to clinical experience and field trips.

Responsible for a physical examination, malpractice insurance, and criminal background check prior to professional practice rotations.

Acceptance of professional practice rotation in and out-of-state health care facilities.

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 the HIM field may provide evidence in writing from the health care facility.

Students are required to complete these courses: ENGL 1010 \& 1020 with minimum grades of a C; three hours of college mathematics, HIST 2010 and 2020 or 3410; at least eight hours of natural science; and nine hours in humanities and/or Fine Arts, including three hours of English Literature) prior to their junior year, and to take the RISING JUNIOR EXAMINATION for admission to upper HIMA courses (3000-4000 level).

## Criminal Background Check

A criminal background check may be required at some affiliated clinical sites for training. Based on the results of the check an affiliated clinical site may determine to not allow your presence at their facility. This could result in your inability to successfully complete the requirements of this program. Additionally, a criminal background may preclude licensure or employment.

## RETENTION POLICY

The Health Information Management program retention policy requires the following:

1. Students must maintain a minimum cumulative grade point average of 2.0.
2. Students must earn a " $C$ " or better in all major courses, supporting Science, Business, Health Care Administration, English, and Mathematics courses. Failure to maintain a " $C$ " in any of these courses will result in repeating the course the next semester the course is offered with approval of the advisor.
3. Students who earn a grade less than a " $C$ " in HIMA courses for more than one semester will be dismissed from the program.
4. Students who have been dismissed from the Health Information Management 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 Core Requirements:

A minimum of 69 semester hours including: ACCT 2010; HLSC 1000; BISI 2150; 3230; BIOL 2210, 2211, 2220,2221; CHEM 2500; ENGL 1010, 1020, HCAP 4500, 4900; HIST 2010,2020; MATH 1110; MGMT 3010; 4030; PHIL 1030; COMM 2200; ECON 2010; SOCI 3000; Humanities/Fine Arts Elective (3 semester hours); Social or Behavioral Sciences Elective (3 semester hours); English Literature (3 semester hours).

## Departmental Requirements Bachelor of Science Health Information Management

Major Core: A minimum of 51 hours including HIMA 1010, 1040, 2020, 2100, 2200, 2250, 2300, 2350, 2400, 2704, 3010, 3020, 3030, 3300, 4000, 4400, 4424 and 4430.

Students who have completed these courses (ACCT 2010, ECON 2010, MGMT 3010, MGMT 4030, BISI 3230) in HIM curriculum and are interested in getting a minor in general business may contact the College of Business for detailed information.

## Suggested Four-Year Plan (for students entering at freshman level) <br> BACHELOR OF SCIENCE IN HEALTH INFORMATION MANAGEMENT

## PLAN 1

FALL SEMESTER
HLSC 1000
ENGL 1010
MATH 1110
BIOL 2210/2211
BISI 2150

## FRESHMAN YEAR

## FALL SEMESTER

COMM 2200
HIST 2020
SOCI 3000
HIMA 1040
PHIL 1030

## FALL SEMESTER

MGMT 3010
HIMA 2020
HIMA 2100
HIMA 2200
HIMA 2250
CHEM 2500

SUMMER SESSION
HIMA 2704

## JUNIOR YEAR

## SOPHOMORE YEAR

## -

SPRING SEMESTER
MGMT 40303
HIMA 23003
HIMA 23503
HIMA 24003
HIMA 3030

## SENIOR YEAR

FALL SEMESTER
HIMA 3010
HIMA 3020
HIMA 3300
HIMA 4000
HIMA 4400
HCAP 4500

SPRING SEMESTER
HIMA 44246
HIMA 44303
HCAP 49003
$\square$

SPRING SEMESTER
Soc/Beh Sciences3
BISI 3230
Hum/Fine Arts 3
ENGL Literature 3
ECON 2010

## FALL SEMESTER

HIMA 3020
HIMA 3300
HIMA 4000
HIMA 4400
HCAP 4500

| MGMT 3010 | 3 |
| :--- | ---: |
| MGMT 4030 | 3 |
|  | 6 |

## SENIOR YEAR

## SPRING SEMESTER

| HIMA 4424 | 6 |
| :--- | ---: |
| HIMA 4430 | 3 |
| HCAP 4900 | 3 |
|  |  |
|  | $\overline{12}$ |

Total Hours for Degree Requirement (Option II): 64 cr . hrs.
Adjunct Instructional Staff and Clinical Affiliation Supervisors: Shonda Cannon, RHIT, Baptist Hospital, Nashville TN; R. Bowen, RHIA, Erlanger Medical Ctr., Chattanooga TN; M. Lampley, RHIA, Metropolitan General Hosp., Nashville TN; S. Horner, MBA, Hospital Corporation of America; H. Blocker-Acklin, RHIA, Select Specialty Hospital, Nashville, TN; L.Ellis, RHIT, Gateway Medical Center, Clarksville, TN; L. Bartley, RHIA, Hendersonville Medical Center, Hendersonville, TN; T. Conley, RHIT, Stonecrest Medical Center, Smyrna, TN; P. Freeman, RHIA, West Mead Place, Nashville, TN; Anitra Copeland, RHIA, Health Center at Richland Place, Nashville, TN; R.Green, RHIT, Middle TN Medical Center, Murfreesboro, TN; K. Huddleston, RHIT, Northcrest Medical Center, Springfield, TN; M. Reeves, RHIA, Vanderbilt Medical Center, Nashville, TN; K. Ashley, RHIT Southern Hills Medical Ctr., Nashville TN; B.Samuels, RHIA, Centennial Medical Ctr., Nashville TN; B.Grossheim, RHIT, Williamson Medical Ctr., Franklin TN; K. Milam, RHIA, Summit Medical Ctr., Hermitage TN; J. Busby, RHIA, Maury Regional Hosp., Columbia TN; C. Draper, Skyline Medical Ctr., Madison TN; C. Ehiemua, RHIA, Matthew Walker Comprehensive Health Ctr., Nashville TN; T. Perkins, RHIA, Meharry Medical Services Foundation, Nashville TN; K. Tillman RHIA, Veterans Affairs Medical Ctr. for Nashville and Murfreesboro TN; J. Duer, RHIA, St. Thomas Hosp., Nashville TN; J. Jones, RHIA, Sumner Regional Medical Ctr., Gallatin TN; T. Hickey, RHIA, Jackson Regional Hosp., Jackson TN; L. Howell RHIT. Bolivar General Hospital, Bolivar TN; M. Clement, RHIA, National Institutes of Health, Bethesda MD; E. Berry, RHIA, LeBonheur Children's Medical Hosp., Memphis TN.

## ACCREDITATION

The Health Information Management Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

## COURSE DESCRIPTIONS

## Health Information Management

HIMA 1010 - Introduction to Health Record Management (1). This course is designed for health related majors who have interest in learning more of health records and documentation practices in various health care delivery systems. The course focuses on the purpose and use of the health record, the role of the health information management department, and its relationship with other services within the health care facility. (Formerly HIM 101) Prerequisites: None
HIMA 1040 - 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. (Formerly HIM 104) Prerequisites: BIOL 22102211 with a grade of a C or better. Co-requisite: BIOL 2220-2221.

HIMA 2020 - Foundations of Health Information Management (3). A study of Health Information Management systems with emphasis on health care delivery systems; the health information management profession; regulatory and accrediting requirements of patient care data; health care data development, content, structure, and use; data collection, quality, access and retention of paper-based records, electronic health record, and image-based records. This course requires a laboratory component (2 lecture \& 2 lab hours/week). (Formerly HIM 202) Prerequisites: Completion of HLSC 1000, BIOL 2210, 2211, 2220, 2221, BISI 2150; HIM 1010, HIMA 1040 with a minimum grade of a C or better. Co-requisites: HIMA 2100, HIMA 2200, HIMA 2250. Student must be accepted into the HIMA program and/or with instructor's approval.
HIMA 2100 - Fundamentals of Medical Science (3). A study of the nature, cause, treatment and management of pathologic, microbiologic and clinical disease processes. (Formerly HIM 210) Prerequisites: BIOL 2210, 2211, 2220, 2221, HIMA 1010, and HIMA 1040.

HIMA 2200 - Legal and Ethical Aspects of Health Information (2). The American legal and court systems, terminology and procedures; principles of liability; patient record requirements with emphasis on regulations for content, retention, and destruction; access to health information; confidentiality and informed consent; the judicial process of health information; HIPAA privacy standards, fraud and abuse; specialized patient records; risk management and quality assessment of patient records as it relates to internal and external reporting; HIV information; computerized patient records with emphasis on accreditation, licensure; liability issues and ethical standards for health information practices. (Formerly HIM 220) Prerequisite HIMA 1010. Co-requisites: HIMA 2020, 2100, 2250.
HIMA 2250 - Health Statistics and Analysis (2). A study of the basic knowledge and skills in health statistics and focus on the applications of the techniques for analyzing and calculating hospital, health, and vital statistics for administrative use and health care planning utilizing manual and computerized health information systems for the purpose of graphic display and required reporting. (Formerly HIM 225) Prerequisite: MATH 1110. Co-requisites: HIMA 2020, HIMA 2100, and HIMA 2200.

HIMA 2300 - Alternative Health Record Systems and Registries (3). A course designed to expose students to health record management in a non-traditional healthcare setting with focus on health record content and structure; regulatory and accreditation requirements; data access, collection, and retention. The overall purpose, organization, development, and maintenance of various registries and indexes will be discussed. Field trips will be required as part of the classroom experience. This course requires a laboratory component (2 lecture \& 2 lab hours/week). (Formerly HIM 230) Prerequisites: HIMA 1010, HIMA 2020, HIMA 2100, HIMA 2200, HIMA 2250, Co-requisites: HIMA 2350, 2400.

HIMA 2350 - Coding and Classification of Health Data (3). An introduction to ICD-9-CM classification and coding of symptoms, diseases, operations, and procedures with emphasis on the UHDDS; basic coding steps and guidelines; coding guidelines for operations and procedures; supplementary classifications; signs \& symptoms; and ethical coding standards. This course requires a laboratory component (2 lecture \& 2 lab hours/week). (Formerly HIM 235) Prerequisites: BIOL 2210, 2211, 2220, 2221, HIMA 1010, 1040, 2100. Co-requisites: HIMA 2300, 2400.

HIMA 2400 - CPT/HCPCS Coding Classification Systems (3). A basic introduction to CPT and HCPCS coding classification systems for ambulatory care with focus on their structure, application, and purpose as well as related reimbursement issues. Activities for this course will include coding, classification, and indexing of procedures in CPT/HCPCS for the purpose of standardization, retrieval, and analysis. This course requires a laboratory component (2 lecture \& 2 lab hours/week). (Formerly HIM 240) Prerequisites: BIOL 2210, 2211, 2220, 2221, HIMA 1010, 1040, 2100. Corequisites: HIMA 2300, 2350.

HIMA 2704 - Directed Professional Practice and Seminar in Health Information Services (3). Students are assigned to health information centers during the summer for practice experience under the direct supervision of either a Registered Health Information Administrator (RHIA) or Registered Health Information Technician (RHIT). Students will gain experience through observation and demonstration in applying theory and knowledge of technical aspects of Health Information Management previously and currently studied. A seminar will be held to discuss the experiences acquired during directed professional practice. Focus will be on presentation of the outcome of assigned projects and activities. Capstone examination will be administered to evaluate student competency-based knowledge at the technical level in Health Information Management. (Formerly HIM 270) Prerequisites: Completion of HLSC 1000, BIOL 2210,

2211, 2220, 2221, HIMA 1010, 1040, 2020, 2100, 2200, 2250, 2300, 2350, 2400. All HLSC, BIOL, and HIM courses completed with a minimum grade of a C or better. An overall minimum grade point average C or better.
HIMA 3010 - Healthcare Billing (2). A study of health insurance process and responsible health care payers. The course includes discussion on professional and uniform billing; the claim process; managed care including accounts receivable, collections and terminology; electronic data interchange (EDI); commercial plans; federal and state plans; workers compensation and disability compensation programs. (Formerly HIM 301) Prerequisites: HIMA 2020, 2300, 2350, 2400.

HIMA 3020 - Current Issues in Health Information Management (3). A study of trends, updates and practical problems related to Health Information Management. Other topics include perspective on health care and health information management. (Formerly HIM 302) Prerequisites: Junior standing in HIMA curriculum or with permission of the instructor.

HIMA 3030 - Quality Assessment and Performance Improvement (3). The study of quality management in healthcare with emphasis on quality improvement, utilization review, risk management, clinical outcomes management, case management/critical path concepts, and accreditation and licensure standards. Student will acquire knowledge, skills, and tools needed to coordinate quality and resource management activities in healthcare facilities. This course requires a laboratory component. (Formerly HIM 303) Prerequisites: HIMA 1010, 2020, 2100, 2200, 2250, 2300, 2350, 2400, 2704.

HIMA 3300 - Advanced Coding and Classification of Health Data (2). An advanced study of ICD-9-CM coding and reimbursement systems with special emphasis on the complexities of coding related to principle diagnosis selection and sequencing, problem diagnoses and procedures by body system, DRG assignment and PPS regulations for DRG validation, QIOs requirements, case-mix concepts, and methods to ensure coding accuracy in automated and manual coding systems. This course requires a laboratory component ( 1 lecture \& 2 lab hours/week). (Formerly HIM 330) Prerequisites: BIOL 2210, 2211, 2220, 2221, CHEM 2500; HIMA 2100, 2350, 2400. This course is designed for HIM majors only or with permission of the HIM Instructor HIM 330) Prerequisites: BIOL 2210, 2211, 2220, 2221, CHEM 2500; HIMA 2100, 2350, 2400. This course is designed for HIM majors only or with permission of the HIM Instructor.

HIMA 4000 - Computerized Health Information Systems (3). Development of managerial skills in Systems Analysis and Computer Applications in Health Information Management. (Formerly HIM 400) Prerequisites: MATH 1110; BISI 2150, 3230; HIMA 2020.

HIMA 4400 - Organization and Management of Health Information Services (3). This course is designed to provide students with managerial skills in the areas of planning, organizing, directing, and controlling. Emphasis will be on the processes of budgeting, staffing, directing, decisionmaking, development and evaluation of policies and procedures, project management and establishing standards for the quality of health information services. Special assignments include in-service education. (Formerly HIM 440) Prerequisites: MGMT courses, senior standing in the HIMA curriculum with a minimum grade point average of 2.0 or better.

HIM 4424 - Management Professional Practice in Health Information Services (6). Students are assigned to a Health Information center for supervised Management Professional Practice experience to observe employee relations and interact with healthcare professionals and consumers while under the direct supervision of a qualified Registered Health Information Administrator (RHIA). Students are provided the opportunity to apply the skills and knowledge previously gained through classroom, directed professional practice, and laboratory experiences in carrying out management and administrative activities. A pre-practice seminar will be held to discuss practice expectations and explore potential methods of identifying and solving problems that may be encountered during management practice. (Formerly HIM 442) Prerequisites: Completion of all HIMA, MGMT, BIOL, HLSC, and HCAP courses with a minimum grade of a C (2.0) or better, have an overall minimum grade point average of 2.0 or better, and senior standing in the HIMA curriculum.

HIMA 4430 - Management Professional Practice Seminar (3). Student will participate in seminar to discuss the experiences acquired during Management Professional Practice. Focus will be on presentation of the outcome of assigned projects and activities; employment opportunities and preparation for job search; and discussion on graduate and professional studies. Students will participate in preparation for the registration examination. Focus will be on test-taking skills and assimilation of AHIMA required competencies. Capstone examination will be administered to
evaluate student competency-based knowledge of Health Information Management. (Formerly HIM 443) Prerequisites: Completion of all HIMA, MGMT, BIOL, HLSC and HCAP courses with a minimum grade of a C or better, have an overall minimum grade point average of 2.0 or better, and senior standing in the HIM curriculum. Co-requisite: HIMA 4424.

# Department of Medical Technology 

Theola N. Copeland, M.S., M.T., (ASCP), Interim Education Coordinator 216 Industrial Arts 615-963-5001

Faculty: W. Burrell, K. McEnerney
General Statement: The Medical Technology Program is jointly sponsored by Tennessee State University and Meharry Medical College and consists of three years of pre-clinical course work and twelve months of clinical training. A graduate of the program is eligible to sit for a certification examination and apply for a license from the Tennessee Department of Health and Environment.

The medical technologist performs a broad range of chemical, microscopic, and bacteriological procedures to assist the physician in identifying and treating diseases and to determine abnormal conditions including the presence of bacteria, viruses, and other microorganisms. Medical technologists also type and crossmatch blood samples for transfusions.

Description of Clinical Laboratory Practicum Sites: Nashville Metropolitan General Hospital, Alvin C. York VA Medical Center, Tennessee Valley Healthcare Systems-Nashville Campus, St. Thomas Hospital, State of Tennessee Department of Health Laboratory Services, and PathGroup Labs serve as clinical practicum sites for medical technology students.

Nashville Metropolitan General Hospital has 150 beds, a fully automated laboratory and serves patients in the departments of surgery, internal medicine, obstetrics and gynecology, and pediatrics. The hospital is located on Meharry Medical College's campus. Alvin C. York VA Medical Center is located in Murfreesboro, Tennessee, approximately 40 miles from Nashville. The VA Medical Center has 570 beds and a fully automated laboratory. Tennessee Valley Healthcare Systems, Nashville campus is located near downtown Nashville, is a large comprehensive healthcare facility serving the veterans of the US Armed services. It is a comprehensive medical center with a fully automated clinical laboratory. St. Thomas Hospital located on Harding Road in West Nashville is a 541 bed facility with a fully automated laboratory. PathGroup Labs is a reference laboratory serving the region of Middle Tennessee, West Tennessee, Kentucky and Alabama performing routine, and molecular diagnostic testing. The State of Tennessee Department of Health Laboratory Services located on Ben Allen Road in Nashville Tennessee serves as the Reference Laboratory for all hospitals and physicians offices in the state.

## MISSION STATEMENT

The mission of the Medical Technology Program at Tennessee State University is to graduate professionals in the Clinical Laboratory Sciences who not only possess the requisite knowledge, skills, and attitudes necessary tor entry-level practice, but also exhibit high regard for ethical and legal practice and a commitment to professional development.

## 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:

High school graduation with a minimum cumulative grade point average of 2.5 on a 4.0 scale.

GED test scores of 50 or above for the five subjects tested.
A minimum composite test score of 19 on the ACT (Enhanced).

## TRANSFER STUDENTS

Applicants will be accepted as transfer students from other colleges or universities, or from other departments of Tennessee State University. Applicants with fewer than 30 semester credit hours in courses required by this program must have an overall college grade point average of 2.5 on a 4.0 scale and meet the admission requirements for first year freshman applicants. Applicants with 30 or more semester credit hours will be admitted if they have maintained an overall college grade point average of 2.5 or above on a 4.0 scale.

Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from accredited medical technology programs will be accepted where evidence is provided that the content of courses previously taken is essentially the same as the content of courses in this curriculum. No credit will be accepted for major field courses in which the student has 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 in Medical Technology must have college credit in the following courses: Microbiology (Bacteriology), Immunology, Organic Chemistry or Biochemistry prior to being admitted to the professional component on a competitive basis.
4. Individuals who possess an Associate of Science Degree in Medical Laboratory Technology and who wish to receive a Bachelor of Science degree in Medical Technology must have completed a minimum of a sixteen (16) week clinical practicum in a NAACLS (National Accrediting Agency for Clinical Laboratory Sciences) approved Medical Laboratory Technology program and must have a minimum of three years of experience as a generalist. These individuals must complete general education requirements for the Bachelor of Science degree, as well as science prerequisites for the Medical Technology program and at least nine (9) hours of 4000 level Medical Technology courses (Cooperative Lecture). Students must have completed
a minimum of 48 credit hours at the 3000 to 4000 levels. Electives may be taken in Biology, Chemistry, or other related fields.
5. Individuals who wish to receive a Certificate in Medical Technology must complete all science prerequisite courses in the clinical/ professional component of the Medical Technology program.

## All Applicants

Prior to enrolling in the clinical component of the program, the student must have a minimum GPA of 2.5 on a 4.0 scale, and be evaluated by the Medical Technology Department. Departmental requirements include:

Prerequisites: Chemistry - 20 semester hours to include Organic Chemistry; Biological Sciences - 16 semester hours to include Bacteriology, and Immunology (as a part of a course or as a separate course); and Mathematics - minimum of one college level course.

Submission of two letters of recommendation from science professors, and one letter of recommendation from major advisor.

Completion of the interview process which includes a review of the Technical Standards of the Medical Technology Program.

At the time of the admissions interview, applicants are given a copy of the Technical Standards of the Medical Technology Program.

Technical standards represent the essential non-academic requirements of the program that students must master to participate successfully in the program and become employable. The following is a list of the technical abilities and skills applicants for admission must possess:

## Manual Dexterity: Ability to use hand(s) or terminal devices

 with coordination.Fine Motor: Ability to manipulate small objects with fingertips or adaptive devices.

Mobility: Ability to maneuver in the laboratory and around instruments and in patient-care settings.

Vision: Ability to distinguish red, yellow, and blue colors; distinguish clear from cloudy, and see through a microscope.

Hearing: Ability to adapt with assistive devices (i.e., phone receivers, hearing aid, etc.)

Speech: Ability to verbally communicate understandably in English.

Writing: Ability to communicate effectively in the written form in English.

Reading: Ability to read, understand, and follow directions printed in English.

## RETENTION POLICY

Any student whose overall grade point average falls below 2.0 or who earns lower than a " $C$ " in two or more courses will be dismissed from the program. No credit will be accepted for major field courses in which the student has earned a grade lower than " $C$."

## Departmental Requirements for <br> Bachelor of Science <br> Medical Technology

General Education Core Courses: (41 credit hours) ENGL 1010, 1020; SPCH 2200; ENGL Literature; Humanities/Fine Arts (6 hours); Social/Behavioral Sciences (6 hours); HIST 2010, 2020; BIOL 1030, 1031, 1040, 1041; MATH 1110.
Major Core Courses: ( 36 credit hours) MEDT 3010, 4010, 4014; 4110, 4210, 4310, 4510, 4600, 4710, 4100, 4200, 4300, 4114, 4214, 4514.
Science Course Requirements: (36 credit hours) BIOL 2210, 2221, 2120, 2121, 2400, 2401, 4410, 4411; CHEM 1010, 1011, 1020, 1021, 2110, 2111, 2120, 2121, 3410, 3411.
Additional Course Requirements: (7 credit hours) HLSC 1000; MT 3010; HIMA 1040.

## Bachelor of Science Degree in Medical Technology <br> FRESHMAN YEAR

Fall Semester
Spring Semester
HLSC 1000
MATH 1110

| 1 | Humanities/ |  |
| ---: | :--- | ---: |
| 3 | Fine Arts |  |
| $4 / 0$ | BIOL 1040/1041 | 3 |
| $4 / 0$ | CHEM 1020/1021 | $4 / 0$ |
| $\frac{3}{15}$ | ENGL 1020 | $4 / 0$ |
| -14 |  |  |

## SOPHOMORE YEAR

Fall Semester
CHEM 2110/2111
HIST 2010
Social/Behavioral
Sciences Elective
SPCH 2220
ENGL Literature

Spring Semester
BIOL 1030/1031
CHEM 1010/1011
4/0 BIOL 1040/1041
ENGL 1010

4/0 CHEM 2120/2121
CHEM 2110/2111
HIST 2020
3 Social/Behavioral 3
Sciences Elective
Humanities/
Fine Arts
16
13

## JUNIOR YEAR

## Fall Semester

BIOL 2210/2211
BIOL 2400/2401
CHEM 3410/3411
Spring Semester
4/0 BIOL 2120/2121 4/0
4/0 MEDT $3010 \quad 3$
4/0 BIOL 4410/4411 4/0
HIMA $1040 \quad \underline{3}$
12
14

## SENIOR YEAR

## Fall Semester

MEDT 4010
*Spring Semester
MEDT 4110
MEDT $4100 \quad 4$
MEDT 4210
MEDT 4200
MEDT 4014
MEDT 4114
MEDT 4214
MEDT 4514
$\frac{1}{15}$
*(13)
*Students will enroll in 2 of the rotation courses in spring semester for a total of 13 credit hours ( 6 weeks per rotation).

## +Summer Session

| MEDT 4300 | 2 |
| :--- | ---: |
| MEDT 4014 | 3 |
| MEDT 4114 | 3 |
| MEDT 4214 | 3 |
| MEDT 4514 | $\underline{3}$ |
|  | $+(8)$ |

+Students will enroll in 2 rotations not previously taken for a total of 8 credit hours (6 weeks per rotation).
Total Credit Hours Required for BS in Medical Technology - 120

## ACCREDITATION

The Medical Technology Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 606313415, and (773) 714-8880.

## COURSE DESCRIPTIONS

## Medical Technology (MEDT)

MEDT 3010 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. (Formerly MT 301) Prerequisites: BIOL 2210, 2211; MATH 1110; CHEM 1010, 1011, 1020, 1021.

MEDT 4010 Chemistry (3). The lecture course and student laboratory will offer the student a brief review of basic chemistry before going into the principles of clinical chemistry. Chemistry problems, automation, and quality control are also included. The lectures include a review of anatomy and physiology of body systems, contents of body fluids and special techniques. (Formerly MT 401) Prerequisite: Admission to clinical (professional) component.

MEDT 4110 Microbiology (3). The lecture course and student laboratory will 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, and Kirby-Bauer sensitivity. An introduction to mycology is also presented. (Formerly MT 411) Prerequisite: Admission to clinical (professional) component.

MEDT 4210 Immunohematology (3). The lecture and student laboratory will introduce the student to the basic principles of blood banking with emphasis on importance of accuracy in laboratory testing. Procedures performed include blood grouping, compatibility testing, and identification of antibodies. Preparation of components and component therapy, adverse transfusion reactions and hemolytic disease of the newborn are presented in the course. (Formerly MT 421) Prerequisite: Admission to clinical (professional) component.

MEDT 4310 Immunology/Serology (1). Formal lectures in this course will include immune response, antigen-antibody reactions, hyper- sensitivity, autoimmune disease and serologic procedures. (Formerly MT 431) Prerequisite: Admission to clinical (professional) component.

MEDT 4510 Hematology/Coagulation (3). The lecture and student laboratory introduce the student to basic hematology procedures; manual and automated CBC (complete blood count), which include red blood cells, white blood cells, platelets, hematocrit, hemoglobin, RBC indices, and WBC differential. Red and white cell kinetics, anemias, and leukemias are presented. Theory and mechanisms of hemostasis, clotting and fibrinolysis are explored. The use of the microscope and blood collection are explored. (Formerly MT 451) Prerequisite: Admission to clinical (professional) component.
MEDT 4600 Parasitology (1). This course 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. (Formerly MT460) Prerequisite: Admission to clinical (professional) component.

MEDT 4710 Clinical Microscopy (1). The lecture and student laboratory will offer the student general information regarding (1) the anatomy and physiology of the urinary system and (2) the role of urine, and body fluids in the diagnosis of diseases by laboratory methods. (Formerly MT 471) Prerequisite: Admission to clinical (professional) component.

MEDT 4014 Clinical Rotation I: Chemistry (3). A rotation in this area of the laboratory will require the student to rotate a minimum time of six weeks. Chemistry consists of routine chemistry, special chemistry and toxicology. Students will work predominately with many different types of automated clinical analyzers in service in clinical laboratories. Students will perform manual procedures as required by the clinical site. A student's experience in clinical chemistry will be dependent on the instrumentation available at a site, however all students will acquire experience with automated analyzers and performance of daily maintenance. Students will gain
experience in organizing workloads and performing and monitoring quality control in the chemistry laboratory. Prerequisite: Passing all courses in the didactic program.

MEDT 4114 Clinical Rotation II: Microbiology (3). A rotation in this area of the laboratory will require the student to rotate a minimum time of six weeks. Microbiology will encompass General Bacteriology (aerobic and anaerobic organisms), Mycology, Mycobacteriology, and Parasitology. Students will be responsible for learning the operation of a microbiology laboratory. Students will perform initial inoculations of clinical samples, perform gram stains, learn how to interpret growth characteristics of many different organisms, examine blood cultures, perform ova and parasite studies and perform any test determined by the bench instructor or supervisor. A student's experience in microbiology will be dependent on the instrumentation available at a site, however all students will acquire experience with automated analyzers and performance of daily maintenance. Students will gain experience in organizing workloads and performing and monitoring quality control in the microbiology laboratory. Prerequisite: Passing all courses in the didactic program.

MEDT 4514 Clinical Rotation III: Hematology/Coagulation/Urinalysis (3). A rotation in this area of the laboratory will require the student to rotate a minimum time of 4 weeks in Hematology, 1 week in Coagulation and 1 week in Urinalysis. In Hematology students will work predominately with automated cell counters and perform some manual tests. Coagulation consists of performing tests for clotting disorders and bleeding disorders. In Urinalysis students will perform physical, chemical and microscopic examinations on urine. A student's experience in Hematology/Coagulation/Urinalysis will be dependent on the instrumentation available at a site, however all students will acquire experience with automated analyzers and performance of daily maintenance. Students will gain experience in organizing workloads and performing and monitoring quality control in the Hematology/Coagulation/Urinalysis laboratory. Prerequisite: Passing all courses in the didactic program.

MEDT 4214 Clinical Rotation IV: Immunohematology and Immunology/Serology (3). A rotation in this area of the laboratory will require the student to rotate a minimum time of 4 weeks in Immunohematology, and two weeks in Immunology/Serology. Immunohematology procedures will include ABO and Rh blood grouping, antibody screening and identification, compatibility testing, preparation of components, maintaining inventory of blood products, and quality control of reagents. Immunology/Serology procedures include RPRs, RA, ANAs, Infectious Mono testing, Hepatitis, and HIV testing. Student's experience in Immunology/Serology will be dependent on the instrumentation available at a site, however all students will acquire experience with automated analyzers and performance of daily maintenance. Students will gain experience in organizing workloads and performing and monitoring quality control in the Immunohematology and Immunology/Serology laboratories. Prerequisite: Passing all courses in the didactic program.
MEDT 4100 MT Seminar I (4). Through lecture presentations by MT faculty, MMC Basic Science Faculty, guest lecturers and the use of other teaching strategies, such as case presentations, small group discussions, Web-enhanced lectures and field trips, the students will review selected topics in Body fluids, Clinical Chemistry, and Microbiology. Prerequisites: MEDT 4010, 4110, 4710.

MEDT 4200 MT Seminar II (3). Through lecture presentations by MT faculty, MMC Basic Science Faculty, guest lecturers and the use of other teaching strategies, such as case presentations, small group discussions, Web-enhanced lectures and field trips, the students will review selected topics in Immunohematology, Hematology, Coagulation, and Immunology. Prerequisites: MEDT 4210, 4510, 4310.

MEDT 4300 MT Seminar III (2). This course is designed to provide the student an introduction to the principles of education and laboratory management. The students will prepare a lesson plan and teach a unit of instruction in the MT Program. Guest lecturers will provide some of the experiences for students. Prerequisites: MEDT 4100, 4200.

# Department of Speech Pathology and Audiology 

Harold R. Mitchell, Ph.D., Head<br>Suite A, Avon Williams Campus 615-963-7081

Faculty: P. Burch-Sims, J. Cantrell, M. Fitzgerald, I. Johnson, V. Matlock, T. Smith

General Statement: The Department of Speech Pathology and Audiology in the College of Health Sciences offers courses of study leading to the Bachelor of Science degree in Speech Pathology and Audiology. Certification to practice speech-language pathology requires a master's degree as entry level. Effective January 1, 2005, ASHA certification will require completion of a course in physical science. Majors are advised to consult with their advisors regarding suitable electives to meet this requirement. Certification in Audiology will require a doctoral degree by January 1, 2007. 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 oncampus Speech and Language Clinic 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 of clinical experiences and involvement in interdisciplinary team approaches to case management.

In addition to its academic commitment, the Department of Speech Pathology and Audiology provides diagnostic and therapeutic clinical services in the areas of speech, hearing, and language pathologies for the surrounding University community.

## ADMISSION/RETENTION REQUIREMENTS

The Department offers a curriculum leading to a BS degree, which is considered a preprofessional degree. Undergraduate admission and retention requirements follow:

## Admission to Tennessee State University.

All students must be screened for oral and written professional skills. Students who need improvement in oral and/or written communication will be required to enroll in the proper therapeutic program or remediation activity. Students are also reminded that they are expected to show steady growth in development of vocabulary, reading, speaking, and writing skills.

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

Major Core Courses: (48 credit hours) SPTH 2500, 2600, 2800, 3050, 3100, 3300, 3500, 3720, 3730, 3740, 4500, 4600, 4700, 4730, 4750, 4800 and the clinical courses 3514 and 4514.

Suggested Four-Year Plan:
Bachelor of Science Degree in Speech Pathology and Audiology

FRESHMAN YEAR

| Fall Semester |  |  |  |
| :--- | ---: | :--- | ---: |
| HLSC 1000 |  |  |  |
| ENGGL 1010 Semester |  |  |  |
| BIOL 2210, 2211 | 3 | MATH 1110 | 3 |
| HIST 2010 | ENGL 1020 | 3 |  |
| SPTH 2800 | $3 / 0$ | BIOL 2220, 2221 | $4 / 0$ |
| COMM 2200 | 3 | HIST 2020 | 3 |
|  | 3 | Humanities/Fine Arts | 3 |
|  | $\underline{3}$ |  | - |
|  | 17 |  | 16 |

## SOPHOMORE YEAR



## ACCREDITATION

The Department of Speech Pathology and Audiology's graduate program has maintained accreditation by the Council of Academic Accreditation of the American Speech-Language-Hearing Association since 1985.

## COURSE DESCRIPTIONS

## Speech Pathology and Audiology (SPTH)

SPTH 2500 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. (Formerly SPTH 250).

SPTH 2600 Phonetics (3). An introductory course in phonetics, the science of speech sounds, which includes 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. (Formerly SPTH 260).

SPTH 2700 Phonetics Laboratory (1). A remedial, self paced course for the individual who needs to improve his or her skills in phonetic transcription. This course follows SPTH 2600 (only if a grade of C was earned in SPTH 2600). (Formerly SPTH 270).

SPTH 2800 Introduction to Human Communication (3). An introduction to the professions of speech pathology and audiology and the nature, types, and characteristics of speech, hearing, language and literacy problems. An overview of various methods used in identifying and managing communication disorders or language differences including approaches for individuals whose native language is not English is provided. (Formerly SPTH 3100).

SPTH 3050 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. Attention is given to phonetic and phonemic awareness of various dialects of English. (Formerly SPTH 305).

SPTH 3300 Clinical Methods in Articulation Disorders (3). This course is designed for student comprehension of the physical production of speech, normal developmental learning patterns of speech, various models of speech processes and theoretical bases for therapeutic procedures. Principles of diagnosis and remediation of articulation problems are emphasized. (Formerly SPTH 330) Prerequisite: SPTH 2600.
SPTH 3500 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, the neurophysiological bases for language development, and the psychosocial aspects of the development of speech and language. (Formerly SPTH 350).
SPTH 3514 Observation of Clinical Practicum (1). Students will be required to complete 25 hours of clinical observation (assessment or therapy) in Speech Pathology and Audiology, as required by ASHA. Completion of these hours will be a prerequisite to any further practica experiences. (Formerly SPTH 351) Prerequisites: SPTH 2600, 3100, 3500.

SPTH 3720 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. (Formerly SPTH 372) Prerequisites: SPTH 2600, 3100, 3300, 3500.

SPTH 3730 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. (Formerly SPTH 373) Prerequisite: SPTH 3740.

SPTH 3740 Introduction to Audiology (3). An introduction to the anatomical and physiological aspects of hearing. The course will explore the etiology and types of hearing loss. It also focuses on theory and practice of techniques of auditory assessment with emphasis on pure tone, speech and impedance audiometry, and the interpretation of test results. (Formerly SPTH 374) Prerequisite: SPTH 2500.

SPTH 3760 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. (Formerly SPTH 376) Prerequisite: The student is encouraged to have completed or be concurrently enrolled in SPTH 3050.

SPTH 3770 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 disabled 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. (Formerly SPTH 377).
SPTH 4500 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. (Formerly SPTH 450).

SPTH 4514 Clinical Practicum (1). An introduction to client management in the field of speech-language pathology and audiology, which will include planning, evaluation, treatment and follow-up. Student will receive a clinical assignment with direct supervision. This course may be repeated 1-3 times. It will be expected that students demonstrate increasing levels of competence. (Formerly SPTH 451) Prerequisite: SPTH 3514.

SPTH 4600 Organic Speech Disorders (3). This course examines the nature of communication disorders in which structural alterations can be demonstrated or inferred as important contributing factors. Congenital and acquired disorders and conditions that can affect human communication are focused upon, along with principles of management strategies with children and adults. Prerequisite: Must have completed all major courses required of junior year. (Formerly SPTH 460).

SPTH 4700 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. (Formerly SPTH 470) Prerequisite: Must have completed all major courses required of junior year.
SPTH 4730 Special Problems in Speech Pathology or Audiology (3). A seminar study of some selected problems in speech pathology/audiology. (Formerly SPTH 473) Prerequisite: Must have completed all major courses required of junior year.

SPTH 4740 Basic Audiology (3). A study of common otological diseases, syndromes and the effectiveness of the treatment ear-related conditions. Audiological tests and other medical data will be analyzed for differential diagnosis of auditory disorders. (Formerly SPTH 474) Prerequisite: SPTH 3740.

SPTH 4750 Medical Speech-Language Pathology and Audiology (3). Introduction to the practice of speech-language pathology and audiology in a medical setting. The course will survey anatomical and physiology systems as they relate to communication and deglutition disorders throughout the life span. Medical terminology and the reading and writing of medical reports will also be introduced.

SPTH 4760 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. (Formerly SPTH 476) Prerequisite: SPTH 3500.

SPTH 4770 Alternatives for the Severely Speech, Hearing and Language Impaired (3). A course designed to provide an overview of recent developments of nonvocal communication systems and other telesensory electronic devices and instruments-as well as an understanding of the potentials that may be realized through use of special techniques, communication aids, and other technological developments for the physically disabled child or adult. (Formerly SPTH 477) Prerequisite: Permission of department head required.

SPTH 4780 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, cognitive disabilities, physically disabled, and other special populations which may need a nonvocal communication system. (Formerly SPTH 478) Prerequisite: Permission of department head required.

SPTH 4790 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. (Formerly SPTH 479) Prerequisite: Permission of department head required.

SPTH 4800 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 presentation/ lectures accompanied by guided competence activities with the appropriate

# College of Public Service and Urban Affairs 

Bill Purcell, Dean<br>615-963-7325

The purpose of the College of Public Service and Urban Affairs is to promote professional engagement in public work. The new College offers degree programs and other educational opportunities that develop community-oriented professionals and citizens; advances the state of knowledge in public problem solving; and engages communities in the problem solving process. The College of Public Service and Urban Affairs houses interdisciplinary programs that integrate coursework across the University while developing innovative, quick-to-respond mechanisms for the rapid sharing of ideas and degree opportunities.

The Institute of Government (IOG) is the core of the new College. In addition to offering the masters and doctorate degrees in Public Administration, IOG also offers certificate programs in Health Administration and Planning and Non-Profit Management. The College is also the home of the Executive Master of Public Administration (EMPA) and the RODP masters degree in Professional Studies.

A new undergraduate degree program in Urban Studies (BSUS) with three areas of concentration will be offered beginning in the Fall Semester of 2007.
method built into individual courses that combines community service with academic instruction as it focuses on critical, reflective thinking and civic responsibility. Programs involve students in organized community service that addresses local needs, while developing their academic skills, sense of civic responsibility, and commitment to the community. Students are involved in community work that contributes significantly to: 1) positive change in individuals, organizations, neighborhoods, and/or larger systems in a community; and 2) students' academic understanding, civic development, personal or career growth, and/or understanding of larger social issues.

## BSUS Curriculum

URBS Core

URBS 1000
URBS 2010
URBS 3670
URBS 4900
URBS 4905
SOCI 3000 or PSYC 2180 Statistics
Orientation to Urban Studies $\quad 1$
Introduction to Urban Studies3
History of Urban America ..... 3 ..... 3
Senior Project
Senior Project
Internship ..... 6

SOCI 4510 or POLI 3100 Research Methods
SOCI 4510 or POLI 3100 Research Methods ..... 3

## Service Learning

Service learning is a core element of the curriculum in the undergraduate program of the CPSUA. Service-learning is a teaching

# THE SCHOOL OF AGRICULTURE AND CONSUMER SCIENCES 

Constantine L. Fenderson, Ph.D., Interim Dean 108 Lawson Hall


#### Abstract

General Statement: The School of Agriculture and Consumer Sciences seeks to carry out the University's mandates in instruction, research and public service. Instruction is achieved through two academic departments: Agricultural Sciences and Family and Consumer Sciences. The academic departments maintain a collaborative relationship with the research and extension programs. Research is state and federally funded and is administered through the Institute of Agricultural and Environmental Research (IAGER), which focuses on research that will enhance the quality of life for all people. Public service is carried out by the Cooperative Extension Program, which is federally funded and 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.


Departmental Requirements: The requirements for each program are listed under the respective Department.

## AGRICULTURAL SCIENCES

Constantine L. Fenderson, Ph.D., Head 108 Lawson Hall

Faculty: S. Comer, D. Duseja, R. Harrison, W. Hayslett, M. Lema, S. Singh

General Statement: The undergraduate program in the Department of Agricultural Sciences is designed to provide both liberal and specialized education for students who seek to advance their education in the field of agriculture. The program in liberal education involves the social sciences, the natural sciences, the humanities and the arts, and is designed to prepare students to understand and function in a very complex environment. The specialized program is designed to provide understanding and training in the complex scientific field of agriculture. The overall program offers curricula leading to the Bachelor of Science (B.S.) degree in Agricultural Sciences, with concentrations in Agribusiness, Agricultural Education, Animal Science/Pre-Veterinary Medicine, Food Technology, Geospatial Information Systems, and Plant and Soil Science. No grade less than "C" in any major course (Agricultural Sciences course) will be accepted as credit toward meeting departmental requirements.

## UPPER DIVISION POLICY

Students majoring in Agricultural Sciences must gain upper division status before enrolling in any upper division courses (3000 \& 4000 levels). Upper division courses taken prior to being given upper division status may not be accepted towards the B.S. degree. Students may be admitted to the upper division after completing at least 60 degree-level lower division credits (as set out in the curriculum) with a minimum cumulative grade point average (GPA) of 2.0 and completion of the Rising Junior Examination. It is the responsibility of the student to submit a formal petition to the department. Such petition will be reviewed by a departmental committee to ensure that all criteria have been met.

## Departmental Requirements <br> For Bachelor of Science <br> Agricultural Sciences

MAJOR CORE: A minimum of 26 semester hours including, AGSC I200, 1410, 2010, 2200, 2410, 2510, 4500, 4710, 4720 and SAHE 1000.

General Education: 41 semester hours including: Communications - 9 hours - ENGL 1010,1020, COMM 2200; Humanities and/or Fine Arts - 9 hours - ENGL 2010-2024 (3 hours), ART 1010, MUSC 1020, or PHIL 2010; Social \& Behavioral Sciences 6 hours - SOCI 2010, PSYC 2010 or ECON 2010 \& 2020; History - 6 hours - HIST 2010, 2020 or 2030; Natural Sciences -8 hours - CHEM 1110/1111 \& 1120/1121 or BIOL 1010/1011 and Mathematics - 3 hours - MATH 1110, 1120 or 1410.

## Suggested Four Year Plan:

## Bachelor of Science Degree in Agricultural Sciences <br> Concentration in Agribusiness

## FRESHMAN YEAR

## FALL SEMESTER

SAHE 1000
ENGL 1010
MATH 1110
SPRING SEMESTER

| ENGL 1020 | 3 |
| :--- | ---: |
| MATH 1120 | 3 |
| AGSC 1200 | 3 |
| AGSC 2020 | 3 |
| AGSC 2410 | 3 |
|  | - |
|  | 15 |

MATH 1110
AGSC 1410
AGSC 2010
ECON 2010

ENGL 2010-2018
BIOL 1010, 1011
HIST 2010
ACCT 2010
AGSC 2040

Humanities Elective
BIOL 1020, 1021
HIST 2020
COMM 2200
AGSC 2200

AGSC 3000
AGSC 3040
AGSC 3120
HUMANITIES ELECTIVE
AGSC 2510

## JUNIOR YEAR

| AGSC 3010 | 3 |
| :--- | ---: |
| AGSC 3030 | 3 |
| AGSC 3130 | 3 |
| MGMT 3010 | 3 |
| ECON 2020 | $\underline{3}$ |
|  | 15 |

## SENIOR YEAR

AGSC 4010
AGSC 4020
AGSC 4500

## AGSC 4040

AGSC 4710
AGSC 4080
ELECTIVES
ELECTIVES

## Suggested Four Year Plan:

## Bachelor of Science Degree in Agricultural Sciences Concentration in Agricultural Education

## FRESHMAN YEAR

FALL SEMESTER
SAHE 1000
ENGL 1010
AGSC 1410
AGSC 2010
AGSC 2040
MATH 1110

ENGL 2010-2028
CHEM I110, 1111
HIST 2010
COMM 2200
EDCI 2010

SPRING SEMESTER
ENGL 10203
AGSC 1200
AGSC 2020
PSYC 2010
AGSC 2410

## SOPHOMORE YEAR

| 3 | HUMANITIES ELECTIVE | 3 |
| ---: | :--- | ---: |
| 4 | CHEM 1120, 1121 | 4 |
| 3 | PSYC 2420 | 3 |
| 3 | AGSC 2200 | 3 |
| $\frac{3}{16}$ | HIST 2020 | $\frac{3}{17}$ |

## JUNIOR YEAR

| HUMANITIES ELECTIVE | 3 | AGSC 3060 |
| :---: | :---: | :---: |
| AGSC 3080 |  | AGSC 3090 |
| AGSC 3070 | 3 | EDSC 3330 |
| EDRD 4910 |  | PSYC 3120 |
| SOCIAL/BEHAVIORAL ELECT |  | AGSC 2510 |
|  | 15 |  |
| SEN |  | YEAR |
| EDAD 4000 | 3 | AGSC 4050 |
| GUIDED ELECTIVES | 3 | EDCI 4705 |
| AGSC 4500 | 3 |  |
| AGSC 4710 |  |  |
| GUIDED ELECTIVES | 3 |  |
|  | 13 |  |

GUIDED ELECTIVES FOR CERTIFICATION:
GUIDED ELECTIVES FOR NON-
AGRICULTURAL EDUCATION
CERTIFICATION:
Agricultural (30 semester hours)
Education (30 semester hours)
EDAD 4000 AGSC 3000, 3010, 3020, 3030, 3040,
EDCI $3110 \quad 3120,3130,3200,3210,3220,3230$,
EDRD $4910 \quad 3240,3320,3330,3340,3350,3400$,
EDSE 3330 3420, 3430, 3440, 3450, 4010, 4040,
PSYC 3120 4070, 4080, 4090, 4230, 4250, 4260,
EDCU 420A 4310, 4430
AGSC 4500

## Suggested Four Year Plan:

Bachelor of Science Degree in Agricultural Sciences
Concentration in Animal Science/Pre-Veterinary Medicine

## FRESHMAN YEAR

FALL SEMESTER
SAHE 1000
ENGL 1010
HIST 2010
MATH 1110
AGSC 1410
AGSC 2010

SPRING SEMESTER
1
3
3
3
3
3
-16

| ENGL 1020 | 3 |
| :--- | :--- |
| HIST 2020 | 3 |
| MATH 1120 or 1410 | 3 |
| AGSC 1200 | 3 |
| AGSC 2410 | 3 |
|  | -15 |


|  | SOPHOMORE YEAR |  |  |
| :--- | ---: | :--- | ---: |
| ENGL 2010-2028 | 3 | HUMANITIES ELECTIVE | 3 |
| CHEM 1110, 1111 | 4 | CHEM 1120, 1121 | 4 |
| COMM 2200 | 3 | AGSC 2200 | 4 |
| AGSC 2040 | 3 | SOCIAL/BEHAVIORAL ELECT | 3 |
| SOCIAL/BEHAVIORAL ELECT | 3 | AGSC 2510 | $\frac{4}{18}$ |

## JUNIOR YEAR

## FRESHMAN YEAR

FALL SEMESTER

## SPRING SEMESTER

SAHE 1000
ENGL 1010
HIST 1010
MATH 1110
AGSC 1410
AGSC 2010
ENGL 1020
HIST 2020
AGSC 1200
AGSC 2200
AGSC 2410

CHEM 2110 \& 2111
AGSC 3400
AGSC 3410
AGSC 3420
HUMANITIES ELECTIVE

CHEM 3410, 3411
AGSC 4410
AGSC 4500
AGSC 4710
GUIDED ELECTIVES

| AGSC 3440 | 3 |
| :--- | :---: |
| AGSC 3450 | 3 |
| GUIDED ELECTIVES | 3 |
| GUIDED ELECTIVES | 3 |
|  | $\overline{12}$ |

## SENIOR YEAR

GUIDED ELECTIVES: Animal Science ( 22 semester hours)
AGSC 3000, 3010, 3240, 3250, 3430, 3500, 3510, 3520, 3550, 4080, 4420, 4450
GUIDED ELECTIVES: Pre-Veterinary Medicine ( 22 semester hours)
BIOL 1110, 1111, 1120, 1121, 2110, and 2111
CHEM 2120, 2121, 3420 and CHEM 3421
PHYS 2010, 2011, 2020, 2021
MATH 1830

## Suggested Four Year Plan:

> Bachelor of Science Degree in Agricultural Sciences
> Concentration in Food Technology

AGSC 4720
GUIDED ELECTIVES
GUIDED ELECTIVES $\frac{3}{13}$

$$
3
$$

## SOPHOMORE YEAR

ENGL 2010-2028
CHEM 1110,1111
AGSC 2040
HUMANITIES ELECTIVE
COMM 2200

| HUMANITIES ELECTIVE | 3 |
| :--- | ---: |
| CHEM 1120, 1121 | 4 |
| SOCI 2010 | 3 |
| BIOL 1110, 1111 | 4 |
| BEHAVIORAL ELECTIVE | $\frac{3}{17}$ |

## JUNIOR YEAR

CHEM 2110, 2111
AGSC 3500
BIOL 2400, 2401
AGSC 2510
CHEM 2120, 2121
AGSC 3510
AGSC 3520
AGSC 3530
$\overline{15}$

## SENIOR YEAR

AGSC 3540
AGSC 4430
AGSC 4710
CHEM 3410,3411
AGSC 4450

## Suggested Four Year Plan:

## Bachelor of Science Degree in Agricultural Sciences <br> Concentration in Applied Geospatial Information Systems

## FRESHMAN YEAR

FALL SEMESTER
SAHE 1000
ENGL 1010
MATH 1110
AGSC 1410
AGSC 2010
GEOG 1010

FALL SEMESTER
ENGL 2010
CHEM 1010 or
BIOL 1010
CHEM 1011 or
BIOL 1011
COMM 2200
HIST 2010
AGSC 3200

Soc./Behav. Elect.
AGSC 3350
AGSC 3550
AGSC 3560
AGSC 3570

FALL SEMESTER
AGSC 4230
AGSC 4500
AGSC 4510
AGSC 4520
AGSC 4710

SPRING SEMESTER
ENGL 1020
AGSC 1200
AGSC 2200
AGSC 2510
GEOG 1020

## SOPHOMORE YEAR

3

SPRING SEMESTER
HIST 2020
Humanities Elect.
3 CHEM 1020 or
BIOL 1020
CHEM 1021 or BIOL 1021
Humanities Elect.
Soc/Behav. Elect.

JUNIOR YEAR
SPRING SEMESTER
AGSC 3580
AGSC 3590
AGSC 3600
AGSC 3340

## SENIOR YEAR

SPRING SEMESTER

| AGSC 4530 | 3 |
| :--- | :--- |
| AGSC 4540 | 3 |
| AGSC 4550 | 3 |
| AGSC 4560 | 3 |
| AGSC 4720 | $\frac{1}{13}$ |

## Suggested Four Year Plan

## Bachelor of Science Degree in Agricultural Sciences <br> Concentration in Plant and Soil Science

Plant and Soil Science
FRESHMAN YEAR
FALL SEMESTER
SAHE 1000
ENGL 1010
HIST 2010
MATH 1110
AGSC 1410
AGSC 2010

SPRING SEMESTER
ENGL 1020

## AGSC 2510

AGSC 1200
3
AGSC 2410
COMM 2200

## SOPHOMORE YEAR

ENGL 2010-2018
CHEM 1110/BIOL 1110
SOCIAL/BEHAVIORAL ELECT
CHEM 1111/BIOL 1111
CHEM 1120/BIOL 1120
3
HUMANITIES ELECTIVE
SOCIAL/BEHAVIORAL ELECT
CHEM 1121/BIOL 1121
AGSC 2200 HUMANITIES ELECTIVE

ELECTIVE HIST 2020
13

## JUNIOR YEAR

CHEM 2110
AGSC 3200
AGSC 3210
AGSC 3240
AGSC 3340

| AGSC 3250 | 3 |
| :--- | ---: |
| AGSC 3300 | 3 |
| AGSC 3350 | 3 |
| GUIDED ELECTIVES | 3 |
| GUIDED ELECTIVES | $\frac{3}{15}$ |

## SENIOR YEAR

AGSC 3260
AGSC 4230
AGSC 4310
AGSC 3320
AGSC 4220
AGSC 4500
AGSC 4710
GUIDED ELECTIVES
GUIDED ELECTIVES3

13
GUIDED ELECTIVES*: Plant and Soil Science
AGSC 3200, 3210, 3220**, 3230**, 3240, 3250, 3260, 3300, 3320, 3330, 3340, 3350, 3550, 3560, 3570, 3580, 3590, 3600, 4210**, 4220**, 4230**, 4240, 4250, 4260, 4310, 4510, 4520, 4530, 4540, 4550, 4560, CHEM 3410 and 3411

## GUIDED ELECTIVES*

15 Credit Hours
*Guided electives will be chosen from listed courses based upon the student's career interests.
**Students interested in soil science as a career will choose a minimum of 15 credit hours from the soils category of listed courses.

## COURSE DESCRIPTIONS

SAHE 1000 (Formerly 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 1200 (Formerly AGSC 120) 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 1410 (Formerly AGSC 141) 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 per week.
AGSC 2010-2020 (Formerly AGSC 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 2040 (Formerly AGSC 204) 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 2200 (Formerly AGSC 220) 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 per week.

AGSC 2410 (Formerly AGSC 241) 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 per week.

AGSC 2510 Fundamentals of Geospatial Information Systems (4). Introduction to GIS principles and technology. This course presents a foundation for creating, editing, querying, and presenting geospatial data. Laboratory exercises use a hands-on approach to learning GIS software and hardware. This course is multidisciplinary and is designed for students in any field of study. Prerequisite: AGSC 2040 or equivalent.
AGSC 3000 (Formerly AGSC 300) 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 2010 or instructor's approval.
AGSC 3010 (Formerly AGSC 301) 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 2010 or instructor's approval.
AGSC 3020 (Formerly AGSC 302) 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 2010 or instructor's approval.

AGSC 3030 (Formerly AGSC 303) 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 2010 or instructor's approval.

AGSC 3040 (Formerly AGSC 304) Agricultural Policy (3). A study of problems in agriculture, governmental policies, and programs assigned to deal with them.

AGSC 3050 (Formerly AGSC 305) Adult Education in Agriculture/ Agribusiness 3010 (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 3060 (Formerly AGSC 306) 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 3070 (Formerly AGSC 307) 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 3080 (Formerly AGSC 308) 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 3090 (Formerly AGSC 309) 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 and two laboratory periods per week.

AGSC 3120 (Formerly AGSC 312) 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 3130 (Formerly AGSC 313) 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 3120.

AGSC 3200 (Formerly AGSC 320) 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 per week. Prerequisite: AGSC 1200.

AGSC 3210 (Formerly AGSC 321) 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 per week. Prerequisite: AGSC 1200.

AGSC 3220 (Formerly 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 2200, CHEM 1110 and 1120.

AGSC 3230 (Formerly AGSC 323) 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 per week. Prerequisites: AGSC 1200 and 2200.

AGSC 3240 (Formerly AGSC 324) 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 per week. Prerequisite: AGSC 1200.

AGSC 3250 (Formerly AGSC 325) 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 per week. Prerequisite: AGSC 1200.

AGSC 3260 (Formerly AGSC 326) Plant Physiology (3). Application of plant physiological principles to seed plants with special emphasis on photosynthesis, respiration, absorption, transpiration and nutrition. Prerequisites: AGSC 1200 and 3200.

AGSC 3300 (Formerly AGSC 330) 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 per week. Prerequisite: AGSC 1200.

AGSC 3320 (Formerly AGSC 332) 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 per week. Prerequisite: AGSC 1200.

AGSC 3330 (Formerly AGSC 333) Floriculture (3). A course dealing with the principles underlying culture of greenhouse crops, commercial cut flowers, and house plants. Prerequisite: AGSC 1200.
AGSC 3340 (Formerly AGSC 334) 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 per week. Prerequisite: AGSC 1200.

AGSC 3350 (Formerly AGSC 335) 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 1200.

AGSC 3400 (Formerly AGSC 340) 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 per week. Prerequisites: AGSC 1200 and 1410.

AGSC 3410 (Formerly AGSC 341) 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 per week. Prerequisite: AGSC 1410.
AGSC 3420 (Formerly AGSC 342) 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 per week. Prerequisite: AGSC 1410.

AGSC 3430 (Formerly AGSC 343) 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 per week. Prerequisite: AGSC 1410.

AGSC 3440 (Formerly AGSC 344) 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 per week. Prerequisite: AGSC 1410.

AGSC 3450 (Formerly AGSC 345) 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 per week. Prerequisite: AGSC 1410.
AGSC 3500 (Formerly AGSC 350) 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 per week.

AGSC 3510 (Formerly AGSC 351) 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 per week. Prerequisites: CHEM 1110 and 1120.

AGSC 3520 (Formerly AGSC 352) 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 per week. Prerequisite: AGSC 2410.

AGSC 3530 (Formerly AGSC 353) 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 foodborne organisms, and microbiology of fermented food products. Two lectures and two laboratory periods per week. Prerequisite: BIOL 2400.
AGSC 3540 (Formerly AGSC 354) Laboratory Instrumentation (3). Introduction to procedures and techniques commonly utilized in analysis of biological materials. Includes spectroscopy, gas and column chromatography, electrophoresis, etc.

AGSC 3550 Global Positioning Systems (3). Introduction to the principles, technology, and effective use of Global Positioning Systems. This course will present a foundation of navigation and positioning principles, hands-on experience with GPS instrumentation, collection and processing of data, and integration with geospatial information systems. This course is multidisciplinary and is designed for students in any field of study. Prerequisite: AGSC 2040 or equivalent.

AGSC 3560 Spatial Analysis (3). Fundamental concepts and analytical procedures used to abstract and simplify complex systems using geospatial information systems. This course emphasizes geometric, coincidence, and adjacency models as applied to surface analysis, linear analysis, raster analysis, topological overlay, and contiguity analysis. Spatial modeling will be used to describe, simulate, predict, and resolve real-world problems, issues, and systems. Prerequisite: AGSC 2510.

AGSC 3570 Geospatial Metadata (3). Data make up the most expensive component of a GIS and account for billions of dollars of expenditures annually. Metadata is data about data. It documents critical information about the data and the procedures used to create and maintain the data. This course explains metadata and its components, and teaches GIS users the how and why of documenting their data. Methodology and standards will
follow the Federal Geographic Data Committee's Content Standard for Digital Geospatial Metadata and will conform to the National Spatial Data Infrastructure. Prerequisite: AGSC 2510.
AGSC 3580 Introduction to GIS for Natural Resources (3). An introductory geospatial information systems course on spatial data development and analysis in the science and management of natural resources. Topics covered include basic data structure, data sources, data collection, data quality, geodesy and map projections, spatial and tabular data analysis, digital elevation data and terrain analyses, cartographic modeling, and cartographic layout. Laboratory exercises provide practical experiences that complement theory covered in lectures. Prerequisite: AGSC 2510.

AGSC 3590 Spatial Landscape Design and Analysis (3). Modern landscape design is a blend of science, art, and technology. Utilizing the spatial tools provided by a GIS brings a new level of visualization and analysis of the landscape environment to the designer. This course introduces students to the principles and concepts of landscape design and analysis, and introduces the tools (CAD, GPS, and GIS) needed for successful landscape development and management. Prerequisites: AGSC 2510, AGSC 3550.

AGSC 3600 Image Analysis and Remote Sensing (3). Satellite imagery and aerial photography are vital tools for GIS developers, analysts, and users. Students will first be introduced to the concepts and methods of imaging, remote sensing, and image analysis. The main focus of this course will then be the anipulation and analysis of images within a GIS. Prerequisites: AGSC 2510.

AGSC 4010 (Formerly AGSC 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 2010 or instructor's approval.
AGSC 4020 (Formerly AGSC 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, ben-efit-cost analysis, and interregional competition. Prerequisite: AGSC 2010 or instructor's approval.
AGSC 4030 (Formerly AGSC 403) 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 2010 or instructor's approval.

AGSC 4040 (Formerly AGSC 404) World Agriculture (3). A study of the role of agriculture in economic development. Survey of lesser developed countries with special emphasis on Africa.
AGSC 4070 (Formerly AGSC 407) Agricultural Special Problems (3). Supervised laboratory or field work research of a problem in agricultural sciences. Written project outline and reports of results required.

AGSC 4080 (Formerly AGSC 408) 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 4090 (Formerly AGSC 409) 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 4100 (Formerly AGSC 410) 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 2010 or instructor's approval.
AGSC 4210 (Formerly AGSC 421) Soil Physics (3). A study of the physical properties of soils. Physical makeup, color, structure, thermal relation-
ships, aeration, water movement phenomenon in soils and its relationship to soil nutrient movement/uptake. Three lectures. Prerequisites: AGSC 2200, MATH 1110 and 1120.
AGSC 4220 (Formerly AGSC 422) 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 per week. Prerequisites: AGSC 2200, CHEM 1110 and 1120.

AGSC 4230 (Formerly AGSC 423) 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 per week. Prerequisites: AGSC 1200 and 2200.

AGSC 4240 (Formerly AGSC 424) 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 1200.

AGSC 4250 (Formerly AGSC 425) Floral Design (3). A course dealing with essentials of flower arrangement. One lecture and two laboratory periods per week. Prerequisite: AGSC 1200.
AGSC 4260 (Formerly AGSC 426) 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 per week. Prerequisite: AGSC 1200.
AGSC 4310 (Formerly AGSC 431) 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 per week. Prerequisite: AGSC 1200.

AGSC 4410 (Formerly AGSC 441) Dairy Production and Management (3). A study of general farm operation, adaptation of the herd to available facilities, factors affecting production, balancing rations for dairy cattle, disease control, principles of modern dairy cattle breeding, arrangement and development of dairy farm buildings. Two lectures and one laboratory period per week. Prerequisites: AGSC 1410 and 3420.

AGSC 4420 (Formerly AGSC 442) 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 per week. Prerequisite: AGSC 2410.

AGSC 4430 (Formerly AGSC 443) 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 1410 and 3420 and one semester of organic chemistry.
AGSC 4440 (Formerly AGSC 444) 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 1410.
AGSC 4450 (Formerly AGSC 445) 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 1410.
AGSC 4460 (Formerly AGSC 446) 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 per week. Prerequisites: CHEM 1110 and 1120.

AGSC 4500 (Formerly 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 4510 Geospatial Applications in Pest Management (3). Pests, diseases, and weeds have plagued mankind since the beginning of agriculture. Even with modem equipment and methodology, the impact of
pests, diseases, and weeds can be devastating. GIS and spatial analysis offer an essential set of tools for use in pest management. This course introduces students to the concepts of pest management and then presents the geospatial tools needed to effectively and efficiently design, implement, and refine a successful pest management program. Prerequisites: AGSC 2510, AGSC 3550.

AGSC 4520 Spatial Analysis in Biosecurity and Risk Assessment (3). GIS and GPS have become integral parts of hazard and disaster management. Biohazards can arise in many different forms - everything from natural events to acts of terrorism. This course will teach students to identify, map, and analyze biohazards, to assess damage, to develop recovery and mitigation plans, and to accurately monitor and predict biohazard risks. Prerequisites: AGSC 2510, AGSC 3550, AGSC 3560.

AGSC 4530 Spatial Database Design and Management (3). The accuracy and usability of data determine the analysis, output, and cost of any geospatial information system. This course presents the principles and techniques of geodatabase design, editing, and management needed to obtain required functionality from a GIS. Prerequisite: AGSC 2510.
AGSC 4540 Geospatial Information Systems Application and Design (3). Concepts and procedures used to successfully assess needs, evaluate requirements, design, and implement geospatial information systems. Emphasis will be placed on the data and technology needed to produced desired information products, and on cost-benefit analysis and project proposal development. Prerequisite: AGSC 2510.

AGSC 4550 Temporal Analysis of Spatial Information (3). The analysis of events over time can reveal trends that are not detectable in a single 'snapshot' of data. The spread of pests and diseases during a specified period, for example, can allow GIS users to make accurate predictions about future spread and to recommend measures to limit or stop spread. This course will introduce students to the concepts and tools needed to analyze spatial data over time. Upon successful completion of the course, students will have the knowledge and skills needed for temporal analysis of historical data and predictive modeling. Prerequisites: AGSC 2510, AGSC 3560.

AGSC 4560 Practicum in GIS (3). The GIS practicum is designed to expose students to real-world GIS problems that might be encountered in the workplace. Student are assigned specific projects in which their knowledge and skills in GIS will be used to solve a problem. Prerequisites: AGSC 2510, AGSC 3560.

AGSC 4710-4720 (Formerly 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 

## Gearldean Johnson, Ed.D., Head <br> 107 Frederick S. Humphries Family and Consumer Sciences and Nursing Education Complex Telephone 615-963-5601

Faculty: S. Ballard, S. Godwin, R. McDowell, M. Machara, G. Matthews, J. Seo

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 developmentally accredited 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 developmentally accredited Didactic Program in Dietetics must maintain a 2.75 GPA in the courses required for the concentration. Degree candidates seeking teaching certification in Early Childhood Education and Family and Consumer Sciences Education must meet requirements designed for the Teacher Education Program as below.

All Family and Consumer Sciences majors must have a "C" or better in all courses in their area of concentration in order to graduate.

## Teacher Education Admission and Retention Requirements:

## ADMISSION UNDERGRADUATE

Each student who desires to be a candidate for admission to the Teacher Education Program will make application to the Director of Student Services and Teacher Education in the second semester of the sophomore year. The student must have earned a cumulative 2.75 GPA, and acceptable scores on the Pre-Professional Skills Test (P-PST), or the Computer Based Test (CBT).

Further clarification of the Teacher Education Program can be found in the College of Education section of this catalog; "Admission, Retention, and Student Teaching Requirements for the Teacher Education Program." Students are required to complete 9 semester hours of student teaching which includes a dual placement.

## Admission to Upper Level (junior-senior year) in Family and Consumer Sciences/Early Childhood Education Programs

Family and Consumer Sciences/Early Childhood Education majors must meet the following criteria to be admitted to the programs to gain full admission to the programs;

1. GPA of at least 2.0 for FACS majors and 2.75 for Early Childhood Education and Family and Consumer Sciences Education majors.
2. Completed the general education courses.
3. Completed all developmental courses
4. Completed the following major field courses: FACS 1010 and at least one of the following core courses; FASH 1120, DIGN 2010, NUFS 2010 or 2011, and ECFS 1010. 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.

## Suggested Four Year Program:

## Bachelor of Science Degree in Early Childhood Education (With Teacher Certification Pre K-4)

## FRESHMAN YEAR

FALL SEMESTER
SAHE 1000, Orientation
ENGL 1010, Freshman English
ECFS 1010, Intro Early Child/ Child Dev
GEOG 1010 or 1020, World Geography
General Ed Natural Science:
BIOL 1010, 1011, or ASTR $1010 \_4$
14

## SPRING SEMESTER

ART 1010, Art Appreciation 3 ENGL 1020, Freshman English II 3 MATH 1110, College Algebra 3 3 FACS 1010, FCS as a Profession 1 General Ed Natural Science: BIOL 1020, 1021, or ASTR 10104

## SOPHOMORE YEAR

ENGL 2010-2024, Soph Lit. HIST 2010 or 2020, Am. History ECFS 2010, Prin \& Concepts Child Dev
EDCI 2010, History/Found Ed.
PSYC 2010, Gen. Psychology or app. Gen. Ed/Social Science

MATH 1410, Struc. Number Sys 3
HPSS 3100, Play \& Lead-Up Games 2 ECFS 3020, Middle Childhood 3 HIST 2030 History of Tennessee 3 COMM 2200, Public Speaking 3 MUSC 1010, Music Appreciation 3
15 17

## JUNIOR YEAR

ENGL 3730, Children's Literature 3 PSYC 3120, Meas/Eval/Clrm Pub Sch
EDSE 3330, Ed. of Exceptional Children
ECFS 3610, Early Childhood Curriculum
NUFS 3330, Maternal \& Child Nutrition
EDCI 3110 or ECFS 4000,
Guiding Young Children
EDRD 3500, Literacy I
3
ECFS 4600, Methods \& Materials
3 in Early Childhood 3
ECFS 3320, Expres. Arts for

ECFS 3520, Observ./Participation/
Assessment in ECFS
3 EDCI 3500, Principles of Curr. and Instruction

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## SENIOR YEAR

ECFS 4650, Parent./Prac. Steps
ECFS 4520, Early Childhood Adm \& Leadership
EDCI 4500, Methods for Teach. the Elem.Students
FACS 4500, Senior Project
EDRD 4500, Literacy II
FACS 4700, Seminar in FCS

ECFS 4720, Student Teaching 9
EDCI 4706, Educational Seminar 3

## Suggested Four Year Program:

## Bachelor of Science Degree in Family and Consumer Sciences Concentration in Child Development and Family Relations <br> FRESHMAN YEAR

| FALL SEMESTER |  |
| :--- | ---: |
| SAHE 1000, Orientation | 1 |
| ENGL 1010, Freshman English | 3 |
| ECFS 1010, Intro Early Child/ |  |
| Child Dev, |  |
| FACS 1010, FCS as a Profession 1 |  |
| BIOL 1010, 1011, Biophysical Sci. |  |
| or General Educ natural science 4 |  |
| MUSC 1010, Music Appreciation 3 |  |
| 15 |  |

## SPRING SEMESTER

ART 1010, Art Appreciation 3
ENGL 1020, Freshman English II 3
MATH 1110, College Algebra
GEOG 1010 or 1020, World Geography

3
BIOL 1020 or 1021, Biophysical Sc or general educ natural science 4

## SOPHOMORE YEAR

ENGL 2010-2024, Soph Lit. HIST 2010 or 2020, Am. History 3 ECFS 2010, Child Growth \& Development
DIGN 2010, Environ. Design or FASH 1120, Cultural Interpre. SOCI 2010, Intro to Sociology

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3
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## SOPHOMORE YEAR

| ENGL 2010-2024, Soph. Lit. | 3 |
| :--- | ---: |
| HIST 2010 or 2020, Am. History | 3 |
| FASH 2030, History of Costume | 3 |
| DIGN 3000, Fashion Illustration | 3 |
| NUFS 2110, Nutrition or NUFS |  |
| 2010 Basic Nutrition | $\underline{3}$ |
|  | 15 |

FASH 2110, Prin of Apparel Const
Social Science Elective
HIST 2020, American History COMM 2200, Public Speaking ECON 2010, Economic Prin.

## JUNIOR YEAR

FACS 3730, Entrepreneurship
DIGN 3100, Int/Fash/Text CAD
FASH 4130 or 3220, Dress
Design or THTR 4000 or 4020, Scene Design
DIGN 3500, Studio Design or DIGN 3400, Presentation Techniques
DIGN 3230, Space Planning

DIGN 3010, Cost./Fash. Design
DIGN 4110, Contract Design 3
DIGN 4350*, Internship
ECFS 4630, Family Relations 3
*Summer Only

## SENIOR YEAR

DIGN 4120, Furniture Design
FACS 4700, Seminar in FCS
DIGN 3005, Drafting of Interiors
FACS 4500, Senior Project
ELECTIVE
FERM 4330, Consumer Ed.

ECFS 4520, Early Child. Adm \& Leadership
ECFS 3610, Early Child. Curr. 3
EDSE 3330, Educ. Except. Child 3
FERM 3210, Family Resource Mgmt. or FERM 4330, Consumer Ed.
NUFS 3330, Mat. Child Nutrition
3

ENGL 3730, Children's Lit 3
ECFS 3520, Observ/Part/Assess.
in ECFS 3
ECFS 3530, Infant Clinic 3
ECFS 4630, Family Relations 3
ECFS 4600, Meth \& Mat in Early Childhood

BIOL 2210, 2211 Human Anat. 4 COMM 2200, Public Speaking HIST 2020, American History
EDCI 2010, Hist/Found of Ed.
ECFS 3320, Expressive Arts

JUNIOR YEAR

## Suggested Four Year Program:

## Bachelor of Science Degree in Family and Consumer Sciences Concentration in Fashion Merchandising

## FRESHMAN YEAR

FALL SEMESTER
SAHE 1000, Orientation
ENGL 1010, Freshman English
FASH 1110, Textiles
MATH 1110, College Algebra
ART 1010, Art Appreciation HIST 2010, American History

## SPRING SEMESTER

NUFS 2110, Nutrition 3
ENGL 1020, Freshman Eng. II 3
FASH 1120, Cultural Interpre.
FACS 1010, FCS as a Profess. 1
HIST 2020, American History 3
Humanities Elective

## SOPHOMORE YEAR

ECON 2010, Prin. of Econom. I 3
DIGN 2010, Environ. Design 3
CHEM 1010, 1011, Gen. Chem. or
General education natural
science course
FASH 2030, History of Costume 3
ACCT 2010, Prin. of Accounting
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FASH 2110, Prin of Apparel Const 3 CHEM 1020, 1021, Gen Chem. or General education natural science course COMM 2200, Public Speaking 3 ENGL 2010-2024, Soph. Lit. 3 ECON 2020, Prin of Economics II 3 16

## JUNIOR YEAR

DIGN 3100, Inter, Fash., Textile CAD
DIGN 3000, Fashion Illustration
FASH 3000, Apparel Quality
DIGN 3230, Space PlanningFERM 3210, Family ResourceMgmt

12
*Summer Only

## SENIOR YEAR

FASH 4030, Clothing Economics 3 MKTG 3200, Sales Management 3 FASH 4000, Display Merch. 3 FACS 4500, Senior Project 3

## SOPHOMORE YEAR

ENGL 2010-2018, Literature
CHEM 1020 \& 1021, Gen. Chem. 4
BIOL 2210, 2211, Human Anat. 4 PSYC 2010, General Psychology 3

BIOL 2220, 2221, Human Anat. or ELECTIVES*
ECON 2010, Economic Prin. 3
HUMANITIES ELECTIVES 3
NUFS 2110, Nutrition
COMM 2200, Public Speaking

## JUNIOR YEAR

PSYC 2180 or ELECTIVE*
NUFS 3120, Nutri./Global Com.
CHEM 2010, 2011, Org. Chem.
MGMT 3010, Manage. \& Org. NUFS 3130 Fd Ser Equip \&
Cost Control

## SPRING SEMESTER

ENGL 1020, Freshman English 3
HUMANITIES ELECTIVE 6
HIST 2020, American History 3
COMM 2200, Public Speaking 3
FACS 1010, FCS as a Profession1

FALL SEMESTER
SAHE 1000, Orientation
ENGL 1010, Freshman English MATH 1110, College Algebra HIST 2010, American History NUFS 1110, Food Principles

ELECTIVE (300-400 level)
FACS 4700, Seminar in FCS MKTG 4250, Retailing Mgmt 14

Suggested Four Year Program:

# Bachelor of Science Degree in Family and Consumer Sciences Concentration in Food Service Management <br> FRESHMAN YEAR 

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| :--- | :--- | :--- | ---: |
| SOPHOMORE YEAR |  |  |  |
| 16 |  |  |  |
| CHEM 1010,1011, Gen. Chem. or | CHEM 1020 \& 1021, Gen. Chem. or |  |  |
| Gen. education natural science | 4 | Gen. education natural science | 4 |
| ENGL 2010-2024, Soph Lit. | 3 | ECON 2020, Economic Prin. II | 3 |
| NUFS 2010, Nutrition | 3 | ACCT 2010, Prin. of Acctg. I | 3 |
| ECON 2010, Economic Prin. I | 3 | HUMANITIES ELECTIVE | 3 |
| DIGN 2010, Environ. Design | $\frac{3}{2}$ |  | $\overline{13}$ |

## JUNIOR YEAR

NUFS 3120, Nutri./Global Com. 3 BIOL 2400 Bacteriology ACCT 2020, Prin. of Acct. II NUFS 3130, Foodservice Equip. 3 MKTG 3010, Basic Marketing 3

## SENIOR YEAR

FERM 4330, Consumer Ed. NUFS 4520, Food Service Sys. 3 BLAW 3000, Legal Envir/Bus. 3 ELECTIVES (3000-4000 level) 5

NUFS 3110, Food Science 3 MGMT 3010, Man. Organization 3 ELECTIVE 3000 or 4000 level 3 ECFS 4630, Fam. Relationships 3 NUFS 4120, Quan. Foods Proc. 3 16
\& 1021, Gen. Chem. or Gen. education natural science 4 2020, Economic Prin. II HUMANITIES ELECTIVE 3

## Suggested Four Year Program:

 <br> \section*{\title{Bachelor of Science Degree in <br> \section*{\title{
Bachelor of Science Degree in Family and Consumer Sciences Family and Consumer Sciences Concentration in Family and Consumer Sciences Concentration in Family and Consumer Sciences Education Education (With or Without Teacher Certification) (With or Without Teacher Certification) <br> <br> FRESHMAN YEAR} <br> <br> FRESHMAN YEAR}
*Students wishing to meet requirements for the Dietetics Program must replace electives with the following courses: PSYC 2180, CHEM 3410 and lab, NUFS 4530, and BIOI 2220, 2221
**Summer Only

FALL SEMESTER
SAHE 1000, Orientation
ENGL 1010, Freshman English
CHEM 1010, 1011, Gen. Chem.
FASH 1110, Textiles
NUFS 1110, Food Principles

## SPRING SEMESTER

CHEM 1020, 1021, Gen Chem.
ENGL 1020, Fresh. English II 3
MATH 1110, College Algebra 3
FACS 1010**, FCS as a Profess. 1
HUMANITIES ELECTIVE 3

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## SOPHOMORE YEAR

ENGL 2010-2024, Soph Lit
HIST 2010 or 2020, Amer. Hist.
DIGN 2010, Environ. Design
PSYC 2420, Human Growth \& Dev 3 NUFS 2110, Nutrition or
NUFS 2010, Basic Nutrition
ECON 2010, Prin. of Econ. I

EDSE 3330*, Educ Except Child. 3
FACS 3870**, Curr./Pro Dev in FCS
DIGN 3230, Space Planning
NUFS 3110 or NUFS 3120,
Food Science
ECFS 2010, Prin./Concepts of Child Development

FALL SEMESTER
SAHE 1000, Orientation ENGL 1010, Freshman English HIST 2010, American History MATH 1110, College Algebra DIGN 2010, Environ. Design NUFS 1110, Food Principles

## SPRING SEMESTER

ENGL 1020, Freshman English 3 HIST 2020, American History CHEM 1010, 1011 Gen Chem. HUMANITIES ELECTIVE FACS 1010, FCS as a Profess.

HUMANITIES ELECTIVE
COMM 2200, Public Speaking
HIST 2020, American History 3
EDCI 2010, History/Foundation of
Education
SOC SCI ELECTIVE

## JUNIOR YEAR

FASH 2110, Prin. Apparel Con 3 FERM 3210, Fam. Resource Mgt 3 FACS 3710, Teaching FCS 3
PSYC 3120*, Meas/Eval Pub School
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## SENIOR YEAR

ECFS 4650, Parent./Prac. Steps 3 FACS 3720, Spe. Prob in FCS or FERM 4330, Consumer Ed. 3 EDCI 4705* Educational Sem. FACS 4500, Senior Project 3 FACS 4720*, Student Teach. or EDRD 4910*, Teaching Reading 3 EDCI 3110, Classroom Behavior 3 FACS 4740, Field Experiences

FACS 4700, Seminar in FCS $\frac{1}{16}$

3 sumer 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
FACS 46002
NUFS 3130, 4120 ..... 6
NUFS 4520 ..... 3
Option II
Care and Guidance of Children ..... 11
FACS 4580 ..... 2
ECFS 3320 ..... 3
ECFS 4520, 4600 ..... 6

## COURSE DESCRIPTIONS

## Design (DIGN)

DIGN 2010 Environmental Design (3). (Formerly DIGN 201) 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 3000 Fashion Illustration (3). (Formerly DIGN 300) 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 2010. Fall Semester: Odd Years

DIGN 3005 Drafting of Interiors (3). A course which emphasizes interior residential design and students learn techniques for 2-D manual drafting, including lettering, floor plans, elevations, detailing, isometrics and perspective. Prerequisite: DIGN 2010 or consent of instructor. Fall Semester
DIGN 3010 Costume/Fashion Design (3). (Formerly DIGN 301) 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. Lablecture. Prerequisite: DIGN 2010, FASH 2030. Spring Semester

DIGN 3100 Interior, Fashion \& Textile CAD (3). (Formerly DIGN 310) 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 3230 Space Planning (3). (Formerly DIGN 323) 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 2010. Fall Semester

DIGN 3400 Presentation Techniques (2). In this course students will gain knowledge and experience in portfolio development and presentation skills. Emphasis is placed on writing and vocalizing design concepts and the design process, developing presentation drawings, renderings and boards. Prerequisite: DIGN 2010. Fall Semester

DIGN 3500 Studio Design Laboratory (2). (Formerly DIGN 350) 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 2010. Fall Semester

DIGN 4000 History of Interiors (3). (Formerly DIGN 400) 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 4110 Non-residential Design (3). (Formerly DIGN 411) 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 2010 and 3230 or consent of instructor.

DIGN 4120 Furniture Design and Decorative Finishes (3). (Formerly DIGN 412) 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 4200 Experimental Textile, Apparel and Design (3). (Formerly DIGN 420) 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 2010 or consent of instructor. Spring Semester

DIGN 4210 Interior Architecture (3). (Formerly DIGN 421) 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 2010 \& 3230. Spring Semester

DIGN 4350 Internship/Seminar/Options (3-6). (Formerly DIGN 435) 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 (ECFS)

ECFS 1010 Introduction to Early Childhood \& Child Development (3). (Formerly ECCD 101) 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

ECFS 1660 (CDA) Observations and Internship (2). (Formerly ECCD 166) A course which provides opportunities for observation and practice work in pre-school programs for young children. Consent of instructor.
ECFS 2010 Principles and Concepts of Child Development (3). (Formerly ECCD 201) 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.

ECFS 2110 (CDA) Problems in CDA Competency Area I (3). (Formerly ECCD 211) An individualized study for early childhood care givers in set-
ting up and maintaining safe and healthy learning environments for young children. This course must be taken in conjunction with ECFS 2120 or with consent of instructor.

ECFS 2120 (CDA) Practicum: Safe, Healthy Learning Environments (3). (Formerly ECCD 212) 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.
ECFS 2210 (CDA) Problems in CDA Competency Area 2 (3). (Formerly ECCD 221) An individualized study for care givers in learning to advance the physical and intellectual development of young children. Consent of instructor.

ECFS 2220 (CDA) Practicum: Physical and Intellectual Competency (3). (Formerly ECCD 222) A course in which the care givers demonstrate the ability to advance the physical and intellectual development of young children. Consent of instructor.

ECFS 2310 (CDA) Problems in CDA Competency Area 3 (3). (Formerly ECCD 231) 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 ECFS 2320 or with consent of instructor.

ECFS 2325 (CDA) Art for Young Children (2). (Formerly ECCD 232A) A course that includes a study of self-directed activities in art and creative play experiences.
ECFS 2320 (CDA) Self Concept and Individual Strength (3). (Formerly ECCD 232) A course in which care givers demonstrate the ability to build positive self-concept and individual strength in young children. Consent of instructor.

ECFS 2410 (CDA) Problems in CDA Competency Area 4 (3). (Formerly ECCD 241) 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 ECFS 2420 or with consent of instructor.

ECFS 2420 (CDA) Practicum: Positive Functioning of Children and Adults in a Group (3). (Formerly ECCD 242) 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.

ECFS 2515 (CDA) The Young Child (3). (Formerly ECCD 251A) 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.
ECFS 2510 (CDA) Problems in CDA Competency Areas 5 and 6 (3). (Formerly ECCD 251) An individualized study course for care givers in coordinating home and center and carrying out supplementary responsibilities. Must be in conjunction with ECFS 2520 or with consent of instructor.

ECFS 2525 (CDA) Observation (3). (Formerly ECCD 252A) A course in which students observe in nursery school, kindergarten, and other preschool programs for young children.

ECFS 2520 (CDA) Practicum: Home, Center and Supplementary Responsibilities (3). (Formerly ECCD 252) 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.

ECFS 2535 (CDA) Internship in Infant Programs (2). (Formerly ECCD 253A) A course in which students observe and participate in infant laboratories.
ECFS 2530-2540-2550 (CDA) Problems in Providing Care for Young Children (3). (Formerly ECCD 253, 254, 255) An individualized experience for early childhood care givers. Consent of instructor.

ECFS 2660 (CDA) Internship in Early Childhood and Child Development (3). (Formerly ECCD 266) A course in which students participate in field work in community nursery schools and other preschool programs for young children. Consent of instructor.

ECFS 3020 Middle Childhood and Adolescence (3). (Formerly ECCD 302) A course in which students study human development from later preschool through adolescence (5-18) years. Prerequisite: ECFS 2010

ECFS 3310-3330-3340 (CDA)Internships for Trainers (3). (Formerly ECCD 331, 333, 334) An individualized internship experience for persons interested in providing child care giver training. Consent of instructor.
ECFS 3320 Expressive Arts for Young Children (3). (Formerly ECCD 332) 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: ECFS 2010 or ECFS 3510. Spring Semester

ECFS 3520 Observation, Participation and Assessment in Early Childhood Settings (3). (Formerly ECCD 352) Observation and participation in early childhood settings. A course required of students concentrating in Child Development and Family Relationships. This course will address appropriate observation methods and assessment tools for use in early childhood settings. Laboratory experiences required. Prerequisites: ECFS 2010 or ECFS 3510. Spring Semester

ECFS 3530 Infant Clinic (3). (Formerly ECCD 353) 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 daycare programs for infants. Observation/participation in infant programs required.

ECFS 3610 Early Childhood Curriculum I (3). (Formerly ECCD 361) A course in which students design curricula in Early Childhood Education, including learning how to write general goals and behavioral objectives for lesson plans, and discussing forces that affect curriculum. Prerequisites: observation in a variety of early childhood settings, ECFS 2010 or ECFS 3510. Fall Semester

ECFS 4000 Behavior Management and Guidance (3). This course examines positive guidance strategies for children from birth to eight years. Students will explore theoretical foundations related to child development and the implementation of various models to foster self-control, organize the classroom environment and curriculum for pro-social skills, methods for addressing persistent and challenging behaviors. Emphasis will be on behavior management and on guidance strategies for preschool and early elementary children. The course will also explore a wide variety of issues in relation to parenting, child-rearing practices, and child-family relations. Required field experience.
ECFS 4520 Early Childhood Administration and Leadership (3). (Formerly ECCD 452) 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

ECFS 4600 Preschool and Kindergarten Methods and Materials (3). (Formerly ECCD 460) 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: ECFS 3320 and ECFS 3610 Spring Semester

ECFS 4620 Current Topics and Issues in Early Childhood Education (3). (Formerly ECCD 462) A course in which students study programs, trends and issues in child development and early education.

ECFS 4630 Family Relationships (3). (Formerly ECCD 463) 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

ECFS 4650 Parenting/Practical Steps to Childrearing (3). (Formerly ECCD 465) 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

ECFS 4660 Internship or Fieldwork in Child Development (9). (Formerly ECCD 466) A course in which students are provided an opportunity to student teach in the campus Early Learning Center. Taken with approval of the coordinator of Child Development and Family Relationships.

ECFS 4720 Observation and Student Teaching in Pre-K and K-3 (12). (Formerly ECCD 472K) 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 (FACS)

FACS 1010 Family and Consumer Sciences as a Profession (1). (Formerly FCS 101) A course designed to help students identify their goals and individual needs and explore possible family and consumer sciences career areas. Students gain knowledge of the history and philosophy of family and consumer sciences as well as public policy and issues and trends. One lecture.

FACS 3180 Cooperative Education (3). (Formerly FCS 318) A universitywide 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.

FACS 3710 Teaching Family and Consumer Sciences (3). (Formerly FCS 371) 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

FACS 3720 Special Problems in Family and Consumer Sciences (1-3). (Formerly FCS 372) A course designed for individual and group projects that focus on recent research findings and general depth in subject matter.
FACS 3730 Entrepreneurship in Family and Consumer Sciences (3). (Formerly FCS 373) 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.

FACS 3870 Curriculum and Program Development (3). (Formerly FCS 387) 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.

FACS 4430 Principles of Career Technical and Occupational Program Planning (3). (Formerly FCS 443) 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 followup, public relations, advisory committees, evaluation and youth leadership. Supervised observation-participation experiences in vocational programs are required. Fall Semester, odd years.

FACS 4500 Senior Project Writing (3). (Formerly FCS 450) 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.
FACS 4580 Field Experiences in Child Care Services (2). (Formerly FCS 458) A supervised work experience in the child care industry. Course includes class seminars. Senior standing in curriculum required. Summer Session

FACS 4600 Field Experiences in Food Service or Nutrition (2-6). (Formerly FCS 460) A supervised work experience in the food service industry or in nutrition programs. Course includes class seminar. Senior standing in curriculum required. Summer Session

FACS 4720 Student Teaching in Family and Consumer Sciences (12). (Formerly 472S) 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.

FACS 4740 Consumer and Family Service Field Experiences (3-6). (Formerly FCS 474) A course designed to provide students opportunities to gain practical experiences in consumer and family service programs. Students not seeking teaching certification should substitute this course for student teaching. Prerequisites: Senior level Family and Consumer Sciences major and consent of instructor.

## Fashion Merchandising (FASH)

FASH 1110 Textiles (3). (Formerly FM 111) A consumer-oriented study of textiles, emphasizing fibers, yarns, fabric construction, finishes and socioeconomic background of the textiles and apparel industry in relation to end use. Lecture-laboratory. Spring Semester
FASH 1120 Cultural Interpretation of Dress (3). (Formerly FM 112) A study of the dynamic nature of the fashion phenomenon within the global society. Theories regarding psychological, social, cultural and economic forces of acquiring new styles will be explored. Learn about fashionable apparel worn in various cultures. Spring Semester

FASH 2030 History of Costume (3). (Formerly FM 203) 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

FASH 2110 Principles of Apparel Construction (3). (Formerly FM 211) Students learn the fundamental techniques of sewing various apparel by using a computerized, industrial sewing machine, or serger. Simple pattern alterations will be implemented. Lecture-laboratory. Fall Semester
FASH 3000 Apparel Quality Analysis (3). (Formerly FM 300) 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: FASH 2110 and DIGN 3010. Spring Semester

FASH 3020 Clothing of the Family (3). (Formerly FM 302) 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

FASH 3120 Applied Dress Design (3). (Formerly FM 312) 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: FASH 2110 and DIGN 3010. Spring Semester: Even Years

FASH 3210 Tailoring (3). (Formerly FM 321) A course in which students learn advanced construction methods. Students construct a tailored garment. Emphasis is also placed on selection and care of woolen garments. Prerequisite: examination in construction skills and/or FASH 2110. Fall Semester: Odd Years

FASH 3220 Flat Pattern Adaptation (3). (Formerly FM 322) 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: FASH 2110. Spring: Odd Years

FASH 4000 Display Merchandising (3). (Formerly FM 400) Presentation of merchandise, coordination elements and principles of design, properties and the art of arranging soft goods through a visual medium. Concepts and tools of selling merchandise in numerous retail settings for increasing sales are covered.

FASH 4030 Clothing Economics (3). (Formerly FM 403) 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

FASH 4130 Dress Design and Draping (3). (Formerly FM 413) 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: FASH 2110 \& DIGN 2010. One lecture and two laboratory periods. Fall: Even Years

FASH 4140 Fashion Merchandising Seminar (3). (Formerly 414) A study of the problems in various aspects of buying fashions. Emphasis is on the planning involved in marketing of merchandise and computer applications in retailing. Spring Semester

FASH 4150 Internship (3-6). (Formerly FM 415) 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

FASH 4440 Fashion Promotions and Events (3). (Formerly FM 444) Students learn to incorporate numerous elements of selling into a theatrical presentation using live models. Stages of planning fashion promotions by establishing the type of show, site, theme, budget, publicity, advertising and various press materials for producing a fashion show are implemented into an annual presentation. Students produce a major fashion show.

## Family Economics and Resource Management (FERM)

FERM 3210 Family Resource Management (3). (Formerly HMGT 321) 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 problems faced by individuals and families in managing resources. The management process is viewed within an environmental context. Offered each Spring Semester

FERM 4330 Consumer Education (3). (Formerly HMGT 433) 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 and Nutrition (NUFS)

NUFS 1110 Food Principles and Meal Management (4). (Formerly FM 111) 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.

NUFS 2010 Basic Nutrition Principles (3). (Formerly NTR 201) A course in which students study nutrition and its relationship to health. Emphasis is placed on functions, sources and deficiency symptoms for the various nutrients. Regulations surrounding food and related products are presented. Nutritional requirements throughout the life cycle are introduced. Fall Semester
NUFS 2110 Elementary Nutrition (3). (Formerly NTR 211) A general course in nutrition with emphasis on scientific principles, metabolism and requirements for nutrients. Special topics of interest to health care professionals are discussed. Spring Semester

NUFS 3110 Food Science (3). (Formerly FDS 311) A course which includes a study of the scientific principles of food preparation. Emphasis is placed on deviations from the norm and causes. Lecture and laboratory. Prerequisite: CHEM 1010 and NUFS 1110. Spring Semester, even years.

NUFS 3120 Nutrition in the Global Community (3). (Formerly NTR 311) 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: NUFS 2010 or 211.

NUFS 3130 Foodservice Equipment and Cost Control (3). (Formerly FDS 313) 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.

NUFS 3330 Maternal and Child Nutrition (3). (Formerly NTR 333) A course which includes a study of nutrition as it relates to children from prenatal life through adolescence. Application of knowledge and nutrition education are emphasized. Experiences with Early Learning Center are included. Fall Semester

NUFS 4110 Advanced Nutrition (3). (Formerly NTR 411) 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: NUFS 2010 or 2110 and Chem 1010-1020.

NUFS 4120 Quantity Food Procurement and Production (3). (Formerly FDS 412) 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: NUFS 1110.

NUFS 4520 Foodservice Systems Management (3). (Formerly FDS 452) 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: NUFS 4120 or permission.
NUFS 4530 Medical Nutrition Therapy (4). (Formerly NTR 453) 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: NUFS 4110, BIO 221-222, CHEM 341. Field experiences and laboratory required.

NUFS 4620 Special Problems in Foods and Nutrition (3). (NTR 462) An individual directed study and investigation involving techniques used in nutrition research and food service management.

# SCHOOL OF NURSING 

Bernardeen O. Fleming, Ed.D., RN, Dean<br>Frederick S. Humphries<br>Family and Consumer Sciences and<br>Nursing Education Complex

## General Statement:

The School of Nursing contributes to the health and welfare of the citizens of Tennessee by preparing registered nurses who have the knowledge and skill to provide quality nursing care in many different settings. The School of Nursing offers two undergraduate degrees; an associate of applied science degree (two year program) and a baccalaureate degree (four year program). Both programs are approved by the Tennessee Board of Nursing 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, 1-800-6691656. 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 60 hours are required for graduation from the AAS program and 120 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 Sharpe, Ed.D., RN, Interim Program Director<br>Frederick S. Humphries<br>Family and Consumer Sciences and Nursing Education Complex<br>615-963-5265

General Statement: The 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 throughout the life cycle with commonly occurring illnesses in a variety of settings.

## Program Competencies:

1. Clinical decision-making that results in finding solutions, individualizing care and assure the delivery of accurate safe care that has positive outcomes.
2. Understand the client and family's cultural diversity to create a caring environment of hope and trust, where client choices relate to cultural values, beliefs, and lifestyle are respected.
3. Communication whether verbal, nonverbal, written or through information technology, that is effective and promotes positive outcomes.
4. Professionalism which adheres to standards of professional practice; is accountable for own actions and behaviors; and within legal, ethical and regulatory framework.
5. Providing nursing care to the patient and family that incorporates knowledge of expected growth and development, prevents and/or provides for early detection of health problems, and uses strategies to achieve optimal health.
6. Management of care by efficiently and effectively using human, physical, financial, and technological resources to meet clients needs and support organizational outcomes.

## Program Options

There are two options for completing the associate degree program:

1. The regular weekday program is offered on the main TSU campus, Nashville State Community College (first-year nursing courses) and at Volunteer State Community College.
2. The LPN-AAS/RN and LPN-BSN/RN Career Mobility evening/ weekend program is offered on the TSU Avon Williams campus.

## 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;

Students can meet the prerequisite Chemistry requirement for the AAS Nursing Program by:

Completing chemistry, with a lab (1 year high school or 1 semester of college with grade of " $C$ " or better).

All high school deficiencies, developmental, remedial, courses and pre-requisite courses must be completed before being
admitted to the AAS Nursing Program. Students are admitted on a space available basis.

## Admission Requirements

1. Officially admitted to TSU with all remedial/developmental requirements completed.
2. High school graduate or a GED score of 50. Applicants with GED scores less than 50 must complete prescribed college level courses with a minimum GPA of 2.50.
3. Cumulative GPA of 2.5 on high school or completed college work.
4. One year of high school or one semester of College Chemistry with lab, with a grade of "C" or better must be completed by the application deadline (March 15th).
5. Verification of math competency at the intermediate algebra level by university testing or completion of required courses.
6. Completion of the pre-entrance nursing examination with a 50 or better on Reading and Math Composite scores, pending approval.
7. Anatomy and Physiology and Microbiology/Bacteriology courses must have been taken within the last 5 years of admission to the program.
8. The curriculum plan must be followed in the sequence listed in the catalog. General education required courses must be taken in the semester listed or may be completed before the required semester.

## Application Requirements

Applications are available on-line or by contacting the Associate Degree Nursing program.

Students who meet admission requirements for the nursing program must complete the following:

The required admission materials for the Associate Degree Nursing Program are:
a. completed School of Nursing application
b. copies of transcripts from all institutions
c. copy of current TSU transcript
d. copy of TSU admission letter for new or readmitted students
e. copy of Pre-nursing entrance examination score with a 50 or better on both Reading and Math Composite scores.

## Admission Selection

The Admissions Committee will consider students who have submitted completed application material by March 15th. Applications received after March 15th are considered on a space available basis. Students who are not admitted must re-apply in order to be considered for the next academic year.

Students who meet admission criteria are ranked for selection for the upcoming class. The order of selection for applications received by March 15 will be ranked according to:

1. Cumulative GPA on all college work or cumulative high school GPA if no college courses have been completed the time of application.
2. Number of general education courses completed.
3. Scores on the pre-nursing entrance exam.
4. If more than one applicant has identical ranking scores, these applicants will be randomly selected.

Qualified applicants who are not initially accepted will be placed on a waiting list and will be added to the class if space becomes available. All waiting lists expire the first day of class.

## Accepted Students

Students who are accepted are notified by May 15th. Students must return their acceptance form by the date listed in the letter to assure their space in the class. Students who do not return the acceptance form by the date listed in the letter will be removed from the admission list.

Students who are admitted must have a health examination which indicates satisfactory health and the required immunizations before starting the nursing courses.

Students must show evidence of current Healthcare Provider BLS training and liability insurance in order to attend clinical nursing classes.

## Progression and Retention Requirements

1. A grade of $C$ or better in Nursing course and $S$ (satisfactory) in laboratory and clinical evaluation is considered passing.
2. A grade of $D$ or $F$ is considered failing. A student who earns a failing grade in a nursing course is not eligible to progress in the program or be admitted to the BSN program.

## Readmission Process

1. A student, who earns a failing grade in a nursing course and wants to re-apply, will write to the Program Director for re-entry at least six weeks before the beginning of the semester reentry is requested. An updated transcript is required. Readmissions are based available faculty and clinical resources. There is no guarantee that any student will be re-admitted.
2. A student who earns a second failing grade in any nursing course at TSU cannot continue in the program.

## Transfer of RN Nursing Courses

Transfer students from other RN programs must meet the University and School of Nursing requirements for admission and graduation. Students who have completed nursing courses, with minimum grades of $C$ in an NLNAC accredited RN program, may be eligible to receive transfer credit. Student 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 <br> 60 Semester Hours

MAJOR CORE: Thirty six semester hours of nursing are required; NURS 1200, 1300, 1010/1014/1020/1024/2010/2014/2020/2024.

GENERAL EDUCATION CORE: Twenty-four semester hours of University and general education courses are required: ENGL 1010, BIOL 2210/2211, BIOL 2220/2221, BIOL 2400/2401, PSYC 2010 and PSYC 3510; Humanities Elective.(must be Music Appreciation, Art Appreciation, or Intro to Theatre)

## Suggested Two Year Plan: Total 60 hours

## Associate of Applied Science in Nursing

## FRESHMAN YEAR

FALL SEMESTER

## Courses

NURS 1010/1014
BIOL 2210/2211
ENGL 1010
NURS 1200

SPRING SEMESTER
Hr Courses Hr

## NURS 1020/1024

BIOL 2220/2221
PSYC 20103
NURS 1300

## SOPHOMORE YEAR

## FALL SEMESTER

Courses
NURS 2010/2014
PSYC 3510
BIOL 2400/2400L

SPRING SEMESTER
Hr
Courses
NURS 2020/2024
Humanities Elec.

## LPN-RN Career Mobility Plan

The Career Mobility Plan is designed to meet the needs of LPN'S to advance their careers and recognize LPN'S previous learning and current clinical experience.

## Admission Requirements for Licensed Practical Nurses (AAS Program)

1. Officially admitted to TSU with all remedial/developmental requirements completed
2. High school graduate or a GED score of 50. Applicants with GED scores less than 50 must complete prescribed college level courses with a minimum GPA of 2.50.
3. Cumulative GPA of 2.5 on completed college work.
4. One year of high school or one semester of College Chemistry with lab with a grade of "C" or better must be completed by application deadline (March 15th) for summer selection and October 15th for Spring selection.
5. Verification of math competency at the intermediate algebra level by university testing or completion of required courses.
6. Completion of the pre-entrance nursing examination with a 50 or better on Reading and Math composite scores.
7. Completion of required departmental and general education courses with a grade of "C" or better.
Nursing Assessment/with lab 2 credits Pharmacology (Drugs and Solution) 2 credits English Composition Microbiology/Bacteriology Anatomy and Physiology Introduction to Psychology Humanities Developmental Psychology 3 credits 4 credits 8 credits 3 credits 3 credits 3 credits

## 8. Proof of current Tennessee LPN license

9. Currently working as a LPN, a minimum of one year or LPN program completion within last six months and currently employed as a LPN.

## Application Requirements

Applications are available on-line or by contacting the Associate Degree Nursing program. Students who meet admission require-
ments must complete the following application materials to be submitted no later than March 15th for the Summer entry class and October 15th for the Spring entry class:

1) Completed application to School of Nursing.
2) TSU admission letter for new or readmitted students
3) Copies of transcripts from all institutions attended
4) Copy of current course enrollment
5) ACT (enhanced), SAT or Compass placement examination score
6) Pre-nursing examination (NET) test with a 50 or better Reading and Math Composite score.
7) Copy of current Tennessee LPN license
8) Letter verifying current employment
9) Letters of reference from immediate supervisor and Director of Human Resources
10) Letter of intent

## Admission Selection

The Admissions Committee will consider students who have submitted completed application material by March 15, for summer admission and Oct. 15, for spring admission. Applications received after March 15, and October 15, are considered on a space available basis. Students who are not admitted must reapply to be considered for the next admission period.

Students who meet admission criteria are ranked for selection for the upcoming class. The order of selection for applications received by March 15 and October 15 will be ranked by:

1. Cumulative GPA on all college work or cumulative high school GPA on all college courses have been completed at the time of application.
2. Number of general education courses completed.
3. Scores on the pre-nursing entrance exam.
4. If more than one applicant has identical ranking scores, applicants will be randomly selected.

Qualified applicants who are not initially accepted will be placed on a waiting list and will be added to the class if space becomes available. All waiting lists expire the first day of class.

## Accepted Students

Students who are accepted are notified by May 15 th for summer admission or November. 15th for spring admission. Students must return their acceptance form by the date listed in the letter to assure their space in the class. Students who do not return the acceptance form by the date listed in the letter will be removed from the admission list.

Students who are admitted must have a health examination which indicates satisfactory health and the required immunizations before starting the nursing courses.

Students must show evidence of current Healthcare Provider BLS training and liability insurance in order to attend clinical nursing classes.

## Progression Requirements of Licensed Practical Nurses

Students are admitted to the LPN-RN Career Mobility Program twice yearly, spring and summer.

| Spring | HR | Summer | HR |
| :--- | ---: | :--- | ---: |
| NURS 1007 (LPN Transition) | 6 | NURS 1007 (LPN Transition) | $\frac{6}{6}$ |
| Total | 6 | Total |  |

LPN'S who successfully pass the NURS 1020 challenge exam will have the following progression. (NURS 1020 will be noted on the transcript prior to taking a clinical course).

| Fall |  | Spring |  |
| :--- | ---: | :--- | ---: |
| NURS 2010/2014 | 9 | NURS 2020/2024 | 9 |
| NURS 1010 (waived) (6 hrs.) | - |  | - |
| Total | 9 | Total | 9 |

LPN's who are NOT successful on the NURS 1020 challenge will have the following progression.

| YEAR I |  |
| :--- | ---: |
| Semester II |  |
| Spring | HR |
| NURS 1020/1024 | $\frac{8}{8}$ |
| $\quad$ Total |  |
| Semester II | HR |
| Spring | $\frac{9}{9}$ |
| $\quad$ NURS 2020/2024 |  |

## YEAR II

Semester I
HR Fall
HR
NURS 2010/2014
Total

## HR

$\frac{9}{9}$

Remaining general education and other lower division courses may be taken concurrently with nursing courses with a minimum grade of " $C$ " for all courses.
$\begin{array}{ll}\text { American History } & 6 \\ \text { Introduction to Philosophy } & 3\end{array}$
Introduction to Philosophy 3
Humanities
English Literature 3
Sociology 3
Communications (public speaking)
Electives 2-4
Nursing 1100
Total

1. Register for NURS 1007, (LPN Transition Course)
2. Successfully pass challenge exam for NURS 1020, offered after completing NURS 1007
3. LPNS have 2 opportunities to challenge NURS 1020 following completion of NURS 1007
4. LPNS who are not successful in the NURS 1020 challenge exam after the second attempt may apply for admission to the regular AAS nursing program.
5. Current Healthcare Provider BLS training Current Healthcare Provider BLS training, immunizations and liability insurance required for clinical practice.
Upon successful completion of one semester in NURS 2020, NURS 1010 and 1020 credits will be noted on the TSU transcript.

## Progression Requirements for Licensed Practical Nurses (BSN)

The Career Mobility Program is one calendar year in length (3 semesters). Students may enter the program after all general education requirements, except three general education core courses have been completed. Upon successful completion of the first two semesters of the nursing program, credit for 30 hours of BSN courses will be noted on the transcript. The student is eligible for graduation.

## Spring

NURS 1007
HIST 2010
ENGL 2110 or 2120

|  | Summer |  |
| ---: | :--- | ---: |
| 6 | HIST 2020 |  |
| 3 | PHIL 1030 | 3 |
| 3 |  | 3 |
| $\frac{3}{15}$ | Total | - |
| HR | Spring | 6 |
| 9 | NURS 2020/2024 | HR |
| 3 | SOC 2110 | 9 |
| 3 | NURS 1020 (Challenge) | 3 |
| $\mathbf{1 5}$ | Total | -12 |
| HR | Fall | HR |
| 3 | NURS 3003 | 3 |
| 3 | NURS 3250/3251 | 3 |
| 4 | NURS 3060 | $\frac{3}{9}$ |
| 10 | Total | 9 |

## APPLICATION REQUIREMENTS

1. Attend an advisement session, call: 963-7102.
2. Bring copies of all transcripts to the advisement session.
3. Bring copy of current enrollment of courses.
a. Pre-nursing exam scores
b. TSU Letter of acceptance
c. Copy of all college transcripts
d. Current semester course enrollment
e. Copy of LPN License and RN eligibility
f. Verification of current employment
g. Reference letters from immediate supervisor and Director of Human Resources

Admissions Committee will review applications and applicants will be notified by Program Director.

## LPN to BSN CHALLENGE PROCESS

Electives
Total
Fall
NURS 2010/2014
NURS 2020/2024 9
Humanities
NURS 1020 (Challenge)
Total
Total
Summer
NURS 3320
NURS 3003
HR
NURS 3002
NURS 3250/3251
Total

## 3

3

Elective
Total
9

## Spring

NURS 3300
NURS 4360/4364 6
NURS $4226 \quad-3$
Total
12

Notice: Advisement with BSN faculty as well as the LPN/RN Mobility faculty is required.

The Admissions Committee will consider students who submitted completed application material by October 15th for spring and February 15th for summer.

## Course Descriptions

NURS 1007 LPN Transition (6) Web CT. Introduction to role transition for the Licensed Practical Nurse (LPN) and the basic concepts of nursing trends and professional role development. The focus is on concepts of the nursing process, critical thinking, awareness of cultural diversity, communication, professionalism, human growth and development, and decisionmaking. Nursing management of commonly occurring health problems are explored, as well as coping strategies that are appropriate for clients and families Pre-requisites Five lecture hours each week(ENGL 1010, BIOL 2210/2211, BIOL 2220/2221, BIOL 2400/2401, PSYC 2010, PSYC3510, NURS 1200, NURS 1300 and Humanities Elective).

NURS 1010/1014 Fundamentals of Nursing (6). Introduction to the basic concept of the nursing profession. Decision making, critical thinking, awareness of cultural diversity, communication, professionalism, human growth and development and the role of the nurse as provider of health care are integrated throughout the course. Clinical activities are designed to help students assess and diagnose basic clinical needs and assist in meeting those needs in adults experiencing commonly occurring health problems. Four lecture and six clinical hours each week. Co-requisites (BIOL 2210/2211, ENG 1010, NURS 1200).

NURS 1200 Fundamentals of Health Assessment (2). Introduces the student to basic physical and health assessment techniques. Focus is on adult clients with emphasis on expected findings and appropriate modifications for different age and cultural groups and selected unexpected findings are discussed. Nursing assessment skills as a part of the role of the professional nurse are introduced. Course expands on the assessment and clinical skills learned and the nursing role of provider of care to the client with health needs. Emphasis is on utilizing critical judgment and communication to promote optimal health among adults experiencing or recovering from illness. One hour of lecture and two laboratory hours each week. (Co-requisites NURS 1010/1014, BIOL 2210/2211, ENGL 1010).

NURS 1300 Pharmacology of Drug Therapy (2). Introduces student to basic pharmacology which pervades all phases of nursing practice and relates directly to patient care and patient education. Course introduces student to major classifications of medications with their concurrent mechanisms of actions, side effects, client education and nursing implications. Pharmacotherapy for clients throughout the lifespan is included. Course also includes basic dosage and solution calculations that are utilized by the provider of nursing care. Two lecture hours each week. Prerequisites (NURS 1010/1014, NURS 1200) Co-requisites (NURS 1020/1024, BIOL 2220/2221, PSYC 2010).

NURS 1020/1024 Adult Health Nursing I (8). The study of nursing care required to assist the individual and family in coping with commonly occurring health problems. The nursing process (assessing, planning, intervening, and evaluating) is emphasized. Decision making, cultural diversity, communication, growth and development, professionalism, and management of care are integrated throughout the course. Six lecture and six clinical hours each week. Pre-requisite (NURS 1010/1014, NURS 1200). Co-requisites (BIOL 2220/2221 and PSYC 2010).

NURS 2010/2014 Family and Behavioral Health (9). Using the nursing process, the student learns to assume increasing responsibility for judgment in patient situations requiring understanding of concepts and principles of women's health, child health, and behavioral health nursing. Clinical activities include experiences in acute care as well as community settings. Five lecture and twelve clinical hours each week. Pre-requisites (NURS 1010/1014, NURS 1200, NURS 1020/1024, NURS 1300. Co-requisites (BIOL 2400/2401, PSYC 3510).

NURS 2020/2024 Adult Health Nursing II and Management Concepts (9). Complex Nursing is the capstone course of the program. The course content synthesizes knowledge and skills learned in previous courses. Theory includes multi-system stressors such as AIDS, heart failure, complications of Diabetes, burns, renal failure, bioterrorism and emergency preparedness. Clinical experiences include rotations to specialty areas and participation in the political process as it relates to nursing. During the last four weeks of the course, clinical rotations with a preceptor provide experience in added responsibility with multiple clients, delegation and management of care. Five lecture and twelve clinical hours each week. Pre-requisites (NURS 1010/1014, 1020/1024 and 2010/2014); Co-requisites (Humanities Elective)

# BACCALAUREATE NURSING DEGREE PROGRAM 

# Frederick S. Humphries Family and Consumer Sciences and Nursing Education Complex 

Faculty: B. Buchanan-Covington, A. Bull, A. Rawls, 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 empirical 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 2.8 on a 4.0 scale.
2. Completion of 60 hours of lower division required University and general education courses by the end of the semester in which the student is being reviewed for admission.
3. A minimum grade of $C$ in each course. All required courses, with grades of $D$, must be repeated before review for admission.
4. Completion of the required basic science courses with a grade of $C$ or above.
5. Students with 2 or more failing science grades (D or F) are not eligible for admission.
6. Minimum scores at the 70th percentile on the pre-nursing examination,(NET). with a reading score at the Post High School level.

## Admission Process for the Nursing Major

Students who meet the admission requirements for the nursing major need to complete a School of Nursing application with copies of the following information attached:

1. a) Copies of all college transcripts
b) Current TSU transcript
c) TSU admission letter for new and newly re-admitted students
d) Pre-entrance nursing examination scores
2. The Admissions Committee will consider students who have submitted their completed application materials by September 15th for the Spring semester and for the Fall semester by March 15th,.
3. Applications received after the deadlines will be returned to the applicants who can apply for the next admission cycle.
4. Students who are admitted must have a health examination which indicates satisfactory health and the required immunizations before starting the nursing major. Immunizations must be up to date.
5. Students must show evidence of current Health Care Provider BLS Status certification, a criminal background clearance, and liability insurance prior to admission to classes in the nursing major (i.e. lecture, learning resources laboratory, and clinical. Students are admitted to the program on a space available basis.

## Progression and Retention Requirements

1. A grade of $C$ or better in lecture and $S$ (satisfactory) in laboratory and clinical evaluation is passing.
2. A grade of $D$ or $F$ is failing. A student who earns a failing grade in a BSN nursing course is not eligible to progress in the BSN program and cannot transfer to the AAS program at Tennessee State University.
3. All general education courses must be completed before beginning junior level nursing courses.
4. 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.
5. All students must earn a passing score on the Comprehensive Program Examination required by the School of Nursing faculty before graduation. The passing score is set by the School of Nursing.

## 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. They may be readmitted on a space available basis.

1. Students who apply for re-admission must meet the program admission requirements.
2. A student who withdraws due to academic reasons will be eligible for readmission but must have passed at least one examination prior to withdrawal.
3. 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.
4. 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 unrestricted Tennessee RN license. RN students must meet with a faculty 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. Admission is once a year in the summer.
The Career Mobility Program is one calendar year in length (3 semesters). Students may enter the program after completing all general education requirements. Upon admission, students can have a total of six hours remaining of pre-requisites in the areas of communication, general electives, or humanities

Upon successful completion of the first two semesters of the nursing major, credit for 30 hours of BSN courses will be noted on the RN-BSN TSU transcript.

| Summer | HR | Fall | HR | Spring | HR |
| :--- | ---: | :--- | ---: | :--- | ---: |
| NURS 3320 | 3 | NURS 3080 | 3 | NURS 4300 | 3 |
| NURS 3002 | 3 | NURS 3250/3251 | 3 | NURS 4360/4364 | 6 |
| Elective | $\frac{2}{2}$ | NURS 3260 | $\frac{3}{n}$ | NURS 4220 | $\frac{3}{12}$ |

## Transfer of RN Nursing Courses

Transfer students from other four year schools must meet the University and School of Nursing requirements for admission and graduation. Students must provide a current transcript, nursing course descriptions, evidence of satisfactory clinical performance, and a letter of good standing from their previous nursing school BEFORE the course(s) are evaluated. Students who have been dismissed from other Schools of nursing are not eligible for admission. Students, who have earned a D, F, or WF, in a nursing course at another school, are not eligible for admission.

The Admissions Committee will determine if 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 University residency degree requirements to complete degree requirements for graduation. Transfer students are accepted on a space available basis.

## Departmental Requirements <br> For Bachelor of Science <br> Degree in Nursing

MAJOR CORE: Fifty Nine semester hours of nursing are required; NURS 3040/3041/3044, NURS 3080, NURS 4280/4284, NURS 3250/3251, NURS 3320, NURS 3100/3101/3104, NURS 4300, NURS 3260, NURS 4140/4144, NURS 4220, NURS 3340/3344, and NURS 4360/4364, NURS 4400.

## 61 Semester Hours

GENERAL EDUCATION CORE: 61 semester hours of University and general education courses are required: Orientation, ENG 1010 and 1020 and 2110 or 2120; COMM 2220, HIST 2010 and

HIST 2020; BIOL 4272,4273; BIOL 2210/BIOL 2211, BIOL 2220/BIOL 2221, BIOL 2400/BIOL 2401; MATH 1110; PHIL 2010; Humanities elective; SOCI 2010; PSYC 2010, PSYC 3510, PSYC 2180; Electives - 5 semester hours.

## Suggested Four Year Plan: Total 120 hours

## Bachelor of Science Degree in Nursing

## Fall

Courses
ENGL 1010
Spring

HIST 2010
HR

MATH 1110
BIO 2210/2211
NURS 1100

Courses

```
ENGL 1020
```

HIST 2020

SOCI 20103
BIOL 2220/2221 4
PSYC 2010

14

## SOPHOMORE YEAR

Fall
Courses
BIOL 2400
ENGL 2110 or 2120
PHIL 2010
PSYC 3510
HUMANITIES ELECTIVE

Spring
HR
Courses
BIOL 4272/4273 4
PSYC 2180 3
COMM 22203
ELECTIVES

NURS 3080 Pharmacology (3). This course focuses on knowledge required by nurses to safely administer and manage pharmacotherapeutic agents. The principles of pharmacology, pharmacokinetics of major drug classifications, potential adverse reactions and drug interactions will be presented as bases for nursing decisions regarding pharmacotherapeutic interventions. Care of the client throughout the lifespan is emphasized. Corequisites: NURS 3040, NURS 3250, NURS 3320.

NURS 3100/3101/3104 Health Promotion, Maintenance, and Restoration I (6). This course focuses on expanding the student's theoretical and clinical knowledge base. This includes substantive content regarding stressors to the respiratory, cardiovascular, renal, reproductive, endocrine, and gastrointestinal systems. The nursing process is used to provide culturally sensitive, holistic, evidenced-based care. Diagnostic studies and pharmacological agents commonly prescribed in conjunction with the management of selected stressors are included. A skills lab component is included with required mastery of advanced skills related to course content. A clinical component is also required and provides opportunities for the student to provide holistic care in acute care facilities. (6 hrs.)Three lecture, two laboratory (NURS 3103), and six clinical hours (NURS 3104) each week. (Formerly NURS 310). Pre-requisite: NURS 3040/3041/3044. NURS 3250/3251, NURS 3320, NURS 3080. Co-requisites: NURS 3340/3344 and NURS 326

NURS 3250/3251 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 (NURS 3251) each week. (Formerly NURS 325) Pre-requisite: NURS 2500; Co-requisites: NURS 3040/3041/3044, NURS 3260, and NURS 3060.

NURS 3320 Professionalism in Nursing (3). This course introduces students to the essential role and principles for professional nursing practice which includes foundations of nursing practice, professionalism, professional socialization and health promotion in nursing. The development of the professional role is discussed with a focus on integration and collaboration with the interdisciplinary health care team. Three lecture hours each week. (Formerly NURS 332) Co-requisites: NURS 3040/3041/3044, NURS 3250, NURS 3080.

NURS 4300 Leadership and Management (3). This course provides an introduction to the dynamic process of leadership within a variety of health care settings and organizational structures in the context of professional nursing practice. The professional nurse's role, influence and contributions as leader, provider and manager of client care and member of the profession are explored. The course meets for three lecture hours each week. Three lecture hours each week. (Formerly NURS 332) Pre-requisite: NURS 4220, NURS 4280/42844, NURS 4360/4364, Co requisites: NURS 4140, NURS 4400.
NURS 3260 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. (Formerly NURS 326) Pre-requisite NURS 2500. Corequisites: NURS 3040/3041/3044, NURS 3250/3251, NURS 4340/4344.

NURS 3280/3284 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 lectures and nine clinical hours (NURS 3284) each week. (Formerly NURS 328) Pre-requisite: NURS 3100/3101/3104, and NURS 3260. Co-requisite: NURS 4220 and NURS 4360/4364.

NURS 4400 Integration of Concepts (2). This course focuses on preparing the student for the National Licensure Examination for Registered Nurses (NCLEX®-RN) by reinforcing, complementing and building upon knowledge previously acquired in the nursing curriculum. This course will also enhance the integration and synthesis of information presented in concurrent courses, Health Promotion, Maintenance, and Restoration of Adult Clients II and Leadership and Management. The nursing process and critical thinking skills will be used to review previously learned nursing concepts as well as concepts currently being presented in the concurrent courses. Pre-requisites: NURS 4220, NURS 4280, and NURS 4360/4364. Co-requisites: NURS 4140 and NURS 4300

NURS 4140/4144 Health Promotion, Maintenance, and Restoration II (9). The course provides a theoretical basis and clinical experience for the practice of holistic nursing for adult patients with critical illness in acute care settings. Emphasis is on applying the nursing process in order to restore the client to the highest level of health possible for that individual. Content addressed in the course will include managing alterations related to neoplastic disease, and of the immunologic, hematologic, and neurologic systems. Critical care topics will cover specific and representative problems requiring heroic interventions to maintain life. Students will use evidenced-based practice to perform comprehensive assessments, plan and provide care, and to evaluate outcomes of nursing actions. Clinical experience is in acute care settings. Concepts of leadership, management, and research are integrated into clinical practice and uniquely applied to the critical care setting.Pre-requisites: NURS 4280/4284, NURS 4220, and NURS 4360/4364. Co-requisite: NURS 4300, NURS 4400.

NURS 4220 Nursing Research (3). This course is an introduction to the research process and the nurse's role in applying research to nursing practice and client care. Emphasis will be placed on critiquing published research studies and research utilization. Pre-requisites: NURS 3100/3101/3104, NURS 3260 and NURS 3340/3344. Co-requisites: NURS 4280/4284 and NURS 4360/4364.

NURS 3340/3344 Mental Health Nursing (6). The focus of this course 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 the environmental factors and the application of developmental systems and stress theories as they relate to the care of clients across the lifespan. Three lecture hours and nine clinical hours (NURS 3344) each week. (Formerly NURS 434). Pre-requisites: NURS 3040/3041/3044, NURS 3080, NURS 3250 and NURS 3320. Co-requisites: NURS 3100/3101/3104 and NURS 3260.

NURS 4360/4364 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. The course consists of three lecture and nine clinical hours (NURS 4364) each week. (Formerly NURS 436) Pre-requisites: NURS 3320, NURS 3100/3101/3104, and NURS 3340/3344. Co-requisite NURS 4280/4284 and NURS 4220.


# AEROSPACE STUDIES 

Commander: Albert Hill Jr., Colonel, USAF Air Force ROTC Detachment 790, Kean Hall (615) 963-5931

## GENERAL STATEMENT

The Air Force Reserve Officer Training Corps (AFROTC) is the largest and oldest source of commissioned officers for the U.S. Air Force. AFROTC's mission is the following: To produce leaders and better citizens for America. AFROTC headquarters is at Maxwell Air Force Base, AL. We teach our students the same curricula that future officers learn at the U.S. Air Force Academy and Officer Training School. Additionally, planners have designed the AFROTC program to recruit, educate, and commission college students based on U.S. Air Force (USAF) requirements. As of August 2002, over 140 ROTC detachments are located on college and university campuses throughout the U.S. and Puerto Rico.

Through cross-town or consortium agreements, students from various universities and colleges in middle Tennessee participate in AFROTC at Detachment 790. Students may enter in their freshman, sophomore, junior, or senior academic year. We also have opportunities for graduate students. Please consult our web site at URL: [http://www.tnstate.edu/rotc](http://www.tnstate.edu/rotc) for a list of schools that we service, scholarships, and other information concerning our program.

## GENERAL MILITARY COURSE (GMC)

For students who enter as freshmen, the first two years of AFROTC, the General Military Course (GMC) consists of one hour of classroom work and two hours of leadership laboratory each week. Note that your institution may accept two courses in Aerospace Studies in lieu of two courses in Physical Education. Please consult your counselor for details. Any full-time student can participate in AFROTC GMC provided they meet age requirements. Non-scholarship GMC cadets are under no service obligation Upon completion of GMC requirements, cadets who wish to compete for entry into the last two years of the program, the Professional Officer Corps (POC), must do so under the requirements of the POC selection. This process uses qualitative factors, such as grade-point average, cadre evaluation, aptitude, and physical fitness test scores to determine a cadet's potential for service in the USAF. After selection, students must successfully complete a four or five-week, summer field training encampment at an assigned USAF base before entering the Professional Officer Corps.

## PROFESSIONAL OFFICER COURSE (POC)

Cadets enrolled in the Professional Officer Course (POC) attend class three hours per week and participate in a weekly leadership laboratory lasting two hours. In the POC, cadets apply what they have learned in the GMC and at field training encampment. The Commandant of Cadets entrusts POC cadets to lead the leadership laboratories. The underlying goal of the leadership laboratory is for POC cadets to teach GMC cadets how to perform as airmen and master general military customs and courtesies. POC class sizes are small. The instructor places emphasis on group discussions and refining communication skills. Classroom topics include leadership, management, communication, and U.S. national defense policy. Once enrolled in the POC, cadets enlist into the Air Force Reserve and incur a service obligation. This entitles them to a monthly, nontaxable subsistence allowance currently $\$ 400.00$ the first year of the POC and $\$ 500.00$ the second year of the POC.

## FIELD TRAINING

Field Training is, in most cases, a cadet's first exposure to a working USAF environment. The goal of Field Training is to develop military leadership and discipline and refine the skills cadets learned in the GMC. The Field Training environment allows commissioned officers to evaluate each cadet's potential to serve as an officer. Field Training includes aircraft and aircrew orientation, USAF professional development orientation, marksmanship training, junior officer training, physical fitness, and survival training. The USAF provides uniforms, lodging, and meals at no cost to the cadet. Additionally the USAF pays cadets for their travel expenses if they opt to use their privately owned vehicles or commercial air conveyance to travel to and from summer encampment. Additionally, after applicable deductions, Field-Training cadets earn about \$650 for the four-week encampment and about \$750 for the five-week encampment.

## UNIVERSITY CREDITS AND CURRICULUM

Students must work with their institutions and departments to determine whether AFROTC classes will receive core, core elective, general elective, or any credit at all. A Tennessee State University minor in Aerospace Studies consists of 22 semester hours and is available to those students who successfully complete GMC and POC curricula. A minor may also be obtained at the other institutions.

FRESHMAN- (GMC)

| AERO 1010 | 1 |
| :--- | :--- |
| AERO 1020 | $\frac{1}{2}$ |

SOPHOMORE- (GMC)
AERO 2010
AERO $2020 \quad \frac{1}{2}$
JUNIOR- (POC)
AERO 35103
AERO 35203
ELECTIVE*
SENIOR- (POC)
AERO 45103
AERO 45203
ELECTIVE* $\quad \frac{3}{9}$
*Cadets may take this course at any time during their junior or senior years. However, they must select from 300- to 400-level Social Science offerings.

## SCHOLARSHIP PROGRAM

Air Force ROTC HBCU Scholarship Program - Provides scholarships covering up to $\$ 15,000$ annually for Tennessee State students enrolled in the Air Force ROTC program. In addition, scholarship recipients receive a tax-free monthly stipend ranging from $\$ 300-500$ and an annual textbook allowance of $\$ 750$. To qualify, students must meet the general AFROTC scholarship requirements of a 2.5 cumulative undergraduate GPA, passing scores on the Air Force Officer Qualifying Test (AFOQT) and Air

Force Physical Fitness Test (PFT), meet Air Force height and weight standards and pass a certified Department of Defense Medical Review Board(DoDMERB) physical examination. The AFOQT, PFT and DoDMERB are all scheduled by Air Force ROTC. Students must maintain a 2.5 cumulative GPA to retain their scholarship.

Upon graduation, students are commissioned Second Lieutenants in the U.S. Air Force and incur a minimum 4-year active duty military commitment.

## COURSE DESCRIPTIONS

AERO 1010, 1020 The Foundations of the United States Air Force, is a survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, USAF officer opportunities, and an introduction to communication skills.

AERO 2010, 2020 Air Power History is designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles to the war on terrorism. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF and space power.

AERO 3510, 3520 Air Force Leadership Studies, is a study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply advanced leadership and management principles.

AERO 4510, 4520 National Security Affairs/Preparation for Active Duty, examines the U.S. national security process, regional studies, advanced leadership ethics, and USAF doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting the military. Within this structure, we continue to emphasize the refinement of communication skills.

AERO 1011L-2021L; 3511L - 4521L Leadership Laboratory, all cadets enrolled in the GMC or POC must take leadership laboratory each semester. The one and one half hours per week is typically taken throughout a cadets' enrollment in AFROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each cadets' leadership potential. Leadership Laboratory involves a study of USAF customs and courtesies; drill and ceremony; career opportunities in the USAF, and the life and work of an USAF officer. Cadets develop advanced leadership skills in a practical laboratory. Co requisite: Cadets must enroll in the equivalent Aerospace Studies class.


# ACADEMIC ENRICHMENT, ADVISEMENT AND ORIENTATION 

Monetha R. Reaves, D. A., Director<br>102, Harold M. Love Sr. Learning Resources Center

Faculty: M. Arbabshirani, H. Adi, M. Akbari, S. Arefin, J. Asamani, J. Grimes, C. Helton, H. Kuzat, M. Shirani, I. Talavaro, D. Thomas, J. Thompson.

## General Statement

The Center for Academic Enrichment, Advisement, and Orientation (AEAO) administers the University's Developmental Studies Program. It manages the University's academic support laboratories: the Writing Center, the Math Lab, the Tutorial Computer Lab, the ICAN Peer Tutoring Program, and the Reading Lab. It also has responsibility for planning and implementing advisement strategies and enrichment programs and for managing 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 (AEAO 1000) introduces the student to University policies, exposes the student to career interests, and provides opportunities for selecting a major. Orientation for Non-Traditional Students (AEAO 1010) 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.

The Advisement Center is the academic counseling component of the AEAO. The Center handles the academic matters of students who take 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 depending on the nature of the services needed.

## Academic Support Services

Because of the multicultural nature of our student body as well as other diversity factors, students have varying educational needs and goals that must be addressed if they are to succeed academically. Academic Enrichment seeks to fulfill student needs through a variety of presentation methods both online through the Virtual Learning Center and on ground through labs and a tutorial center located in LRC. A student-centered learning environment, the Learning Center supports the enhancement of basic and advanced skills in coursework at all levels. There are tutorial labs and online materials 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 ICAN Center provides assistance, both online and on ground, in major field courses. The services in the Virtual Center are available twenty-four hours a day, seven days per week; on ground services are available during the week on both a walk-in and appointment basis depending on the nature of the assistance needed. All support services are free to TSU students.

## The Developmental Studies Program

The Tennessee Board of Regents of State University and Community College System required that, beginning in fall, 1985, fresh-
man students seeking regular admission to a technical institute, community college, or university within the Tennessee State Board of Regents (TBR) who meet the criteria listed below must participate in assessment and placement as a condition of enrollment.

At present, ACT/SAT scores are used for placement purposes. Sub scores in writing of 18, math of 18, and reading of 18 or SAT verbal sub scores of 459 , math sub scores of 459 and a composite score of 899 (The score is used for reading placement) may be used for placement purposes.

Students who wish to challenge their ACT/SAT placement may take COMPASS, a computerized adaptive placement test. Those who take this test as a challenge must abide by the placement. The fee for challenge testing is $\$ 20.00$.

COMPASS is also used for placement purposes for non-traditional students who do not have a valid ACT or SAT.

Transfer students who do not transfer college-level English or math from their previous institutions must either present a valid ACT/SAT exempting them from developmental placement or must undergo placement testing with COMPASS.

The COMPASS test has three (3) components to measure the student's readiness for college-level courses: Writing, Reading Comprehension, and Mathematics. The Testing Center periodically offers the COMPASS Test during each semester. Students may contact the Advisement office (963-5531) to schedule a time to take the COMPASS.

## Diagnostic Advancement

The Developmental Studies Program at Tennessee State University provides students in developmental courses the opportunity for diagnostic advancement into the next level course at the beginning of the term. For details, the student should consult the course instructor or the Director of Academic Enrichment. Students who diagnostically advance as a participant in the Flexible Delivery Program are required to participate in supplemental instruction. Students who are taking developmental courses to remove high school deficiencies may not be diagnostically advanced out of English and reading, but they may be diagnostically advanced from Elementary Algebra into Intermediate Algebra.

## Class Participation

Students are expected to attend regularly all courses in which they are enrolled. Student participation in developmental studies courses is mandatory, and monitoring is ongoing. Irregular attendance or any substantial number of unexcused absences may weigh adversely in the consideration of grades or any petition for a special academic privilege such as make-up assignments and/or examinations. To be allowed to make up work, students must present appropriate documentation to the classroom instructor. Students who have excused absences must arrange with the instructor to make up class and laboratory work immediately. Information on attendance and participation becomes a part of the student's file.

## Class Withdrawals

Students placed and enrolled in DSP courses are not permitted to withdraw except for extenuating circumstances. Students who are denied permission to withdraw may appeal their denial to the individual designated by the institution to hear withdrawal appeals.

## Credit Hours Earned

All credit hours earned in courses preceded by the course prefix DSP (DSPW 0800, DSPM 0800/0850, DSPR 0800, etc) will be in addition to the hours required for graduation. Grades earned in these courses, however, are computed in the student's grade point average.

## Readmission After a Suspension

In order to be readmitted, a student in DSP who has been suspended must have the recommendation of the Director of Academic Enrichment and must comply with all readmission conditions.

## Grading

Grades of completion in DSP courses are A, B, and C. A student will be judged to have achieved minimum competency if he/she achieves an average of at least 70 percent. D's are not awarded in DSP courses. Students who receive IP's or W's in DSP courses must re-enroll in the courses. The I may be awarded if the student cannot take the final examination because of extenuating circumstances. If the student receives an I, he/she does not re-enroll in the course.

## Testing

All developmental studies 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 developmental courses.

## Transfer of Developmental Credit

Developmental work successfully completed at another Tennessee Board of Regents institution (and shown on the student's transcript) will be accepted as equivalent to TSU courses and /or laboratories that cover the same skills and competencies as the courses or laboratories at the other institution. A student who transfers developmental work from another TBR institution may, however, be referred to the Director of Academic Enrichment by a classroom instructor if the student demonstrates deficiency or weakness in a college-level program. Forms for referral are available from the Director's office. If it is determined that the referred student is in need of course work or laboratory assistance, the student will be required to enroll in the appropriate course or laboratory. The student, however, will not be required to enroll in a course at another institution. Students who have been tested and have taken course work in non-TBR Institutions, whether in or out-of-state, may still be required to undergo ACT/SAT/COMPASS assessment for placement.

## Course Descriptions

## Orientation

AEAO 1000 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 semester of enrollment.

AEAO 1010 Orientation for Non-Traditional Students (1). A course designed primarily for non-traditional adult students (21 years of age or older). I It may be taken instead of the major orientation course. Students
under the age of 21 may also take the course if there are problems scheduling the required orientation class. The adult learner will be introduced to the college community and to all facets of university life. Effective study habits, student support services, interpersonal skills, and basic computer skills are included. The class will meet three times during the semester. The remainder of the work will be completed via the Web. The course must be taken during the first semester of enrollment.

AEAO 1020 Academic Recovery (0). A non-credit course designed to monitor students who have been readmitted to the University after suspension, as well as those students who have chosen to sit out a semester and students who have attempted a developmental course twice. In addition to monitoring a student's progress, this course covers applied study skills and activities to assist students in regaining their "good standing" status at the University. The class meets two days a week for one hour. Academic study skills are taught during the first day, and tutorials in the area of weakness are covered on the second day. IT IS REQUIRED OF ALL READMITTED STUDENTS IN THE DEVELOPMENTAL STUDIES PROGRAM. The course is co-requisite to the DSP course the student must repeat and must be taken upon re-enrollment into the University.

## Basic Studies

Basic (Remedial) courses are offered on the Tennessee State University campus by Nashville State Community College.
DSPM 0700 Basic Mathematics (3). A study of mathematical competencies that include whole numbers, fractions, decimals, ratio and proportion, percents, and topics in algebra that include signed numbers, exponents, algebraic expressions with sums and differences, along with solving algebraic equations. If the student is placed by ACT/SAT/COMPASS, the course is prerequisite to DSPM 0800-0850, all college-level math, and all math-based courses, such as chemistry, physics, accounting, and statistics.
DSPR 0700 Basic Reading (3). A course which helps to improve students' reading comprehension. Topics include vocabulary improvement, literal reading comprehension (recalling story detail, recognizing sequence, identifying main ideas, and identifying major and minor support), and inferential reading comprehension (drawing conclusions, making inferences, and recognizing implied main idea). If the student is placed by ACT/SAT/COMPASS, the course is prerequisite to DSPR 0800 and all intensive college-level reading courses, such as history, psychology, sociology, biology, and chemistry.
DSPW 0700 Basic Writing (3). A course which focuses on grammar and sentence skills, leading to the writing of effective paragraphs and essays. Writing skills may be further improved through a computer-assisted laboratory. If the student is placed by ACT/SAT/COMPASS, the course is prerequisite to DSPW 0800 and all college-level English and language courses.

## Developmental Studies

DSPM 0800 Elementary Algebra (3). Development of mathematical competencies prerequisite for studying college algebra. This course will provide the student with a foundation in the following topics for fulfilling the requirements of elementary algebra: fundamental operations and inequalities, graphing, factoring, exponents and polynomials. (Principal topics covered: integers and rational numbers, introduction to algebra, equalities and inequalities, word problems, and polynomials). A student who enrolls in the course will spend three hours per week in the classroom and at least one hour per week in mandatory lab. If the student is placed by ACT/SAT/COMPASS, the course is prerequisite to DSPM 0850, all college-level math courses, and all math-based- courses, such as chemistry, physics, accounting, and statistics.

DSPM 0850 Intermediate Algebra (3). A course designed to develop mathematics competencies prerequisite for studying college algebra. This course will provide the student with a foundation in the following topics for fulfilling the requirements for intermediate algebra: algebraic fractions, graphing equations, and inequalities, systems of equations, radical expressions and quadratic equations. The ability to select and to use appropriate approaches in solving problems that arise in everyday life and as a tool for thinking logically and reasoning critically in decision-making will be emphasized. Prerequisites: successful completion of DSM 0800, one year of high school algebra, or the equivalent. A student who enrolls in this course will spend three hours per week in the classroom and at least one hour per week in mandatory lab. If the student is placed by ACT/SAT/COMPASS, the
course is prerequisite to all college-level math courses and all math based courses, such as chemistry, physics, accounting, and statistics.

DSPM 0990 Geometry (3). A basic course in geometry for students who did not have geometry in high school. It may be used for removal of high school unit deficiency.
DSPR 0800 Developmental Reading (3). A course designed as an experience in reception and processing of ideas in the evaluation, application, and retention of textual materials and designed to provide strategies, applying high-level reasoning skills to identify, formulate, and solve problems. Emphasis will be placed upon methods and procedures for use with interdisciplinary textbooks designed to provide a link across the disciplines for directive work in all fields of college study. A student who enrolls in this course will spend three hours per week in the classroom and at least one hour per week in mandatory lab. If the student is placed by ACT/SAT/COMPASS, the course is prerequisite to all intensive college-level reading courses, such as history, psychology, sociology, biology, and chemistry.

DSPS 0800 Learning Strategies (3). A course designed to provide an integrated system of instruction, application and assessment in major college survival skills essential for success. Modules on general study skills and specific techniques for studying reading, English, and math are included. The course must be taken during the first semester of enrollment.

DSPW 0800 Developmental Writing (3). A course designed to focus on the writing of sentences, paragraphs, and short essays, with attention to grammar, spelling, punctuation, vocabulary and similar matters as needed. Readings in current events and popular literature will provide the basis for written assignments. A student who enrolls in this course will spend three hours per week in the classroom and at least one hour per week in mandatory lab. If the student is placed by the ACT/SAT/COMPASS, the course is prerequisite to all college-level English and language courses.

# TSU TESTING CENTER 

S. Yancey Padget, Ph.D., Director<br>Avon Williams Campus, Suite C<br>615-963-7111

The TSU Testing Center is a service unit within Academic Affairs and it administers both paper-and-pencil tests and computeradministered standardized tests that support the academic programs of the University and address community needs for admissions tests, distance learning, workforce development, credentials, and licenses. Services provided through the Testing Center are available to TSU students and members of the community. The Testing Center provides special accommodations for test candidates with appropriately documented disabilities. The TSU Testing Center is a member of the National College Testing Association and of the Consortium of College Testing Centers, a network that facilitates distance education nationally and internationally.

## Student Assessment

The Testing Center facilitates admission to the University by administering the ACT on all national testing dates and the ACT Residual once a month. During orientation and registration the Testing Center administers the University placement test, COMPASS, for all students who are required to take it. Many students elect to earn credit by examination and the Testing Center routinely administers the CLEP (College Level Examination Program) and Dantes tests. As students progress through programs of study they are required to take the Rising Junior Exam, the Academic Profile, for admission to upper division status. In addition, certain academic/professional programs also require specific entrance tests, such as the NET (Nurse Entrance Test) and the Praxis I / PPST (Pre-professional Skills Tests), and these are also administered by the Testing Center. The University is required to document student outcomes and the Testing Center participates in this effort by administering selected Major Fields Tests as well as the Senior Exit Exam, the ETS Academic Profile, which is required of all graduating students.

To facilitate admission to Graduate and Professional Schools, the Testing Center administers the Miller Analogies Test (MAT) twice a month and offers the GRE and GMAT through the TSU-ETS Computer-Based Testing Lab. The Testing Center provides registration packets for the MCAT (Medical College Admission Test), LSAT (Law School Admission Test), and the OAT (Optometry Admission Test), and conducts these tests according to the nationally published dates.

## TSU-ETS Computer-Based Testing Lab

The TSU Testing Center operates an ETS Computer-Based Testing Center, Site \#7741, in Room 220 within Avon Williams. This

Center is open to the public and offers the following tests: GRE (Graduate Record Examination TOEFL (Test of English as a Foreign Language); Praxis I/ PPST (Pre-professional Skills Tests); and assessments for the NBPTS (National Board of Professional Teaching Standards).

The phone number for this facility is 963-7386 and the Lab is open for testing sessions on the following schedule: Mondays from 12:30 to 4:30 p.m. and 5:00 to 9:00 p.m. and Tuesdays from 8:00 a.m. to 12:00.

## Proctored Tests and Distance Education

Students involved in distance education through correspondence courses and web-based courses are often required to take proctored examinations. This assures accrediting organizations that students taking their examinations have provided proof of identity and taken their tests under supervision and according to standardized procedures. The TSU Testing Center supports this effort to maintain the integrity of distance and asynchronous programs and schedules proctored examinations for students who need to take paper or web-based tests. This service is also provided for businesses and other organizations that need to schedule proctored tests as a part of employment screening procedures.

## GED and Workforce Development

The GED (General Educational Development) Tests offer adults who have not earned a high school diploma a second opportunity to demonstrate their skills and knowledge and earn a high school credential. The primary reasons that adults give for seeking a GED diploma are for employment or for higher education. The TSU Testing Center contributes to workforce development and access to college by conducting GED testing twice a month at the University site and once a month in several surrounding counties.

A contribution to the assimilation of immigrants, and other non-native speakers of English, into the workforce is made through the routine administration of the GED test in Spanish and of the Test of English as a Foreign Language (TOEFL)required by many employers as evidence of communication skills in English.

## Certifications and Professional Licenses

The Testing Center cooperates with a number of credentialing agencies and test companies to administer a variety of national examinations. The Testing Center routinely administers the following examinations according to the national schedule for each test:

Praxis II/ National Teacher Exams
School Leaders Licensure Assessment \& School Superintendent Assessment
Professional in Human Resources \& Senior Professional in Human Resources
Pharmacy Technician Certification
Board of Pharmaceutical Specialties Certification
National Opticianry Competency Exam \& Contact Lens Registry Exam
Advanced American Board of Opticianry \& National Contact Lens Examiners
Certified Diabetes Educator
American Health Information Management Technician \& Administrator
Certified Financial Planner
Other certification tests are also administered when there is sufficient interest within the Nashville and middle Tennessee area.


# The University Honors Program 

Sandra W. Holt, Ph.D., Director<br>Learning Resources Center

Faculty: A. Al-Hadid, , M. Bertrand, W. Billings, Y. Clark, D. Daniels, D. Holder, D. Gendron, S. Holt, H. Houston, J. Irby, L. James, C. Johnson, G. Johnson, P. Kahlon, M. Karim, W. Latham, L. Lewis, E. Martin, M. McDonald, D.L. McGahey, C. McGinnis, J. Miglietta, J. McKinney, M. Mazzone, C. Okoro, E. Orlando, J. Parham, N. Pearson, E. Phillips, L. Powers, M. Rivera, P. Roberts, E. Schmeller, K. Semenya.

General Statement: The University Honors Program (UHP) promotes positive and life-long learning, scholarly inquiry, and a commitment to the service of others. From its inception, the primary goal of the Program has been to create and maintain a community of academically bright and talented students who would serve as campus leaders and role models, impacting positively on the university and enhancing the mission of Tennessee State University. The Honors Program at Tennessee State University stresses excellence as a way of life.

The Program: The UHP offers special opportunities for exceptional high school graduates or college students with a record of achievement and a sincere desire to lead and learn. The UHP is designed to offer the academically exceptional student an educational experience that is a step beyond the norm.

Through the Honors curriculum and special programs, gifted students are challenged, stimulated and inspired intellectually to explore their potential and reach new levels of academic excellence. Students are exposed to an advanced curriculum that provides opportunities for critical analysis, creative achievement, intensive research and scholarly thought. Spirited exchange with classmates and teachers is offered along with the most inspiring seminars available at TSU.

Course Work: UHP course work is concentrated in the freshman and sophomore years, when students will take enriched versions of general education courses. At the junior and senior levels, when students are fully involved in their major area of specialization, courses will be supplemented with interdisciplinary honors colloquia. Before graduation, students are expected to complete a senior thesis. The thesis is defended before a committee, or a recital 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 UHP 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:

- a variety of social and cultural activities
- challenging courses designed especially for UHP students with limited enrollment
- intellectually-oriented faculty and peers
- grant opportunities to fund student research projects during the summer
- domestic exchange to outstanding universities through Na tional Student Exchange
- use of the Honors Center which offers an atmosphere for study and relaxation
- special internships and graduate study opportunities

Admission/Retention Requirements: In addition to the general application for admission to the University, the prospective Honors student must also complete the application for admission to the UHP. There are no additional fees associated with participation in the UHP.

Admission is made on the basis of the student's ACT/SAT scores and the high school record.

Baccalaureate students who do not participate in the UHP as entering freshmen may be admitted later by recommendation of a University faculty member. The latest point for a student to enter the UHP is the first semester of the junior year.

To remain in good standing in the Program, a student must maintain a minimum cumulative grade point average of 3.4 , based on all course work. A student may withdraw from the Program at any time, but should first notify the Honors office.

Graduation with University Honors: At commencement, students who complete the requirements of the Honors Program will graduate with "University Honors." They are awarded the Honors senior pin and the scarlet and gold cord.

These requirements include: 1) taking required Honors courses, 2) giving a recital or writing and defending a senior thesis. The student will select a topic for the Honors thesis with the approval of his or her major advisor and the instructor of the course. The topic may 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 the topic in his or her senior year and defend it before the Honors Thesis Committee and such other persons who may be invited to sit for the defense, and 3) maintain a cumulative average of at least 3.4.

| Semester | Freshman Year <br> Credit Hours |
| :--- | ---: |
| ENGL 1011-1021* | $3-3$ |
| BIOL 1012-1022 | $4-4$ |
| BIOL 1112-1122 | $4-4$ |
| MATH 1111-1121 | 3 |
| THTR 1021 | 3 |
| CHEM 1112 | 3 |
| HIST 2011-2021 | $3-3$ |
| ART 1011 | 3 |
| MUSC 1030 | 3 |
| HONR 1002* | 1 |
|  |  |
|  | Sophomore Year |
| ENGL 2018-2028* | $3-3$ |
| COMM 2030 | 3 |
| COMM 2202* | 3 |


| HONR 3002* | 3 |
| :--- | :--- |
| HONR 3012 | 3 |
| AFAS 3952 | 3 |
| BIOL 3920 (MARC) | 4 |
| BIOL 4920 (MARC) | 4 |

## Senior Year

HONR 4002* 3
HONR 40123
HONR 40323
HONR 4102* 3
*Required honors courses. All other honors courses are electives.

## Course Descriptions

HONR 1002 Honors Orientation (1). This course is designed as an orientation class for UHP freshmen. It is also an opportunity for professional/personal development. Students are exposed to corporate and business professionals who conduct modules on all aspects of professional growth. Students also prepare and present a professional portfolio.

HONR 3002 Honors Junior Colloquium (3) (formerly HP 300H). Lectures, discussions, and student writing based upon a central theme - such as "Famous Biographies" - 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/she deems it advisable.

HONR 3012 Honors Special Topics (3) (formerly HP301H). A junior level course designed to expose students to current issues, personalities, activ-
ities, 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. This course is usually experiential in nature.

HONR 4002 Honors Senior Colloquium (3) (formerly HP 400H). Lectures, discussions and student writing based upon a central theme - such as "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/she deems it advisable.

HONR 4012 Honors Special Topics (3) (formerly HP 401H). A senior level course designed to expose students to current events, 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. This course is usually experiential in nature.
HONR 4032 Honors Summer Seminar (3) (formerly HP 403H). 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. The goal may be accomplished through actual travel to a different culture or through studying "the city as text." May also be offered in the Spring semester.

HONR 4102 Honors Senior Thesis (3) (formerly HP 410H). The student will be allowed freedom of choice in selecting a topic for his/her Honors thesis. The topic may, for example, be related to the student's major field of interest or to a colloquium taken in the UHP. Insofar as possible, advisors for the honors thesis will be members of the Honors faculty. The student will defend it before the Honors Thesis Committee and such other persons who may be invited to sit for the defense.


# The Avon Williams Campus Center for Extended Education and Public Service 

Dr. Evelyn E. Nettles, Associate Vice President for Academic Affairs Suite 339, Avon Williams Campus 615-963-7003

The Avon Williams Campus (AWC) of Tennessee State University is located at 330 10th Avenue North, in the heart of downtown Nashville. This facility, which serves as the hub for the University's night, weekend, and distance education offerings, was named for the noted Civil Rights attorney Avon Nyanza Williams Jr. who brought litigation that sought to end segregation in public higher education in the state of Tennessee. At the Williams Campus, traditional and nontraditional students are afforded the opportunity to earn a degree during the day, in the evening, on weekends, and via distance education delivery systems. Both undergraduate and graduate degree programs are offered at this facility. The Williams Campus houses the offices of Continuing Education, Distance Education, Off-Campus Programs and Student Support Services for Adult and Distance Learners (The One-Stop-Shop). Through academic programming and reliable and efficient student support services, the University reaches beyond its walls to serve citizens throughout the state and around the globe.

## Center for Extended Education and Public Service

The Center for Extended Education and Public Service is the administrative unit at AWC responsible for coordinating academic and community service outreach that advances TSU's mission of instruction, research, and service. It is also the administrative unit responsible for the operations of the Avon Williams Campus. Programs offered through Extended Education are designed to meet the professional, career development, personal and civic awareness needs of persons in the University's service area, and among select client groups throughout the state and the nation. When specific needs are identified, 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. Information about programs offered through the Center is detailed below.

## Student Support Services for Adult and Distance Learners The One-Stop-Shop

The goal of the Office of Student Support Services for Adult and Distance Learners or The One-Stop-Shop is to provide a single point of access for students seeking enrollment and other support services. The primary objective of this unit is to remove barriers, provide accurate and timely information, and anticipate the needs of nontraditional students. This unit administers the Geier Nontraditional Student Scholarship and provides recruitment, admissions, and financial aid services to all nontraditional students. Nontraditional students have access to the Counseling Center, Career Placement, Disabled Student Services, Graduate and Professional Opportunities, and Minority and International Affairs through The One-Stop-Shop. Academic advisement for students enrolled in the Regents Online Degree Program is also located within this unit. The One-Stop-Shop is committed to providing quality service to all students. Contact the Office of Student Support Services at (615) 963-7003 or by email at AWC_StudentSup port@tnstate.edu for more information.

## Off-Campus Programming at TSU

The purpose of off-campus programming is to extend educational opportunities to the entire Middle Tennessee community. This unit provides greater access to TSU courses/programs by extending the "classroom" to areas where students live and work. Personnel within this unit provide support services to off-campus students. Sites are located at community colleges and high schools throughout the Middle Tennessee area. For a current listing of off-campus sites, visit www.tnstate.edu or call 615-9637003.

## Distance Education and Multimedia Services

## Distance Education

Distance education at Tennessee State University allows the Institution to extend its resources in the areas of instruction and service to citizens within the state of Tennessee and to persons around the world. Classes are offered through various technological delivery systems including interactive video instruction, video independent study, TSU online, and the Regents Online Degree Program. All distance education classes are planned and conducted in accordance with the academic requirements and regulations of participating academic colleges and schools. Described below are the various types of distance education courses offered at TSU.

- Video Independent Study Program (VISP) - Video Independent Study Program offers a flexible alternative to traditional courses. VISP courses require the student to independently review and study pre-recorded videos. Students also read textbook assignments and complete projects, papers, and examinations. A mandatory orientation session on the first day of class is required. Other sessions are scheduled throughout the semester for content review and examinations. Students are required to attend all scheduled class meetings. On the orientation session date, all enrolled students are loaned a set of video tapes from the Avon Williams Campus Media Center. These video sets must be returned to the Center by the specified date at the end of the semester. VISP courses are designated in the course schedule as section 97.
- Interactive Video Courses - Interactive video courses allow TSU to broadcast live instruction to enrolled students at remote sites. These sites include other colleges, universities, and school systems. The video conferencing classrooms allow the instructor to communicate in real time via both audio and video. Interactive video courses are designated in the course schedule as section 97A.
- TSU Online Program - TSU Online courses are delivered via D2L, the University's online course management system. Students are required to read assignments, participate in discussion groups, and communicate with professors and other students by email. In addition, students are responsible for reading textbook assignments, completing papers and projects, and taking examinations. As the course is delivered com-
pletely online, students must have proficient computer skills and access to a computer with the following minimum requirements:

1. Administrative rights to download software, change computer settings, etc.
2. A dependable internet service provider (ISP).

Students are required to attend a face-to-face orientation or complete an orientation module online prior to attending the course. TSU online courses are designated in the course schedule as sections 98.

- Regents Online Degree Program (RODP) - Tennessee State University has joined with the other Tennessee Board of Regents (TBR) institutions in offering the Regents Online Degree Programs. The online degree program currently consists of two bachelor degrees: Bachelor of Professional Studies with a concentration in Information Technology or Organizational Leadership and Bachelor of Interdisciplinary Studies. Courses offered through these programs are delivered completely online although some courses may require proctored tests.

RODP courses are designed to meet the needs of the adult student who cannot attend school because of family, work, and/or other obligations. Students interested in pursuing one of these degrees must apply to TSU and meet the general admissions requirements. Upon acceptance to TSU, the student must meet with the RODP coordinator in person or by telephone to plan a program of study.

RODP courses are designated as section R50. RODP course fees are charged on a per hour basis and are in addition to standard course fees. While these courses are designed for students majoring in the degrees listed above, all TSU students may enroll in RODP courses as approved by their faculty advisor.

## For more information, visit the RODP website at http://www.tnstate.edu/eeps/rodp_info.htm.

## Multimedia Services

The Office of Distance Education also comprises the Multimedia Services unit. The goal of Multimedia Services is to enhance the teaching and learning process in the classroom, distance education and continuing education programs by providing leadership, support and a broad range of services to Tennessee State University faculty, staff and students. This goal enables the University to incorporate existing and emerging technologies in the learning environment. The unit (1) provides training in the use of educational technology; (2) assists faculty develop, implement and assess the effectiveness of advanced research-based teaching and learning methodologies, including multimedia learning; and (3) increases the use of technologies in support of technology-enhanced courses, online courses and other distance learning environments. For more information, contact the Office of Distance Education and Multimedia Services at (615) 963-7003.

## Continuing Education

Non-credit courses are coordinated through the Office of Continuing Education. The unit offers courses/activities throughout the year both on and off campus in response to special client needs and for the greater community. The instruction is supported by regular and part-time faculty and it is designed to meet the special needs of both the vocational and avocational learners. All instruction is based upon participatory evaluation rendered by those who are enrolled. Most instructional activities are offered for enrollment on an individual fee basis, but selected activities are planned with client groups and they are delivered under special contracts.

Continuing Education Units (CEU) are awarded to participants of selected instructional activities that are approved within the published guidelines. Institutional records of such learning are maintained by the Office of Continuing Education and are available upon written request by the student.

- Conferences, Courses, and Seminars - Conferences provide an opportunity for participants, members of the University community, and highly qualified resource persons to share information and explore new ideas that will improve job performance or complement their academic interests. These conferences and institutes are tailored to reflect the needs of the requesting client group. The format used in short workshops and seminars vary with the type of program, but they are always designed to meet the expressed needs of groups served.
- Non-Credit Courses - Courses are offered to meet specific needs expressed by the public and by local business and industry. These courses are listed on the Center's web page at www.tnstate.edu


# Institute of Agricultural and Environmental Research 

Stephen H. Kolison, Jr., Ph.D., Dean and Research Director 125 Farrell-Westbrook Agricultural Research and Extension Complex


#### Abstract

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## General Statement

The Institute of Agricultural and Environmental Research (IAgER) is the principal agricultural, natural resources and environmental research division of Tennessee State University. With some 30 researchers holding terminal degrees in their fields, 7 master's degree level researchers, and 14 research and administrative support staff, IAgER is one of the three major research centers at Tennessee State University. Annually, it receives about $\$ 2.5$ million appropriation from the United States Department of Agriculture for research and facilities, and about \$736,000 in State and University funds specifically for woody ornamental crop research. In addition, researchers in IAgER attract an average of more than $\$ 1,000,000$ annually through grantsmanship efforts. IAgER researchers received their education from outstanding universities throughout the United States and from several countries around the globe. At IAgER, we are committed to improving the lives of all the citizens of Tennessee and other regions. We attach great importance to serving the population of our state and nation that has traditionally been underserved. As the economic boundaries between countries rapidly disappear, IAgER is also committed to exploring opportunities that will enhance the ability of the food systems industry of Tennessee and the nation to compete in the global marketplace.

To take these commitments to new frontiers, our scientists are involved in research activities related to animal production systems, biotechnological applications to food safety concerns, the production of plants with desired characteristics, small farm sustainability, environmental protection, and the marketing of agricultural commodities that are economically important to our state and other regions. To facilitate these efforts, we have a research complex that consists of excellent facilities in Nashville and McMinnville.

The Institute of Agricultural and Environmental Research is organized into five multidisciplinary research teams: Animal and Alternative Livestock Research Team; Economics and Policy Research Team; Environmental Protection and Enhancement Research Team; Food Safety, Nutrition and Family Well-Being Research Team; Nursery, Medicinal, and Alternative Food Crops Research Team. This approach allows us to address research problems from a more holistic perspective while maximizing our resources.

## Animal and Alternative Livestock Research Team

Samuel N. Nahashon, Ph.D.<br>Team Coordinator

## Statement of the Issue

Animal agriculture in Tennessee and the nation is diverse, with farmers and ranchers raising traditional livestock as well as considering non-traditional livestock alternatives. The thrust of this team is to address issues concerning breeding, nutrition, basic physiology, production, management, and marketing of traditional and alternative livestock and conducting research activities of relevance to the economy of Tennessee and the nation. Research efforts in the area of non-traditional alternative livestock include guinea fowl and goats. Beef cattle and chickens represent our research activities in traditional areas. Specific goals of the team are based on the following concerns: 1) the desire for alternative meats is increasing because of an increasingly diverse U.S. consumer demographics, 2) there is need for alternative enterprises to replace tobacco, a major cash crop in Tennessee, because the demand for tobacco products is declining, 3) the limited acreage typically found on small farms affect the economic viability of agricultural enterprises, and 4) Increasing concern over management practices that could compromise safety of livestock products and public health.

## Priority Research Areas:

- Develop and introduce competitive meat goat and guinea fowl production system for small farmers in Tennessee as alternatives to beef cattle and traditional poultry production, tobacco farming, and other farming activities for which they are losing markets, or are likely to lose market share.
- Evaluate economic impact and marketing strategies for the goat industry in Tennessee.
- Conduct applied and basic research in meat goat nutrition and evaluate various forage systems for meat goat production.
- Assess metabolic indices in meat goat and beef cattle consuming endophytic tall fescue to identify mechanisms through which ergopeptine alkaloids linked to fescue toxicosis reduce productivity in the meat goat and beef cattle production systems.
- Optimize nutrient requirements for the guinea fowl and introduce management practices for improving their reproductive and production efficiency.
- Utilize functional genomics tools to improve poultry production efficiency, ensure quality of poultry products and safeguard the environment from pollutants of inefficient poultry production systems.


# Economics and Policy Research Team 

Fisseha Tegegne, Ph.D. Team Coordinator

## Statement of the Issue

In a highly dynamic global economy, the challenges facing applied economists and policy makers continue to change and expand. In the Southeastern region of the United States, including Tennessee, issues of rural economic development, agriculture and the food system - production, marketing, management, the environment - and public policy related to agribusiness are among the most challenging and rewarding areas of agriculture/agribusiness. The Economics and Policy Research Team strives to generate knowledge, enhance skills, and disseminate unbiased information derived from application of economic and business principles to the above issues at the state, regional, national, and global levels. Findings from the team's research are expected to provide useful input for policy makers.

Priority Research Areas:

- Rural economic development.
- Production, marketing, management, natural resources, and environmental issues in agriculture and the food system.
- Policy analyses.
- Economics of Agricultural Biotechnology and Bio products: Adoption, Education and Impact.


# Environmental Protection and Enhancement Research Team 

Emmanuel K. Dzantor, Ph.D. Team Coordinator

## Statement of the Issue

Clean and safe environments are important to the economies of our nation as well as other countries of the world. Unfortunately, these attributes have come under assault due to large uses of synthetic chemicals to enhance agricultural production for an ever growing world, and maintain or improve standards of living of increasingly affluent societies. Threats posed to human and ecosystem health by intrusions of chemicals into the environment call for studies on behaviors of chemicals in soil, potentials for, or realities of their movement into bodies of water, remediation and mitigation strategies for existing or future contaminations, and best management practices that reduce dependence on man-made chemicals, or mitigate their environmental impacts. Integrating and implementing these studies and developments will lead to improvement in environment quality, protection or water resources, and overall environmental sustainability.

## Priority Research Areas

- Integrated pest management in nursery systems
- Pesticide and nutrient management in crop production systems
- Naturally-based strategies for remediating and mitigating environmental contamination and degradation
- Forest resources management for more economic resource utilization and environmental protection
- Protection of water resources
- Precision agriculture and education


## Food Safety, Nutrition and Family Well-Being Research Team

Sandria L. Godwin, Ph.D. Team Coordinator

## Statement of the Issue

The Food Safety, Nutrition and Family Well-being team's major objective is to improve the health and well-being of Americans through a safer food supply, adequate food distribution and greater knowledge of nutrition and dietary assessment methodology. Team members have formal collaborative projects with the following: Food Surveys Research Group of the Agricultural Research Service/U.S. Department of Agriculture (USDA), Economic Research Service/USDA, National Center for Health Statistics of the Centers for Disease Control and Prevention, Department of Health and Human Services (DHHS), Food and Drug Administration/DHHS, Second Harvest of Middle Tennessee, The Sensory Analysis Center, Department of Nutrition of Kansas State University, the Cooperative Extension Program, TSU, and Health Technomics, Inc.

## Priority Research Areas:

- Assessing food safety related knowledge and practices of consumers.
- Enhancing food security and nutritional status of economically disadvantaged populations.
- Investigating alternative methods for reporting food intake during dietary surveys
- Increasing fruit and vegetable consumption by limited resource individuals
- Developing innovative technology to improve food safety surveillance.
- Introducing alternative meats and meat products to consumers


# Nursery, Medicinal and Alternative Crops Research Team 

## Christopher J. Catanzaro, Ph.D. Interim Team Coordinator

## Statement of the Issue

The overall goal of the Nursery Crop Production Systems Research Team is to improve selected plant genera to broaden their consumer appeal and contribute to the enhancement of Tennessee's standing as a national leader in the nursery industry. This goal also includes the development of hands-on teaching and demonstration areas on the IAGER research farm in Nashville. The demonstration areas will strengthen teaching and aid in our efforts to stimulate interest in the plant sciences among Metro Nashville high school students and to transfer new discoveries into the hands of limited resource nursery owners. Among the plant genera targeted by the team for improvement are Helleborus, Pulmonaria, Hemerocallis, Castanea, and Ulmus. Areas for teaching and demonstration will include tree fruits (peaches, apples,
pears), vine fruits (grapes), small fruits (strawberries, blackberries, raspberries), turf plots, nursery plants, and other plants to be added in the future.

The overall goal of this team also includes the development and introduction of medicinal and other plants as alternative agronomic crops for small farm operators. Included in this goal is the identification and improvement of selected genera for their pharmaceutical and other values using conventional and biotechnological means. Propagation and production protocols are being developed for superior plants. And, once perfected, these production methods will be made available to farmers.

## Priority Research Areas:

- Improve selected plant genera to broaden consumer appeal.
- Transfer new discoveries to the green industry, including limited resource nursery owners.
- Evaluate poinsettia cultivars and plant nutritional practices for the green industry.
- Provide research training in the plant sciences to students.



# COOPERATIVE EXTENSION PROGRAM 

Clyde E. Chesney, Ph.D., Administrator and Professor<br>Farrell-Westbrook Agricultural Research and Extension Complex (615) 963-1351

Extension Faculty: C. Chesney, F. Bullock, L. Speller-Henderson, B. Hunter, T. Sanders-Hunter, J. Idassi, L. Lighari, M. McLendon, P. Gordon-Patton, A. Peischel, J. Samuel, A. Wade, R. Winston

## MISSION STATEMENT

The mission of the Tennessee State University Cooperative Extension Program is to help educate and provide information to limitedresource urban and rural families, small farmers, individuals, other groups and organizations. We use research-based information and technology to focus on priorities and needs which help improve quality of life.

In order to accomplish our mission, the Tennessee State University Cooperative Extension Program will:

- Provide educational programs in the areas of agriculture and natural resources, community and rural development, 4-H and youth development, and family and consumer sciences.
- Operate with public (federal, state, and county) and private financial support.
- Provide educational outreach in selected counties through county faculty and subject matter specialists.
- Help individuals, families, agencies, organizations and communities identify and solve problems.
- Enhance the economic and social viability of the communities.
- Involve county and state advisory committees in our programming efforts.

Our vision is to be a leader in outreach educational programs for continuous learning opportunities. To make this vision a reality, Cooperative Extension will:

- Network with The University of Tennessee, other land grant universities and with other sources of research-based information.
- Build a competent and innovative staff committed to excellence.
- Offer an expanded network of volunteers.
- Establish coalitions with agencies at local, state, national and international levels.
- Establish public trust in the organization's stewardship of human, financial and natural resources.


## PROGRAMMATIC GOALS

Goal 1: Enhance the global participation, competitiveness, and profitability of agricultural producers, especially family farmers, non-traditional producers, and those who lack adequate economic and social resources.

Goal 2: Improve decision-making by consumers and policy-makers to ensure a sustainable, safe, affordable and nutritious food supply through enhanced research, education and Extension activities.

Goal 3: Increase the capacity of individuals, families and communities to assure a healthy well-nourished population.

Goal 4: Enhance the environmental protection efforts of small, limited-resource landowners, communities and families through educational programs that emphasize and encourage the adoption of sustainable consumer and production practices.

Goal 5: Empower youth, families and communities to enhance the growth and development of business and industrial sectors.

## Agriculture \& Natural Resource Team

Fitzroy D. Bullock, Ph.D., Professor, Small Farms and IPM Team Leader

The Agriculture and Natural Resources (ANR) Team provides re-search-based information via a variety of educational program delivery methods including workshops, tours, field days, farm visits and inservice training to county agents. The ANR Team consists of Extension faculty in small farms and integrated pest management, forestry, goats and small ruminants, and home and consumer horticulture. They work with small farmers, landowners, homeowners, organizations and rural and urban communities. The ANR Team is an integral unit of the statewide network of TSU and UT Extension faculty, county agents, federal and state agencies implementing the land-grant mission.

## Family, Youth \& Community Team

## Thelma Sanders-Hunter, Ed.D., Associate Professor, Family Life and Resiliency <br> Team Leader

The purpose of the Families, Youth, and Communities (FYC) Team is to provide support for programming to ensure outcomes that strengthen families, help youth to succeed, and build strong communities. The FYC Team consists of Extension faculty in Family and Consumer Sciences, 4-H and Youth Development, and Community Resource and Economic Development. The Team provides leadership in their respective areas to county agents and assists with planning, implementing and evaluation of educational programs. They link research to address identified needs of clientele across the state.

# Fiscal, Equipment \& Personnel Team 

Rhonda Moore, M.S., Fiscal Analyst II Team Leader

The Fiscal, Equipment and Personnel (FEP)Team is responsible for approving, processing and tracking all travel requisitions, purchase orders, appointment recommendations, and personnel action forms for the Cooperative Extension Program. This team is also responsible for inventory control and the coordination of all building projects and equipment purchases under the USDA Facilities Program. The FEP Team consists of a Fiscal Analyst II, a Equipment Inventory and Management Manager, and a Facilities Construction Manager.

## Administrative Support Team

Albretta L. Jackson, B.S., Office Manager Team Leader

The Administrative Support (AS) Team provides essential technical and data processing services designed to meet the needs o the entire program. The AS Team consists of office manager, administrative secretary and three secretary IIIs. Individually they serve on separate program teams but function collectively to maximize their expertise and enhance innovation and creativity through out the campus and county units.

## Communications \& Information Technology Team

## Latif Lighari, Ph.D., Associate Administrator, Professor Team Leader

The Communications and Information Technology Team is a support team for the faculty and staff of TSU Cooperative Extension Program. It provides wide range of support in the areas of communications, such as media relations, media contacts, news and media coverage, publication of Extension fact sheets, program brochures, departmental and team news letters, impact statements, periodic and annual reports. In the area of Information technology, this team is prepared to provide support in the areas of web page design and management, computers and equipment maintenance and support, support and training for the use of e-mails, Lotus Notes - MIS, Annual Plans of Work, Annual Reports; Power Point and other computer based instructional programs and reports. In the area of web-based teaching and distance education support, this team is organized to provide basic instructional design work to convert written instructional material into web based teaching material. This effort is coordinated with the Distance education staff of the TSU Division of Extended and Continuing Education. This team is able to assist in conference calling, Video Conferencing, Net Meetings, and teaching on the Web using our Agricultural Information and Technology Center.

# National Extension Leadership Development (NELD) Team 

Brenda Hunter, M.S. Team Leader

The purpose of NELD is to assure and promote the quality of future leadership for the Cooperative Extension System. Specifically, the three-fold purpose is: To provide Extension leaders and administrators with the vision, courage and tools to deal with the rapidly changing social, political, economic climate; to enhance the pool of executive leaders available to the Cooperative Extension System; to help current and future leaders assess existing organizational resources as they continue to design concepts and programs that meet new and emerging needs. As the national host for NELD, TSU/ CEP is responsible for developing and coordinating a dynamic two-year learning experience for selected Extension personnel from Land Grant institutions across the country.

## Program Planning \& Staff Development Team

Clyde E. Chesney, Ph.D. Latif Lighari, Ph.D. Team Leaders

The purpose of the Program Planning and Staff Development (PPSD) Team is to ensure timely development and submission of the Extension plan of work and accomplishment reports to the Cooperative State Research, Education and Extension Service (USDA). Plan of Work (POW) development, implementation, evaluation of and the collection of outcome and impact statements is done in partnership with the UT Extension Service. The PPSD Team consists of the administration and team leaders of the other teams. The team helps develop and recommend appropriate inservice training for campus-wide faculty and county agents. Leadership development and team building is also an important function of this team.

# Marketing, Service Excellence \& Public Relations Team 

Latif Lighari, Ph.D.<br>Albretta L. Jackson, B.S. Team Leaders

The purpose of the Marketing, Service Excellence and Public Relations (MSEPR) is to ensure a planned and systematic approach to educating the various publics about who, what, why, where and so what of the Cooperative Extension Program. The MSEPR Team consists of staff with appropriate skills and interests. They work to ensure that we meet and exceed expectations of our various clientele groups, and ensure a uniformity of quality programming. Finally, they help ensure communication program outcomes and impacts to key decision-makers.

# University Personnel and Instructional Faculty 

## COLLEGE OF ARTS AND SCIENCES

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## Africana Studies

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## Art

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