mechanical or chemical which enter into successful establishment of manufacturing enterprise. Cost and location studies and market analysis influence the commercial feasibility of new plants or projects.

5490 Simulation (3) Generation of outcomes of complex random processes by computer. Models of complex systems used as available simulation languages. Students write programs. Prereq.: 3430 and Computer Science 315.

5499 Prearranged Time Simulations (3) Work design and measurement using a prearranged time system of work measurement, Basic Motion Time Study, or Work Factor Theory. Theory and application. Prereq.: 4450.

6110 Human Factors in Work Design II (3) Human capabilities and limitations affecting work place layout, working environments, design of tools and controls, and communications and response in man-machine systems. Prereq.: 3650, 3650, 4550.

6300 Human Factors Engineering (3) Hospital management systems and means by which they may be improved through application of modern industrial engineering principles and techniques. Prereq.: 3650.

6490 Industrial Plant Problems Analysis (3) Industrial problems, application of industrial engineering, field assignment in local industry, problem definition, analysis, and presentation. Prereq.: 3650, 3640, 3910, 3910, 4550.


6790 Mini-Computer Applications in Industrial Engineering (3) Introduction to computer hardware and microcomputer interface; emphasis on small computers as an element of larger system; applications and limitations of small computers in solving industrial engineering problems. Prereq: Senior standing.

6790-25-30 Special Industrial Engineering Topics (3, 3, 3) May be repeated for credit. Prereq.: Consent of instructor.


9201 Non-Thesis Graduate Completion (3-15) May be repeated for credit. Prereq.: Consent of advisor.

College of Engineering 151
GRADUATE STUDY PROGRAMS
Graduate programs leading to the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy with specialization in mechanical engineering or aerospace engineering are available to graduates of recognized undergraduate curriculum in mechanical or aerospace engineering and to graduates of other curricula where the necessary prerequisite courses. The general requirements for advanced degrees are summarized in the Graduate Catalog.

Mechanical Engineering (650)
3940 Introduction to Mechanical Engineering (1) Description and analysis of a variety of aerospace vehicles and systems. The central courses are Aero. Engr. 3940 and Aero. Engr. 3950. This course is intended for upper-class students who have completed the prerequisite courses.
4150 Energy Conversion Systems (3) Operating and design characteristics of new technology energy conversion systems, selected direct conversion techniques. Prerequisite: Math 3320, Aero. Engr. 4140.
4160 Energy Conversion Systems (3) Economic and technical design parameters as applied to power plants for public utilities or industrial applications; selected design and layout problems. Prerequisite: Aero. Engr. 4140 and Math 3320.
4175 Turbo-Machinery (3) Basic principles of turbo-machinery: systematic methods of analysis, design, pressure, stress, flows, equations. Prerequisite: Aero. Engr. 3511.
4180 Energy Production and Utilization (2) Thermodynamic constraints on energy production, comparison of new energy sources and conventional energy conservation schemes. Prerequisite: Senior standing in engineering.
4200 Environmental Noise (2) Basic principles of acoustical analysis and control of noise in industrial and community environments. Prerequisite: Senior standing in engineering or consent of instructor.
4300 Seminar (1) Presentation and discussion of topics related to mechanical engineering. Prerequisite: Aero. Engr. 3940 and Aero. Engr. 3950.
4310 Applied Engineering Thermodynamics (3) Energy and laws governing energy transformations; thermodynamic properties; applications to aerospace engineering; heat engines, refrigerators, turbines, engines, compressors. Prerequisite: Math 3320, Aero. Engr. 3940, and Math 1080. This course is intended for undergraduate and graduate students.
4311 Engineering Thermodynamics (3) Energy and laws governing energy transformations: thermodynamic properties; applications to aerospace engineering; heat engines, refrigerators, turbines, engines, compressors. Prerequisite: Math 3320, Aero. Engr. 3940, and Math 1080.
5320-5330 Engineering Thermodynamics (2, 3) Properties of gases and mixtures; chemical reaction engineering; heat and mass transfer; basic principles of fluid mechanics. This course is intended for undergraduate and graduate students.
5410 Fluid Flow (3) Development of continuum, material, and energy balances; applications to mechanical and aerospace engineering problems. Prerequisite: Math 3321 and Math 3317.
5440 Heat Transfer (3) Heat transfer processes: heat conduction, thermal radiation, convection, and combined processes. Prerequisite: Math 3350. This course is intended for undergraduate and graduate students.
5474-5475 Thermal Engineering Systems (3, 3) Fundamental knowledge of thermal science for analyzing heat, mass, and energy transfer systems. This course is intended for undergraduate and graduate students.
5476 Machinery Dynamics (3) Problem solving techniques for mechanical systems. Prerequisite: Math 3350 and Aero. Engr. 3950.
5480-5483 Creative Design (3, 3) Application of engineering principles to design of complex systems and lumped parameter vibratory systems. Prerequisite: Math 3350.
5490 Matrix Analysis (3) Application of matrices to solution of complex physical problems. Prerequisite: Math 4320.
5640 Materials and Manufacturing Process (3) Materials science and technology relevant to mechanical engineering. Prerequisite: Math 3350 and Aero. Engr. 3950.

GRADUATE
5999 Thesis (3) 6000 Non-Thesis Graduation Completion (3-15) 6002 Thesis (3) 6003 Non-Thesis Graduation Completion (3-15) 6010 Heat Transfer (3) 6011 Radiation Heat Transfer (3) 6012 Phase Change Heat Transfer (3)
Aerospace Engineering (018)

4200 Low Speed Aerodynamics (3) Potential flow theory; laminar and turbulent flow, compressibility effects; numerical solution methods. Prereq: 3511 and Math. Engr. 3910.


4210 Seminar (1) Discussion of topics related to aerospace engineering; includes inspection trips to industrial plants. Prereq: Senior standing. S/C.


4510 Aircraft Performance (3) Introduction to aircraft wing characteristics, drag; propellers; static performance and maneuvers; theory and design of control surfaces; stability. Prereq: 3511.

4580 Selected Topics in Aerospace Science (3) Current problems in aerospace science, topics in science and engineering required for an understanding of the various areas of aerospace science. Prereq: Consent of instructor.

GRADUATE

5000 Thesis

5001 Non-Thesis Graduation Completion (3-15) Graduate program leading to a degree of Master of Science and Master of Engineering in nuclear energy available in nuclear engineering. For details, see the Graduate Catalog.

5002 Non-Thesis Graduation Completion (1-15) Graduate program leading to a degree of Master of Science and Master of Engineering in nuclear energy available in nuclear engineering. For details, see the Graduate Catalog.

5990 Special Topics in Aerospace Engineering (1-3)

5900 Doctoral Research and Dissertation

6101-20 Advanced Topics in Fluid Mechanics and Heat Transfer (3, 3)

6130-40 Advanced Radiation Heat Transfer (3, 3)

6240-30 Selected Topics in Thermodynamics (3, 3)

6110 Engineering Vibrations (3)

6110 Introduction to Aerospace Engineering (1) Presentation and discussion of topics related to aerospace engineering. Prereq: Just-in-time course in S/C.


3630 Vibrationsof Single and Multiple Degree Vibrating Systems (3)


3510 Dynamic System Design (3)

5900 Special Topics in Mechanical Engineering (1-3)

5900 Doctoral Research and Dissertation

6110-20 Advanced Topics in Fluid Mechanics and Heat Transfer (3, 3)

6130-40 Advanced Radiation Heat Transfer (3, 3)

6240-30 Selected Topics in Thermodynamics (3, 3)

6110 Engineering Vibrations (3)

6110 Introduction to Aerospace Engineering (1) Presentation and discussion of topics related to aerospace engineering. Prereq: Just-in-time course in S/C.


3510 Dynamics (3)


3510 Dynamics (3)


3510 Dynamics (3)


3510 Dynamics (3)


1310 Dynamics and Controls (3) Systems differential equations, solution by classical methods; Laplace transform method; frequency response, stability, and control. Coreq: 4150.

3210-20 Thermodynamics (4, 4) Properties and laws of thermodynamic systems. First and second laws used to analyze power plant systems—both fossil and fission. Prereq: Math 2900 and Basic Engr 1330.

3730 Momentum Transport (4) Development of differential and integral momentum equations; elementary theory of turbulence; applications to pipe flow, nuclear reactors, 3 lecs. and one lab. Prereq: Math 4510.


4110-20-30 Introduction to Nuclear Reactor Theory (3, 3, 3) Nuclear structure; radioactive decay laws; neutron interaction; fission process; chain-reacting systems; diffusion equation including multigroup diffusion theory, neutron moderation, reactivity coefficients; perturbation theory. Prereq: Physics 3730 or consent of instructor.


4210-20-30 Nuclear Engineering Laboratory (3, 3, 3) Radiation detection and counting instrumentation, counting statistics, half-life and decay schemes, gamma spectrometry, cross-section measurements, analog computation, diffusion properties of reactions, critical loading experiments, control rod calibration, statistical weight, shielding, xenon poisoning, prompt critical reactor behavior, fission density, and adjoint flux. Prereq: 4110 (or registration therein), or equivalent.


4710 Energy Transport (4) Development of differential and integral energy conservation equations; conduction, convection, and radiation heat transfer; applications to nuclear reactor fuel elements and heat exchangers. Prereq: 3730.

4720 Reactor Thermal Design (4) Hydrodynamics and heat transfer in boiling systems; boiling instabilities; fuel element thermal design, steam generator design. Prereq: 4710.

4730 Nuclear Reactor Design (3) First order reactor design, integration with non-nuclear heat transfer and power conversion system, economic evaluation, optimization procedures, description of typical systems. Coreq: 4150.

4810 Radiation Shielding (3) Types of radiation sources, gamma ray and neutron attenuation, biological effects of radiation, shield design. Prereq: Physics 3730, Math 4500.

4850 Reactor Kinetics and Controls (2) Derivation of kinetic equations; basic kinetic parameters; transient responses, feedback control, and protective systems. Prereq: 4110.

4860 Nuclear Reactor Safety (3) Presentation of reactor safety concepts and criteria; credible accidents; reactor product release and transport; containment systems; accident analysis, engineered safeguards. Prereq: 4120.

4930 Nuclear Fuel Management (3) Discussion of problems associated with processing of nuclear materials, fuel cycle analysis, burn-up calculation. Prereq: 4120.
The College of Home Economics is an integral part of The University of Tennessee's academic program in its three major functions of teaching, research, and extended services. The college ranks among the top two colleges of home economics in the nation in enrollment and first in the number of master's and doctoral degrees granted. All undergraduate programs of the college are accredited by the American Home Economics Association. Much of the qualitative and quantitative growth of the college is due to its highly qualified faculty and staff who, being aware of the current community problems and needs, have made its programs relevant to the goals and aspirations of today's students. Today's students are seeking professional positions in which they can better serve people—individually, families, and consumers—by helping them predict and solve problems arising from the increasingly rapid changes occurring in the society in which we live. The basis of the college's professional programs is to prepare young men and women to serve the needs of people in their many varied environments and different stages of life.

The philosophy of the college is best stated as follows: home economics does seek knowledge which describes and analyzes but is not content with only studying "what is." In order to enhance the quality of life and well-being of people and society the college is also concerned with promoting "what can and should be." The college's mission is twofold: its undergraduate programs prepare students to work with people in a professional capacity so that they may make use of what has been learned in serving as professional agents of change; its graduate programs are geared toward research, producing alternative solutions to technical and social problems which are and will be encountered by the people who are to be served.

The University of Tennessee pioneered as one of the first institutions of higher education in the South to offer home economics and has continued to hold a position of leadership. The first class was taught in 1897.

The faculty of the college numbers 60 full-time teaching and research staff. There are four departments with curricula leading to the Bachelor of Science degree: Child and Family Studies; Home Economics Education; Nutrition and Food Sciences; and Textiles, Merchandising and Design. The undergraduate program in Home Economics Education is offered in cooperation with the College of Education and the Home Economics Extension Education program is offered in cooperation with the Institute of Agriculture. Approximately 350 courses are offered in these departments. The graduate programs leading to the Master of Science degree were begun in the summer of 1925. Programs for the Doctor of Philosophy degree were initiated in 1960. The Doctor of Philosophy degree program in home economics now includes three options: Interdisciplinary, Food Science, Nutrition. Food Systems Administration may be taken as a concentration in the Food Science doctoral option.

Special Resources

Several special programs enhance the offerings of the college:

Selected students have the opportunity to study for one quarter at the Merrill-Palmer Institute for Human Development and Family Life in Detroit, Michigan, or at the Child Development Center of the Center for Health Sciences in Memphis or at the Fashion Institute of Technology in New York. Credits earned may be applied toward a Bachelor of Science degree in appropriate curricula of the college.

Many research programs for infant care and preschool day care and nursery school provide home economics students the opportunity to train for careers as directors of, and teachers in, child care facilities. The need for appropriate child day care facilities staffed with well-trained, competent staff is recognized as one of the most urgent problems of today's urban society.

Opportunities for home economics graduates with special interest in preschool programs are numerous and continue to increase. The Nursery School through Grade Three program offered jointly with the College of Education provides certification for teachers in early childhood education.

The U.S. Department of Agriculture Textiles and Clothing Research Laboratory is a part of the Southern Region Mid-Atlantic Area and was located at The University of Tennessee in 1967. Textiles and clothing researchers collaborate with the U.S.D.A. staff to conduct investigations that will (1) determine consumer needs for textiles and clothing and the adequacy of products available to meet these needs, (2) develop basic principles to guide consumers in selection and caring for textiles and clothing, and (3) solve other economic and technical problems pertaining to the field. Graduate students in this area may be trained at the laboratory.

International study tours in several areas of home economics are offered when a demand is indicated. The course "Home Economics 4910 International Study Tour" is offered for 6 credit hours at the undergraduate level. At the graduate level, "Home Economics 5100 International Studies" is available, depending on demand and resources, for up to 15 graduate credit hours. The length of the tours may vary from 6 to 8 weeks and the program is under the direction of a member of the faculty.

The Department of Nutrition and Food Sciences has a cooperative arrangement with food service systems, such as those of the University, hospitals, schools, hotels, and restaurants, are available for laboratory experience for food systems administration students and in food industries for those in the food science curriculum. During the junior and senior years students in the Documented Undergraduate Program in Dietetics receive clinical experience integrated with courses in hospitals and other
health care facilities. The Tourism, Food, and Lodging Administration program offers experience in approved tourism, food, or lodging industry facilities during the summer and fall quarters of the sophomore, junior, and senior years, with academic studies during the freshman year and subsequent winter and spring quarters. Graduates of the Coordinated program will be eligible for membership in the American Dietetics Association (ADA) and application for ADA registration. The Nutrition program is affiliated with the Child Development Center, UT Center for Health Sciences, Memphis, for special study in mental retardation and developmental disorders. A liaison is maintained with the Knox County Health Department to provide concurrent field experience for students in the Community Nutrition option. The Nutrition Science and Community Nutrition programs also meet academic requirements for membership in the American Dietetic Association. All departments of the college conduct basic and applied research which may be supported in part by the college, by special grants and contracts, and by the Agricultural Experiment Station. The University of Tennessee Atomic Energy Commission program at Oak Ridge also provides opportunity for training and research. Workshops on special topics of current importance are offered by the different departments in home economics. These will be of special interest to those desiring to work for special credentials or advanced placements. The program at Oak Ridge also provides opportunity for independent study. The Jessie W. Harris Home Economics Building was dedicated in 1957. Since that time two wings have been added, one in 1937 and another in 1959. All departments have well-equipped laboratories for both undergraduate and graduate work. A college audiovisual learning center and departmental reading rooms provide opportunity for independent study. The Child Development Center is a separate building especially planned as a laboratory for teaching and research with preschool children. It houses an infant day care center, nursery school classrooms for two-, three-, four-, and five-year-olds, a preschool curriculum laboratory, and rooms for observation and research. A separate Child Day Care Center housed in the UT Golf Range Apartments is staffed by the college and provides a laboratory for study as well as an adequate center for group care of children 2 to 5 years of age. The Family Life Center provides office and classroom space. Nutrition and food sciences facilities include well-equipped laboratories for basic food science, experimental food science, experimental nutrition (animal), and chemistry for undergraduate and graduate students. Laboratories include instruments for the evaluation of the chemical, physical, histological, and sensory properties of food, in addition to facilities for metabolic and survey studies of human nutrition. Home economics educational offices and laboratories are located in the Home Economics Building. The Department of Textiles, Merchandising and Design facilities include provisions for study, regular classroom, laboratory, and studio experiences. Laboratories for interior design and housing studies are especially equipped for this purpose. Textile research facilities are available to undergraduate and graduate students and to research personnel interested in textile studies that benefit fiber producers, fabric and clothing manufacturers, and consumers. Laboratories are well equipped for the physical and chemical analyses of fabrics, yarns, and fibers. Certification in Vocational Home Economics Education Certification to teach vocational home economics requires either a bachelor's or master's degree in home economics from an institution offering a curriculum for teacher training approved by the State Board for Vocational Education and by the United States Office of Education. The University of Tennessee, Knoxville is approved for the training of teachers in home economics. A description of the professional home economics education curriculum leading to certification will be furnished upon request. Graduate students interested in meeting certification requirements should consult the head of the Department of Home Economics Education. Transfer and graduate students who desire to qualify for vocational certification in home economics should state this when applying for admission so that their credits may be evaluated in terms of the goal. Certification in Early Childhood Education A joint program in Early Childhood Education—Nursery School through Grade Three was recently approved for the Department of Child and Family Studies (College of Home Economics) and the Department of Curriculum and Instruction (College of Education). In addition to preschool education, graduates are certified to teach kindergarten through third grade. Educational Programs for Home Economics Extension Education Students interested in careers as home economists require a bachelor's or master's degree of Bachelor of Science in Home Economics education curriculum leading to the degree of Bachelor of Science in Interior Design. The curriculum in the following major leads to the degree of Bachelor of Science in Urban and Rural Families. Special programs of study can be arranged for selected students with a minimum 2.5 grade point average. The student must enroll in Agricultural Extension Education 3110 during the fall or spring quarter of the junior year prior to enrolling in Agricultural Extension Education 4110-20 (Fixed Studies) in the summer quarter (see page 65 for course descriptions). Six hours' credit is awarded for summer field studies during which the student works ten weeks as a Junior Assistant County Agent of the Tennessee Agricultural Extension Service. Students interested in this program should contact their adviser and the administrative assistant in the Office of the Dean of the College of Home Economics for detailed information. Undergraduate Study in Home Economics Curricula in the following majors lead to the degree of Bachelor of Science in Home Economics: Child and Family Studies (CFS) Option 1—Early Childhood Development Option 2—Human Development and Family Studies Option 3—Nursery-School Grade 3 Food Science, Nutrition, and Food Systems Administration (FSNFSA) Option 2—Nutrition Science Option 3—Community Nutrition Option 4—Graduate Program in Dietetics (ADA) Interior Design and Housing (IDH)* Textiles and Clothing (T & C) Option 1—Merchandising Option 3—Textile Science Option 3—Clothing and Textiles Vocational Home Economics Educational Programs for Home Economics Extension Education (HEEd) Consumer and Homemaking Education Occupational endorsement in one or more of the following areas: (1) Food Services (2) Child Care and Guidance (3) Clothing Management, Production, and Services The curriculum in the following major leads to the degree of Bachelor of Science in Food Science, Nutrition, and Food Systems Administration (FSNFSA) Option 1—Merchandising Option 3—Textile Science Option 3—Clothing and Textiles Vocational Home Economics Educational Programs for Home Economics Extension Education (HEEd) Consumer and Homemaking Education Occupational endorsement in one or more of the following areas: (1) Food Services (2) Child Care and Guidance (3) Clothing Management, Production, and Services The curriculum in the following major leads to the degree of Bachelor of Science in Tourism, Food and Lodging Administration: Tourism, Food and Lodging Administration Plan A Plan B NOTE: Students are advised to consult the University's degree requirements as stated in the front section of this catalog as well as the

*Programs under revision
requirements for their particular college or school.

For the degree of Bachelor of Science in Home Economics, students generally plan to complete the last 45 quarter hours of work (three quarters) at The University of Tennessee, Knoxville. Seventy-two hours must be earned in courses numbered above 3000 at The University of Tennessee, Knoxville. The preprofessional transfer student is advised to preplan the total college program before starting any college-level work. Careful planning prior to transferring to the college is essential to maintaining a program of study with maximum utilization of credit and sequence of course work. All new freshman and transfer students whose majors require chemistry must enroll in the freshman chemistry course sequence before requirements are completed. It is recommended that preprofessional students complete the freshman chemistry requirements before transferring to the college.

Students wishing to transfer 36 or more credit hours into the college must have an average of 2.0 for admission. Students with an average of less than 2.0 are not eligible for enrollment in junior or senior courses.

During the first quarter each student generally takes courses basic to all curricula and is assigned a faculty advisor for program planning. A normal student load per quarter is 15-16 hours. The maximum load is 19 credit hours per quarter (18 hours maximum for the Coordinated Undergraduate Program in Dietetics) unless otherwise approved by the Assistant Dean for Academic Affairs.

When a student has completed one quarter in residence at The University of Tennessee (Knoxville with at least a 2.0 average in college work), the student is advised to participate in self-registration, except for those quarters for which the student is scheduled for mandatory advisement. Students participating in the voluntary academic registration program bear full responsibility for meeting degree requirements and academic standing.

Students may choose to take, for elective credit, all of the courses required in the major fields and specific requirements of the college and outside the major fields. In this event, the student will receive a satisfactory or no credit grade. The purpose of the satisfactory-no credit (SNC) grading system is to encourage the student to explore subject matter areas outside of the requirements and other courses of the major by minimizing pressures for the student's concern. SAT or ACT scores are somewhat less outstanding than that in preferred subject areas and are not counted as hours for graduation but not for calculating the student's grade point average. A final grade of C or better will be recorded as satisfactory. The maximum satisfactory or no credit hours which could be counted toward a degree is 30 hours. When this student wishes to take a satisfactory or no credit course, the student must so indicate at the time of registration.

Proficiency examinations are offered for numerous courses taken at the college in courses on which proficiency examinations are given and obtained from departments of the college. Field training provides the opportunity for practical pre-professional experience and constitutes an integral part of many of the college's programs. Students enrolled in certain College of Home Economics courses who are involved in field experiences are required to participate in the group liability insurance plan offered through the college. The annual cost to the student for this insurance coverage is $4 (subject to change).

The first digit in course numbers indicates the student group for whom the course is primarily offered: 1000 indicates courses for freshmen, 2000 for sophomores, 3000 for juniors, 4000 for seniors, 5000 and 6000 for graduate students.

Education 3810 should be elected in the sophomore year by those students majoring in the vocational home economics education curriculum. This course is a prerequisite for other required courses in education. Psychology 2500 is a prerequisite for Education 3810.

For majors in the food science, nutrition, or textiles option, Nutrition 3010 should be taken preferably in the sophomore year and not later than the first quarter of the junior year. The following four courses are fundamental to home economics and are required in all curricula.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>Home Economics 1510 Family First Quarter</td>
<td>4</td>
<td></td>
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<tr>
<td>Systems: Human Development</td>
<td></td>
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<tr>
<td>Education 2500 Biology</td>
<td>4</td>
<td></td>
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<tr>
<td>Education 2520 Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Home Economics 2510 Family First Quarter</td>
<td>4</td>
<td></td>
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<tr>
<td>Systems: Aesthetic-Environ-</td>
<td></td>
<td></td>
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<tr>
<td>Human Development</td>
<td></td>
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<tr>
<td>Home Economics 3510 Family Junior Quarter</td>
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<tr>
<td>Systems: Consumer Resources</td>
<td></td>
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<tr>
<td>Human Development</td>
<td></td>
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<tr>
<td>Home Economics 3510 Family Sophomore Quarter</td>
<td>4</td>
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<tr>
<td>Systems: Physiological-Well-being</td>
<td></td>
<td></td>
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<tr>
<td>Human Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Economics 3510 Family Junior Quarter</td>
<td>4</td>
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<tr>
<td>Systems: Consumer Resources</td>
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<tr>
<td>Human Development</td>
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</table>

Professional Curriculum in Child and Family Studies

The Department of Child and Family Studies is concerned with early education, human development and family interaction throughout the life span, and with resource management and consumer studies. Departmental goals and objectives are designed to contribute to the interpersonal and professional competence of men and women students, and to provide preparation for careers in the helping professions related to children, adolescents, and families, depending on the option the student selects.

The curriculum is appropriate for persons oriented toward teaching and/or administrative positions in child care centers and nursery schools, in public schools, with family services, child welfare agencies, extension, banks, and consumer agencies. Other opportunities exist that require study beyond the bachelor's level (for example administration, research, and clinical services). All options provide necessary background for graduate study in child development, family relationships, early childhood education, and social work.

Option 1: Early Childhood Development

This option is appropriate for persons interested in the following types of positions: day care teacher, nursery school teacher, worker in center for socially disadvantaged and/or handicapped children, entry level positions in social work, or preparation for graduate school.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Human Economics 1510 Family</td>
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</tr>
<tr>
<td>Home Economics 1520</td>
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<tr>
<td>Natural science</td>
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<td>English 1010 or 1011 or 1020</td>
<td>4</td>
<td></td>
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<tr>
<td>English 2010 or 2020</td>
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<tr>
<td>Mathematics 1540</td>
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<tr>
<td>Philosophy 1010 or 2150</td>
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<tr>
<td>or 3230 or 2310 or upper-division foreign language</td>
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<tr>
<td>Music 1210 or Art 1015 or 1625</td>
<td>4</td>
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<tr>
<td>Electives</td>
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<tr>
<td>Sociology</td>
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<tr>
<td>Psychology</td>
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<tr>
<td>Physical or Biological science</td>
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<tr>
<td>Social sciences</td>
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<td>Interdisciplinary science</td>
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<tr>
<td>Electives</td>
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<tr>
<td>TOTAL: 192 hours</td>
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</table>

Option 2: Human Development and Family Studies

This option is for undergraduate CFS majors who want a generalist background in individual and family studies. This option does not prepare for a career in preschool education. Students interested in Cooperative Extension Service, community agencies, social service agencies, counseling, social work, and graduate work would choose this undergraduate option.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Human Economics 1510 Family</td>
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</tr>
<tr>
<td>Home Economics 1520</td>
<td>4</td>
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<tr>
<td>Natural science</td>
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<td></td>
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<tr>
<td>English 1010 or 1011 or 1020</td>
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<tr>
<td>Mathematics 1540</td>
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<tr>
<td>Philosophy 1010 or 2150</td>
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<td></td>
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<tr>
<td>or 3230 or 2310 or upper-division foreign language</td>
<td></td>
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<tr>
<td>Music 1210 or Art 1015 or 1625</td>
<td>4</td>
<td></td>
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<tr>
<td>Electives</td>
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College of Home Economics 157
### College of Home Economics

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<tr>
<th>Course Code</th>
<th>Hours</th>
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<tr>
<td>CFS 2190</td>
<td>3</td>
<td>History or political science elective</td>
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<tr>
<td>CFS 3910</td>
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<td>Social sciences elective</td>
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<td>CFS 4110-11</td>
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<td>Psychology 1510 or 1520 or 1530</td>
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<td>Spec. Ed. 3110</td>
<td>3</td>
<td>Selected from at least 2 of the following areas: Anthropology 2510 or 2530 or 2540 or Anthropology 2520, 2530, 2550.</td>
</tr>
<tr>
<td>CFS 4110-11</td>
<td>3</td>
<td>Art 2100-10</td>
</tr>
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<td>Spec. Ed. 3110</td>
<td>3</td>
<td>Selected from at least 2 of the following areas: Anthropology 2510 or 2530 or 2540 or Anthropology 2520, 2530, 2550.</td>
</tr>
<tr>
<td>CFS 4110-11</td>
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<td>P.E. 3450</td>
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</tr>
<tr>
<td>CFS 4110-11</td>
<td>3</td>
<td>Music Ed. 2100</td>
</tr>
<tr>
<td>Spec. Ed. 3110</td>
<td>3</td>
<td>Selected from at least 2 of the following areas: Anthropology 2510 or 2530 or 2540 or Anthropology 2520, 2530, 2550.</td>
</tr>
</tbody>
</table>

**Total: 12-21 Electives**

---

### Options

#### Nursery School-Grade Three

- **Option 1**: Food Science
  - Senior
    - Electives: 10 Hours
  - Junior
    - Electives: 12-21 Hours

#### Nutrition and Food Sciences

- **Option 1**: Food Science
  - Senior
    - Electives: 10 Hours
  - Junior
    - Electives: 12-21 Hours

---

### Additional Information

- **Application for Admission**
  - Application and selection by a faculty committee required to enter sophomore year.

- **Professional Curricula**
  - Students will not register in a particular course until their third quarter in residence.
  - Applications for admission to the freshman program must be made by May 15, and each student will be assigned to an adviser associated with the chosen option.
  - The second choice of option will be assigned to an adviser associated with the chosen option only if the student is listed as an alternate for first choice of option, admission may be reconsidered at a later date.

**Note:** The curriculum is subject to change annually. Contact the College of Home Economics for the most current information.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>310</td>
<td>Psychology</td>
<td>5</td>
</tr>
<tr>
<td>1310</td>
<td>Food science</td>
<td>3</td>
</tr>
<tr>
<td>1320</td>
<td>Food technology</td>
<td>3</td>
</tr>
<tr>
<td>1330</td>
<td>Humanities electives</td>
<td>3</td>
</tr>
<tr>
<td>1340</td>
<td>Electives</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL:</strong></td>
<td><strong>180 hours</strong></td>
</tr>
</tbody>
</table>

**Option 2. Nutrition Science**

This curriculum provides in-depth training in the basic biological sciences as well as nutrition. This option is designed for students who are interested in graduate study to become college teachers or researchers, or who are interested in graduate study and/or a dietetic internship to become a clinical nutrition specialist.

<table>
<thead>
<tr>
<th>Freshman Year (Fall)</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 111-120 or 111-120</td>
<td>12</td>
</tr>
<tr>
<td>English 101 or 111</td>
<td>3</td>
</tr>
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<td>Food Science 110</td>
<td>3</td>
</tr>
<tr>
<td>Home Economics 1510</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1140</td>
<td>4</td>
</tr>
<tr>
<td>Nutrition 1410</td>
<td>4</td>
</tr>
<tr>
<td>Psychology 2500</td>
<td>4</td>
</tr>
<tr>
<td>Sociology 1510</td>
<td>4</td>
</tr>
</tbody>
</table>

**Sophomore Year (Fall)**

<table>
<thead>
<tr>
<th>Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>8</td>
</tr>
<tr>
<td>8</td>
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<tr>
<td>3</td>
</tr>
<tr>
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</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Junior Year (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>310</td>
<td>Psychology</td>
<td>3</td>
</tr>
<tr>
<td>1310</td>
<td>Food science</td>
<td>3</td>
</tr>
<tr>
<td>1320</td>
<td>Food technology</td>
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<tr>
<td>1330</td>
<td>Humanities electives</td>
<td>3</td>
</tr>
<tr>
<td>1340</td>
<td>Electives</td>
<td>8</td>
</tr>
</tbody>
</table>

**Senior Year (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>320</td>
<td>Nutrition</td>
<td>3</td>
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<tr>
<td>330</td>
<td>Nutrition</td>
<td>3</td>
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<tr>
<td>340</td>
<td>Nutrition</td>
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</tr>
<tr>
<td>350</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>360</td>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** **180 hours**

---

**Option 4. Coordinated Undergraduate Program in Dietetics (ADA)**

The Coordinated Undergraduate Program in Dietetics is a generalist program, training entry-level dietitians in administrative and clinical dietetics, and is accredited by the American Dietetic Association (ADA). The program incorporates the equivalent of a fifth year dietetic internship into a four-year academic curriculum. The curriculum includes two-year pre-professional sequence that meets general education requirements and prerequisites for professional courses, and a professional phase in the junior and senior years. The senior year provides an introduction to dietetics, basic knowledge in food science, nutrition, and food systems administration, and research techniques. The senior or fourth year consists of advanced work in dietetics. During the professional phase, academic courses are coordinated with planned activities. The maximum credit hours carried per quarter should not exceed 18 hours without special permission from the program director.

**Admission and Progression Policies**

A student may be admitted to the program provided all requirements or equivalents of the program up to that time, as well as University of Tennessee and College of Home Economics standards, have been satisfactorily met. Pre-professional courses may be taken at The University of Tennessee, Knoxville, or any accredited junior or senior college, or community college. The program has been planned to permit transfer students to enter prior to the beginning of the senior year. Professional courses must be taken at The University of Tennessee, Knoxville. Applications should be made to the program director by April 1. Criteria for selection include (1) evidence that the student will succeed, (2) an overall GPA of 2.2 or higher, (3) personal interview, and (4) recommendations from faculty who have taught the student. The number of qualified students accepted into the Coordinated Undergraduate Program in Dietetics is contingent on the number of clinical sites available. Criteria for admission must be maintained throughout the pre-professional phase. Exception to criteria may be made by petition to the program director. Criteria for progression in the professional phase and senior years will include (1) satisfactory completion of each required professional course as scheduled with a minimum grade of C. (2) periodic evaluation of competency level by academic and clinical faculty, (3) participation in voluntary professional activities, the maximum credit hours carried per quarter should not exceed 18 hours without special permission from the program director. Exceptions to the above may be made by petition to the program director. Upon satisfactory completion of the program, students receive the Bachelor of Science Degree in Home Economics and are eligible for membership in the American Dietetic Association and to apply for the registration examination to qualify as a Registered Dietitian (R.D.).

---

**Option 3. Community Nutrition**

This curriculum is designed for those students interested in community services or graduate work in public health nutrition.

<table>
<thead>
<tr>
<th>Freshman Year (Fall)</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 111-120 or 111-120</td>
<td>12</td>
</tr>
<tr>
<td>English 101 or 111</td>
<td>3</td>
</tr>
<tr>
<td>Food Science 110</td>
<td>3</td>
</tr>
<tr>
<td>Home Economics 1510</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1140</td>
<td>4</td>
</tr>
<tr>
<td>Nutrition 1410</td>
<td>4</td>
</tr>
<tr>
<td>Psychology 2500</td>
<td>4</td>
</tr>
<tr>
<td>Sociology 1510</td>
<td>4</td>
</tr>
</tbody>
</table>

**Sophomore Year (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>310</td>
<td>Psychology</td>
<td>3</td>
</tr>
<tr>
<td>1310</td>
<td>Food science</td>
<td>3</td>
</tr>
<tr>
<td>1320</td>
<td>Food technology</td>
<td>3</td>
</tr>
<tr>
<td>1330</td>
<td>Humanities electives</td>
<td>3</td>
</tr>
<tr>
<td>1340</td>
<td>Electives</td>
<td>8</td>
</tr>
</tbody>
</table>

**Junior Year (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>320</td>
<td>Nutrition</td>
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<tr>
<td>330</td>
<td>Nutrition</td>
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<tr>
<td>350</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>360</td>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** **180 hours**

---

**Option 1. Community Nutrition**

Students would be eligible for membership in the American Dietetic Association and to apply for the registration examination to qualify as a Registered Dietitian (R.D.).

---

**Application and selection by a faculty committee required to enter senior year.**

---

**Applications and selection by a faculty committee required to enter junior year.**

---

**Students would be eligible for membership in the American Dietetic Association and to apply for the registration examination to qualify as a Registered Dietitian (R.D.).**

---

**Junior Year (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>320</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>330</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>340</td>
<td>Nutrition</td>
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<tr>
<td>350</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>360</td>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** **180 hours**

---

**Application and selection by a faculty committee required to enter junior year.**

---

**Applications and selection by a faculty committee required to enter senior year.**

---

**Students would be eligible for membership in the American Dietetic Association and to apply for the registration examination to qualify as a Registered Dietitian (R.D.).**

---

**Junior Year (Fall)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>320</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>330</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>340</td>
<td>Nutrition</td>
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<tr>
<td>350</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>360</td>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** **180 hours**

---

**Application and selection by a faculty committee required to enter senior year.**

---

**Applications and selection by a faculty committee required to enter junior year.**

---

**Students would be eligible for membership in the American Dietetic Association and to apply for the registration examination to qualify as a Registered Dietitian (R.D.).**
Anthropology 450 \hspace{2cm} \text{Seminar} 12

Food Systems Administration 4421 \hspace{2cm} \text{Food Systems Administration} 4421 5

Nutrition 4440 \hspace{2cm} \text{Nutrition} 4440 4

Food Science 4000 \hspace{2cm} \text{Food Science} 4000 2

**TOTAL: 190 hours**

**TORIUM, FOOD, AND LODGING ADMINISTRATION MAJOR PLAN A AND PLAN B**

This professional curriculum is concerned with meeting the middle and upper level management needs of the tourist, food, and lodging industry of today. It provides a program for both men and women which will assist students in gaining background of complex management problems in the industry.

This major offers two curricular plans, a regular four-year plan (A) and a cooperative plan (B) with pre-planned and supervised work experience in the sophomore, junior, and senior years during which the student is employed by an approved facility in the tourist, food, or lodging industries. The cooperative plan will take four years plus two terms. Selection of Plan A or B must be made at the end of the freshman year.

A business minor is available to students who successfully complete 21 hours of the following required courses: Accounting 2101-20-30, Economics 2110-20-30, and Statistics 2100. In addition, 15 hours of upper division business electives must be taken at UK. More than six upper division hours of accounting, economics, or statistics may be used for this minor. Students are responsible for meeting prerequisites listed for any upper division courses taken. The 12 hours of upper division business courses required in Plan A or B may be applied toward satisfying the 15 hour elective requirement.

**PLAN A**

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours Credit</th>
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<tbody>
<tr>
<td>English 1010 or 1011; 2020 or 3030</td>
<td>9</td>
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<tr>
<td>Home Economics 1510 or 2510</td>
<td>5</td>
</tr>
<tr>
<td>Math 1540 or 2510</td>
<td>5</td>
</tr>
<tr>
<td>Food Science 1010</td>
<td>5</td>
</tr>
<tr>
<td>Sociology 1510 or 1530</td>
<td>3</td>
</tr>
<tr>
<td>Nutrition 1210</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore**

| English 2510 | 4 |
| Food Economics 2510 | 5 |
| Economics 2530 | 5 |
| Accounting 2110-20 | 6 |
| FSA 3250 | 5 |
| Sociology 1510 | 4 |
| Psychology 2500 or 2530 | 4 |
| FSA 3160 or 3210 | 6 |
| Speech 2231 or 2511 | 3 |

**Freshman**

| English 4130 or 4150, 4250 | 9 |
| Dietetics 3160 | 4 |
| Economics 4423 | 4 |
| Textiles 3223 | 3 |
| Marketing 3110-20 | 6 |

**Senior**

| Accounting 2130 | 3 |
| Computer Science 1410 | 3 |
| Electives | 14 |

**Junior**

| Home Economics 3510 | 4 |
| FSA 4006 or 2100 | 4 |
| FSA 4142 | 3 |
| FSA 4250 | 3 |
| FSA 4610 | 3 |
| Electives | 14 |

**Total: 190 hours**

**Note:** Natural science electives (12 hours selected from one of the following: Biology 1101-20-30, Chemistry 1101-20-30, or Physics 1410-20-30).

**Professional Curricula in the Department of Textiles, Merchandising and Design**

**Admission and Exhibition**

The department reserves the right of acquisition and exhibition of work completed in its studios under the guidance of the faculty.

**Interior Design MAJOR**

The Interior Design major is for students who are primarily interested in becoming professional interior designers.

**Admission and Progression Policies**

Applications to Interior Design must be received by the Director of Admissions no later than March 1 for admission to the summer and fall quarters. Selection will be made by April 1, November 1 is the deadline for applications for the spring quarter, enrollment is closed for the winter quarter. An applicant who is not accepted may be reconsidered if an application is made for a future class.

Admission to junior level interior design studio requires (1) satisfactory completion of the sophomore level interior design series (2115-16) with a cumulative grade point average of at least 2.3, exceptions by petition only, (2) Application to the Department of Textiles, Merchandising and Design no later than the second week of the quarter in which the student is enrolled in IDT 2115, and (3) a personal interview and evaluation of the applicant's portfolio by designated members of the interior design faculty.

Students whose competencies suggest other programs will be counseled to enter other departmental curricula or assisted in the transfer to other college or University Programs.

**Student Performance**

Students must maintain an overall 2.3 grade point average by the end of 56 hours in order to remain in “full status” in the program. Academically deficient students will be put on “temporary status” during which the students must raise their overall GPA to 2.3, or have a minimum of 2.3 for each quarter's work. If the GPA is not raised to 2.3, the student will be dropped from the interior design program. Students must earn a C or better in each required upper-division interior design course in order to graduate from the program.
## Interior Design and Housing Major

A general curriculum is designed for students preparing for positions in business, educational, and public service programs and provides background for advanced study in interior design and housing.

### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1010 or 1011, 1020</td>
<td>6</td>
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<tr>
<td>English 1030</td>
<td>3</td>
</tr>
<tr>
<td>Food Science 1010</td>
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<td>Home Economics 1510</td>
<td>4</td>
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<td>Social science electives</td>
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<tr>
<td>IDH 1419</td>
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### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Economics 3510</td>
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<tr>
<td>Textiles and Clothing 4630-40</td>
<td>4</td>
</tr>
<tr>
<td>Home Economics 3510</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td>IDH 3215-16-18</td>
<td>12</td>
</tr>
<tr>
<td>IDH 3550-56</td>
<td>12</td>
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<tr>
<td>Home Economics 3510</td>
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</tr>
<tr>
<td>Electives</td>
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</table>

### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology 2500 and 2530 or 2540</td>
<td>8</td>
</tr>
<tr>
<td>Home Economics 3520</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 1510</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td>IDH 4120</td>
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</tr>
<tr>
<td>Electives</td>
<td>26</td>
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</table>

### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFS 3710 or 3820</td>
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</tr>
<tr>
<td>CFS 3830</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and social science electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>26</td>
</tr>
</tbody>
</table>

**TOTAL: 191 hours**

### Requirement Notes:

- Eight hour sequence from foreign language is required to achieve and maintain an overall grade point average of 2.5 or better.
- Twenty hours of electives must be upper-division level.
- Eight upper-division credits may be substituted.
- All quarter offerings are based on the quarter system.

### Requirement Notes: Option 1.

- Eight hours from the following: Anthropology, Biology, English, History, Psychology, Sociology.
- Eight hours from the following: Anthropology, History, Psychology, Sociology.

### Requirement Notes: Option 2.

- Eight hours from the following: Anthropology, Biology, English, History, Psychology, Sociology.
- Eight hours from the following: Anthropology, History, Psychology, Sociology.

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**Notes:**

- *Science electives (12-hour sequence) from one of the following fields: biology, chemistry, physics (15-hour sequence: Physics 1430-20, Biology 1150-30, 1140).
- The selection of electives for the area major is chosen from ornamental horticulture and landscape design, interior design and decoration, textiles, art, architecture, business administration, child and family studies.

---

**College of Home Economics**

<table>
<thead>
<tr>
<th>Department</th>
<th>Hours Credit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 3110</td>
<td>3</td>
<td><em>Eight-hour sequence from foreign language or philosophy is required to achieve and maintain an overall grade point average of 2.5 or better.</em></td>
</tr>
<tr>
<td>Economics 2110-20</td>
<td>6</td>
<td><em>Eight-hour sequence from foreign language or philosophy is required to achieve and maintain an overall grade point average of 2.5 or better.</em></td>
</tr>
<tr>
<td>Economics 3530</td>
<td>3</td>
<td><em>Eight-hour sequence from foreign language or philosophy is required to achieve and maintain an overall grade point average of 2.5 or better.</em></td>
</tr>
<tr>
<td>Textiles and Clothing 4630-40</td>
<td>4</td>
<td><em>Eight-hour sequence from foreign language or philosophy is required to achieve and maintain an overall grade point average of 2.5 or better.</em></td>
</tr>
<tr>
<td>Psychology 2510 or 2520 or 2530 or 2540</td>
<td>4</td>
<td><em>Eight-hour sequence from foreign language or philosophy is required to achieve and maintain an overall grade point average of 2.5 or better.</em></td>
</tr>
<tr>
<td>Sociology 1510</td>
<td>4</td>
<td><em>Eight-hour sequence from foreign language or philosophy is required to achieve and maintain an overall grade point average of 2.5 or better.</em></td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
<td><em>Eight-hour sequence from foreign language or philosophy is required to achieve and maintain an overall grade point average of 2.5 or better.</em></td>
</tr>
</tbody>
</table>

### Requirement Notes: Option 3.

- Eight-hour sequence from foreign language or philosophy is required to achieve and maintain an overall grade point average of 2.5 or better.
Twenty-four hours of electives must be upper-division level.

Eight-hour sequence from foreign language or philosophy of study involves general education and occupational program. The four-year course teachers for vocational certification at the College of Education do not meet certification requirements. In the undergraduate curriculum, endorsement in one or more of the following occupational endorsement is not sought, 9 hours of electives are to be selected in additional home economics subject matter. This curriculum will prepare students for graduate study in home economics. Students interested in graduate studies should request teacher-child interaction. Prerequisite: 3210; 3300 required. 3 hrs. 1 hr observation per week.

Graduate Study Programs in the College of Home Economics

The College of Home Economics offers a full range of graduate study programs leading to M.S. and Ph.D. degrees. Any person interested in graduate study should request information application, and a Graduate Catalog from Dr. Jay Staus, Assistant Dean, Graduate Studies, College of Home Economics, The University of Tennessee, Knoxville, TN 37916.

2015 Introduction to Early Education (3) Introduces and overview of early childhood education: conceptions of children, teachers, and teaching; includes field observation.

1120 Management and its Contribution to Family Living (3) Decision-making process, relationship among decisions; principles of organization for reorganizing, decision-making procedures; basic concepts of management principle to problems.

1030 Introduction to Family Economics (3) Introduces and overview of occupational education; conceptions of children, teachers, and teaching; includes field observation.

2100 Multifamily Relations (3) Examination of issues and development of communication skills and roles involved in relating to opposite sex. (Not open to majors.)

2160 Human Sexuality (3) Dimensions of human sexuality as examined through cultural, social, and psychological influences.

3150 Day Care Programming for Infants and Preschool Children (3) Program planning for children from early infancy through 6 years in day care environment. Analysis of program and prediction of later behavior. Prerequisite: 2110 and 3200 recommended. 3 hrs. 1 hr observation per week.

3210 Development in Early Childhood (3) Comprehension of the child during the early childhood years. Analysis of interactions among children; the interaction between infant and the environment. Special attention to different social and cultural environments. Recommended 3200 and 3210 be taken prior to this course. 3 hrs. 1 hr observation per week.

3200 Development in Middle Childhood (3) Growth and development of children ages 7-12. Emphasis on social and emotional development; begins with emphasis on influences of family and community on child's growth; includes field observation. Recommended 2600 and 3200 be taken prior to this course. 3 hrs. 1 hr observation per week.

3300 Observational Methods in Child Development (3) The study of methods of gathering information, and child behavior and development of individual skills and competencies. Prerequisite: 3200 or 3210 or consent of instructor.

3301 Program Planning (3) Principles of pre-school education, socialization and interaction. Prerequisite: 3210; 3300 recommended.

3302 Aesthetic Experiences (3) Examination of subject matter—quantity and quality; art; music, literature, science, 3302 recommended.

4100 Family Economics (3) Management of family income and resources. Private and public measures

Total: 190 hours

Elective courses in relevant, anthropology, geography, interaction between infant and his environment. Recommended 3200 and 3210 be taken prior to this course. 3 hrs. 1 hr observation per week.
credit up to 9 hrs. May be repeated with departmental consent for students and instructor with departmental approval.

4710 Contemporary Developments (1-3) Student or arranged. May be repeated. Maximum credit 15 hrs.

4630 Field Work In Child, Family, and Consumer Specialized Programmes for Deprived Preschool Children. Young children, nursery school programs, and special agencies contributing to welfare of children. Prereq: Selected components. Observation and analysis of settings. Development of student competencies in and application of management behavior to family environments. Emphasis given to effects of family life cycle stage on marital interaction and parenting. Prereq: 2110 or 3210 or 3520 or 3530 or 3520.

4110 Student Teaching of Preschool Children (3) Increasing responsibility for planning and guiding groups of young children under supervision of head teacher includes 2 hr weekly seminar. Prereq: 3020, 3120, 3300, 3350; 3920 recommended; coreq: 4110.

4120 Family Finance (3) Analysis of alternative ways of meeting financial problems encountered during life cycle of family.

4220 Consumer Trends and Energy in the Home (3) Application of management principles to home-making activities; evaluation of equipment, work centers, and work procedures in terms of time and energy demands. Adaptations for the handicapped.

4240 Adult Development and Aging (2) Life in our society. Adjustment to internal and environmental changes through middle and elderly periods. Prereq: 2110 or 3210 or approved course. 1 hr background in adult development or consent of instructor.

4300 Advanced Child Development (2) Survey of studies of human growth and development. Emphasis on research literature and research methods. 1 hr background in human development or consent of instructor.

4400 Learning Experiences with Parents (3) Dynamics of parent-child teacher interaction. Emphasis on development and application of various teaching techniques and on experimental design, analysis, and interpretation. Development of research and working relationships between parents and researchers through experiences in a variety of settings. Prereq: Home Economics 1510 or 3270.

4420 Family Relationships (3) Interpersonal relations between family members and social roles. Prereq: 3015 or 3115.


4610 Child in the Community (2) Needs of children: community agencies serving these needs: visitation agencies conferring with welfare of children. Prereq: 2110 or Home Economics 3150 or equivalent.

4620 Administration of Programs for Young Children (3) Planning for staffing, housing, testing, scheduling, and financing for day care of infants and young children, nursery school programs, and specialized programs for deprived preschool children. Prereq: 3110 or 3310 or 4110.

4630 Field Work in Child, Family, and Consumer Studies (3-15) Opportunity for student to work in nursery school programs or community agencies, focus on children, families, and/or consumer concerns. Arranged. May be repeated. Maximum credit 9 hrs.

4670 Doctoral Dissertation (3-15) Problems of growth and development during two years, role of parents and other adults in fostering adult development. Upper-division students only. Prereq: 2110 or 3210 or 4 hrs psychology.

4710 Student Teaching in Preschool Settings (6) Increasing responsibility for planning and guiding groups of young children under supervision of a head teacher includes 2 hr weekly seminar. Prereq: 1500, 3210, 3300, 3350; 3920 recommended; coreq: 4110.

4711 Professional Field Experience (3,3) Repeated. Maximum credit 9 hrs.

4810 Afro-American Families (3) Historical background, contemporary family structure and relationship, emerging needs and programs. Prereq: 4120 or upper-division standing. (Same as Black Studies 4010.)

4830 Consumers and the Market (3) Analysis of elements in marketplace which create problems for consumers. Special attention is given to consumer decision making, need for information and communication, and the consumer advocate associated with government protection of consumers.

4780 Honors: Child, Family, and Consumer Studies (3) Individual special problems for juniors and seniors showing special ability and interests. May be repeated. Maximum credit 9 hrs.

GRADUATE

5000 Thesis

5002 Non-Thesis Graduation Completion (3-10)

5060 Practicum (1-15)

5110 Field Work in Family Life (3)

5140 Consumption and Standards of Living (3)

5150 Assessment of Family Behavior (3)

5160 Management of Time and Energy in the Home (3)

5170 Consumer Economics (3)

5180 Family Financial Consultation (3)

5190 Standards In Consumer Protection (3)

5210 Theories of Child Development (3)

5230 Family Life Programs (3)

5310 Theory and Research on Human Sexuality (3)

5410 Advanced Family Relationships (3)

5420 Parents and Children (3)

5430 Families in Crisis (3)

5510 Survey of Research in Child and Family Studies (3)

5530 Research Methods in Child and Family Studies (3)

5540 Learning in Preschool Programs (3)

5550 Supervision in Preschool Programs (3)

5560 Management of Time and Environment in Family Environment (3)

5620 Nursery School Administration (3)

5630 Seminar in Infant Development (3)

5640 Teaching Child and Family Studies (3)

5670 Current Programs and Trends in Child and Family Counseling (3,3)

5680 Problems in Child, Family, and Consumer Counseling (3,3)

5690 Child's Effects on Parents and Marriage (3)

5700 Seminar in Child Development and Family Relationships (3,3)

5720 Seminar in Child Development and Family Relationships (3,3)

5750 Advanced Topics (3)

5810 Individual and Family Development: Physiological Determinants (3)

5830 Individual and Family Development: Cognition (3)

5850 Individual and Family Development: Socialization (3)

6400 Theory Construction in Family Studies (3)

6450 Conceptual Frameworks for the Family (3)

6810-20 Applied Behavior Analysis in Natural Settings (1,1)

6710 Elements of Consumer Choice (3)

6720 Consumer Protection (3)

**Nutrition and Food Sciences**

**Professors:**

E. R. Beauchamp, (Head), Ph.D. Kansas State; J. A. McLean, Ph.D. Minnesota; M. A. Padward, Ph.D. Minnesota; W. D. Campbell, (Emerita), Ph.D. Oregon State; C. G. Greene, Ph.D. Kansas State; B. Green (Emerita), M. S. Columbus; G. T. Marlow (Emerita), Ph.D. Columbus; C. R. McClelland, Ph.D. Wisconsin; R. F. McWhirter, Ph.D. Wisconsin; J. C. Smith, Ph.D. Wisconsin; M. A. Selink, Ph.D. Pennsylvania

**Associate Professors:**


**Assistant Professors:**

L. H. Myh, M. S. Kansas; P. B. Hutcherson*; M. P. H. Oklahoma; R. L. 'Le,' M.S. Case Western Reserve; L. J. McNeil*, M.A. Missouri; D. D. Haas, M.S.; M. S. Tennessee; B. B. Speer, M.S.; Tennessee

**Instructors:**

W. L. Dodson, M.S. Tennessee; B. B. Speer, M.S. Tennessee

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**College of Home Economics**

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Prerequisite: Consent of instructor. Hours and credit arranged. Not for graduate credit to departmental majors.

2310 Analytical Chemistry (4) Analytical chemistry; topics to be determined by instructor. Not for graduate credit to departmental majors.

3300 Biochemistry (3) Biochemistry; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

3300 Biochemistry (3) Biochemistry; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5110-20 Advanced Physiological Chemistry (4,3) Advanced physiological chemistry; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5230 Carbohydrates and Fats in Relation to Food Science (3) Carbohydrates and fats in relation to food science; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5240 Proteins and Amino Acids (3) Proteins and amino acids; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5250 Seminars (1-3) Seminars; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5310-20 Community Nutrition (3, 3) Community nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5340 Field Study in Community Nutrition (1-12) Field study in community nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5350 Mental Retardation or Other Developmental Disabilities (1-12) Mental retardation or other developmental disabilities; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5370 Survey of Nutrition (3) Survey of nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5410 Reproductive and Developmental Nutrition (3) Reproductive and developmental nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5450 Field Experience in Nutrition (1-6) Field experience in nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5460 Survey of Dietetics II (1-3) Survey of dietetics II; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5470 Nutrition and Aging (3) Nutrition and aging; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5480 World Food Supply and Human Nutrition (3) World food supply and human nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5490 Environmental Effects on Nutrition (3) Environmental effects on nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5550 Food Behavior of the Individual (3) Food behavior of the individual; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5610-20 Advanced Food Science (3, 3) Advanced food science; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5620 Advanced Topics in Nutrition (1-3) Advanced topics in nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5700 Current Programs and Trends in Nutrition (1-3) Current programs and trends in nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5750 Current Programs and Trends in Nutrition (1-3) Current programs and trends in nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5800 Problems in Nutrition (1-3) Problems in nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

5914 Foods and Nutrition: Physicochemical Principles (3) Foods and nutrition: physicochemical principles; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

6000 Doctoral Research and Dissertation (1-12) Doctoral research and dissertation; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

6110 Advanced Topics in Food Science (3) Advanced topics in food science; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

6210 Advanced Topics in Nutrition (1-3) Advanced topics in nutrition; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

6250 Seminar (1-3) Seminar; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.

6900 Seminar (1-3) Seminar; topics, and principles. May be repeated with departmental approval. Elective credit only. Prerequisite: consent of instructor.


4000 Current Topics (1-3) Assigned reading and group discussion of research, literature Hiro and credit arranged. Prereq: 3110 or consent of instructor.

4600 Seminar (1-3) Review, organization, and reporting of literature on selected topics. May be repeated. Credit: 3 hrs or consent of instructor. Hiro and credit arranged.

4780 Honors: Foods Systems Administration (1-3) Special problems for juniors and seniors showing special ability and interest in instructor administration. May be repeated for credit. Hiro and credit arranged.

GRADUATE

5000 Thesis

5002 Non-Thesis Graduation Completion (3-15)

5120 Methods of Community Services Development (3)

5210 Administration of Food Service Delivery Systems (3)

5230 Food Systems Evaluation (3)

5400 Financial Management of Food Systems (3)

5500 Clinical Teaching in Health Care Agencies (3)

5700 Current Problems and Trends in Food Systems Administration (1-3)

5800 Problems in Food Systems Administration (1-3)

5850 Field Experience (3-9)

5900 Seminar (1-3)

5906 Practicum (1-12)

5910-20 International Studies (1-3)

5950 Workshop (1-12)

5978 Honors :Food Systems Administration (1-3)

5978 Honors: Community Services Programs (3) Problems for juniors and seniors with special interest in community services programs. May be repeated for credit up to 9 hrs.

4910 International Study Tour (6) See page 153. Prereq: Consent of instructor.

4978 Honors: Community Services Programs (3) Problems for juniors and seniors with special interests in community services programs. May be repeated for credit up to 9 hrs. Prereq: Consent of department.

GRADUATE

5110 International Studies (1-3)

5210 Modern and Contemporary Developments (3)

5421 Contemporary Developments in Dietetics (2) Relating professional course concepts to clinical experiences through travel (off-campus). Open only to seniors in the Coordinated Undergraduate Program in Dietetics. May be repeated for credit up to 9 hrs.

5600 Home Economics in the Community (3)

5700 Community Services Programs (3)

5800 Seminar in Human Resource Development (1-3)

5900 Seminar in Human Resource Development (1-3)

6000 Doctoral Research and Dissertation (1-3)

6100-20 Quantitative Methods to Control Re- source Development (1-3)

6210 Professional Issues in Human Resource Development (3)

6230 Evaluation of Community Services Programs (3)

6310 Advanced Topics (3)

6500 Methodological Issues in Human Economics (3)

6600 Seminar (1-3)

Home Economics Education (481)

1010 Home Economics as a Profession (1) Scope of the profession of home economics; educational and professional preparation; professional requirements for admission to various careers within the profession. S/N Co.

1510 Family Systems: Human Development (6) Def. inion, description, and utilization of basic concepts as applied to development of individual and family; emphasis on professional development and contribution.


2010 Family Systems: Consumer Resources (4) Foci of family systems in consumer education and the family systems model as a basis for teaching consumers about individual and family development in the interactions of individuals and families with society. Prereq: 3 hrs of economics, junior standing.

4000 Seminar in Consumer Resources (3) Group discussion of selected topics related to consumer research, education, and behavior. Topics selected by the instructor. May be repeated for credit up to 9 hrs.

5310 Family Systems: Consumer Resources (4) Relacion of professional course concepts to clinical experiences through travel (off-campus). Open only to seniors in the Coordinated Undergraduate Program in Dietetics. May be repeated for credit up to 9 hrs.

1010 Home Economics Education (3) Education in the College of Education (see page 121 for course offerings) .

2010 Family Systems: Consumer Resources (4) Relating professional course concepts to clinical experiences through travel (off-campus). Open only to seniors in the Coordinated Undergraduate Program in Dietetics. May be repeated for credit up to 9 hrs.
Textiles, Merchandising and Design

Professors: J. Y. Orlando (Head), Ph.D., Iowa State; J. A. Thompson, Ph.D., Missouri. Associate Professor: G. H. Lattimer, Ph.D., N.C. University.

1160 Costume Analysis (2) Analysis and application of design principles related to different types and activities. 1 hr and 2 labs.

1165 Clothing (1) Functions of pattern alteration, fitting, and construction with emphasis on design, quality and construction compatibility. Prereq: 1160; 1 hr and 2 labs.

2110 Fashion (3) How fashion world works, from designer to consumer; fashion trends and cycles.

3230 Textiles (3) Textile products—study of consumer, selection, preference, and satisfaction with emphasis on performance. For non-majors only.

3240 Functional and Cultural Aspects of Textiles and Clothing (3) Cultural, sociopsychological, functional, and technological developments in textiles and clothing. Prereq: 3 hrs of the following: child development and family relationships, economics; 4 hrs of sociology or anthropology or psychology.


3420 Clothing II—Advanced Construction (3) Paraphrastic study and investigation of fabric design concepts utilizing basic principles including fitting, elementary flat tailoring, quick tailoring methods, and couture finishing techniques. Prereq: 1165; 1 hr and 2 labs.

3430 Consumer Issues: Clothing for Contemporary Families (3) Problems of clothing consumption encountered during various stages of family life cycle. Prereq: Junior standing.

4260 Professional Practice (15) Supervised field experience in establishments engaged in practice of interior design, housing, opinion, merchandising, and related activities. For non-majors only. Prereq: 3240. Required for majors, optional for non-majors.

4330 Care and Repair of Household Equipment (3) Care of equipment to give maximum service in relation to operation and servicing cost, understanding of common repair problems. Prereq: 4260. 1 hr and 2 labs.

4130 Research Experiences (3-15) Individual juniors and seniors showing special abilities may be assigned to ongoing research within department or work in research and development laboratories or quality control department of fiber, chemical, or textile company. Prereq: Recommendation of department head and research advisor; 4020; 4140; and 3 or 4 hrs of statistics. May be repeated. Maximum credit 15 hrs.

4140 Introduction to Textile Testing Methods (3) Methods and equipment used in physical testing as approved by recognized textile groups. Prereq: 4300. 1 hr and 2 labs.

4150 Elementary Textile Microscopy (3) Microscopic techniques as applied to study of textile fibers and fabrics. Prereq: 4020. 1 hr and 2 labs.

4200 Textile Fiber Chemistry (4) Chemistry of textile fibers with emphasis on structure, preparation, and reactions. Implications relating to dyeing and finishing of fabrics. Prereq: One quarter of organic chemistry. 3 hrs and 1 lab.

4220 Theory and Interpretation of Fashion Design (3) Analysis and application of historical, sociological, cultural, and environmental sources of costume design interpretation with emphasis on contemporary design. Prereq or coreq: 1165, 3410, and 3480. 2 hrs and 1 lab.


4235 Principles of Design Analysis (3) Interpretation of dress design terminating in finished garments developed through the media of draping.

4510 Teaching Materials (3) Investigation, preparation, and evaluation of teaching materials. For students planning to teach or do home demonstration work. Prereq: 3440, senior standing. 1 hr and 2 labs.

4620 Introduction to Field Experience in Merchandising (1) Interviews with store personnel; placement and planning for field experience. Prereq: Economics 2110, 2130, junior standing, concentration in merchandising option, approval of program coordinator, and a minimum grade point average of 2.2. Open only to students who intend to enroll in 4630-40. May not be repeated.

4630 Field Experience in Merchandising (9) On-campus, supervised experience in a cooperative program with business establishments which merchandise textiles and/or apparel. Prereq: 3510, 4110, 4620, 9 hrs of marketing, senior standing, major in merchandising, and a minimum grade point average of 2.2; coreq: 4640. Offered fall quarter only.

4640 Methods in Field Experience (6) Investigation of training systems and store organization, analyses of jobs, and evaluation of field experience. Prereq: 4300, senior standing, major in merchandising, and a minimum grade point average of 2.2; coreq: 4630. Offered fall quarter only.

4000 Seminar in Textiles and Clothing (1-3) Individual problems for juniors and seniors showing special ability and interest in textiles and clothing. Admission only upon recommendation of head of department. hrs arranged.

5000 Thesis

5002 Non-Thesis Graduation Completion (3-15) 5110 Textile Testing and Methods of Research in Textiles (3) 5120 Advanced Problems in Textiles and Clothing (3) 5130 Advanced Tailoring (3) 5150 Principles of Design Analysis (3) 5160 Review of Literature (3) 5170 Social, Psychological, and Economic Aspects of Clothing (3) 5180 Advanced Textile Economics (3) 5210 Evaluation of Instructional Materials in the Field of Textiles and Clothing (3) 5220 Historic Textiles (3) 5230 Practicum (1-6) 5250-60-70 Problems in Textile Chemistry (4, 4, 4) 5310 Fashion Analysis (3) 5330 Problems in Historic Costume (5) 5370 Current Programs and Trends in Textiles and Clothing (1-5) 5380 Seminar in Textiles and Clothing (1-3) 6010 Advanced Studies in Textiles and Clothing (5) 8110 Selected Issues in Textiles and Clothing (3) 8140 Selected Behavioral Theories in Clothing (3) 8150 Social-Psychological Theories of Clothing Consumption (3) 8160 Textile Flammability (3) 8170 Physical Performance Behavior of Textile Structures (1) 9010 Seminar in Textiles and Clothing (1-3)
The College of Law will change from the quarter system to the semester system in the summer of 1981.

The University of Tennessee College of Law commenced operation in 1890 and has continuously sought to provide high quality legal education in a university community. While the principal objective of the college is to prepare students for the private practice of law, its total mission is more broadly conceived. The college exposes students to the legal issues of our society enabling them to develop analytical skills in respect to decisional law and statutes, the ability to communicate effectively to others their knowledge of the law, an awareness of the historical growth of the law, a knowledgeable appreciation of the interrelationship of law and society, and the ability to use law as an implement of societal control and development. Students are thus equipped to serve their community not only as advocates and counselors, but as policy makers and active, responsible citizens.

The coordinated program of the college has three dimensions: teaching and learning, research into and appraisal of our legal systems and institutions, and service to the community. Each plays a significant role in the college as a modern law center.

The teaching and learning element of legal education at the college involves a cooperative classroom interaction between faculty and students in the analytical study of a host of questions and problems found in today's legal profession. These involve decisional law, statutory interpretation, administrative regulation, techniques of trial and appellate advocacy, and the roles and responsibilities of the lawyer in advising and representing clients. While proper consideration is given to the problems of Tennessee law, the course of study is conducted with a view toward providing an awareness and understanding of the regional and national perspective to prepare our students for service in any state.

The college is also directly involved in providing service to the community of which it is a part. A major element of public service is centered in the Legal Clinic where students, under the guidance of skilled and experienced licensed practitioners, provide legal services to indigent persons of Knox County. Additionally, through research, consultation, and other services to legal institutions and groups within the state, the college seeks to participate in the development and improvement of the society in which its students may eventually practice law. The Public Law Research and Service Program is an example of this function. In combination, the direction and objectives of the college lead to the development not of a narrow technician, but of a student of the law with the perspective, breadth, and understanding necessary for the accomplishment of the many tasks assigned by society to the legal profession.

The College of Law Building

Since 1969 the college has occupied a building especially designed for teaching, study, and research in the law. In the spring of 1971 the college occupied the new wing begun in the fall of 1969. The new addition has doubled the available facilities. The library, the classrooms, and the offices are air-conditioned. Adequate classrooms, courtrooms, seminar rooms, a private office for each full-time faculty member, the well-equipped offices of the Legal Clinic, and a spacious, well-lighted Law Library are contained in this modern building. Stack space for more than 200,000 volumes will permit the repository of one of the largest law books collections in the South.

Legal Clinic

The University of Tennessee Legal Clinic was established in 1947. Though the Legal Clinic provides legal assistance to indigent persons, it is designed primarily as a teaching device to correlate theory and practice. It introduces the student under faculty supervision to the law in practice through personal contact with clients and their problems. The Legal Clinic functions as a large law office in which the student gains experience in interviewing clients, writing legal letters, investigating and evaluating facts, preparing memoranda of law, preparing cases for trial or adjustment, and briefing cases. Classroom work supplements the handling of actual cases. The student is thus trained in the technique of law practice and the management of a law office. The ethical responsibilities of lawyers and their function as public servants are stressed. Under present rules of the Tennessee Supreme Court, students, under the direct supervision of the Legal Clinic staff, are certified to practice before all the courts of Tennessee.

The Law Library

The Law Library contains the official state reports of all states, the complete National Reporter system which covers all states and the federal courts, the Annotated Reports, standard sets of miscellaneous reports, the reports of the Canadian cases and of English cases from the yearbooks to date. In addition to these, there are adequate encyclopedias, digests and dictionaries, standard textbooks, law reviews, and current looseleaf services, totaling together more than 100,000 cataloged volumes. The library is under the supervision of a law librarian who is trained in law and library science. Law students also have the use of the collections in the University Main Library, which is located across the street from the Law Library, the Undergraduate Library a few blocks away, and other branch libraries.

Degree of Doctor of Jurisprudence

The degree of Doctor of Jurisprudence will be conferred upon candidates who complete, with the required average, six semesters of resident law study and who have 84 semester hours of credit, including all required courses. The required average is 2.0 and that average must be maintained on the work of all six semesters and also for the combined work
of the grading periods in which the last twenty-eight (28) hours of credit were earned. Averages are computed on weighted grades. Grades are on a numerical basis from 0.0 to 4.0. A grade of 0.9 or below is a failure.

Eligible law students may receive credit towards the J.D. degree for acceptable performance in up to three (3) courses taken in other departments at The University of Tennessee. Course selection and registration are subject to guidelines approved by the law faculty which include the requirement that such course should be acceptable for credit towards a graduate degree in the department offering the course.

Note: Students are advised to consult the University’s degree requirements as stated in the front section of this catalog as well as the requirements for this college.

Dual J.D.-M.B.A. Degree Program

The College of Business Administration and the College of Law offer a coordinated dual degree program leading to the conferral of both Doctor of Jurisprudence and the Master of Business Administration degrees. A student pursuing the dual program is required to take fewer hours of course work than would be required if the two degrees were to be earned separately.

Admissions. Applicants for the J.D.-M.B.A. program must make separate application to, and be competitively and independently accepted by, the College of Law for the J.D. degree and the Graduate School and College of Business Administration for the M.B.A. degree, and by the Dual Degree Committee. Students who have been accepted by both colleges may commence studies in the dual program at the beginning of any term subsequent to matriculation in both colleges, provided, however, that dual program studies must be started prior to the last 28 semester hours required for the J.D. degree and the last 24 hours required for the M.B.A. degree.

Courses. A dual degree candidate must earn at least 90 semester hours of approved courses offered by both colleges. Dual degree students withdrawing from one college will be required to withdraw from the dual degree program. For students continuing in the dual degree program, the J.D. and M.B.A. degrees will be awarded upon completion of all requirements of the dual degree program.

The College of Law will award credit toward the J.D. degree for acceptable performance in a maximum of 8 semester hours of approved course work at the College of Business Administration. A student shall receive two semester hours of credit for each such course successfully completed unless the Law faculty specifies otherwise. Two of the 8 semester hours must be earned in Accounting 5810 or a more advanced accounting course. If College of Law credit is given for such accounting courses, the dual degree program at the College of Business Administration must meet all requirements imposed on students taking the course on a regular grade basis. A student who obtains permission to vary the credit evaluation of a dual degree course will be required to complete 12 hours in a quarter, then for the remainder of the study the student is restricted to 16 hours per quarter.

Maximum Course Load Per Quarter

Eighteen hours is the maximum for the college. If a student does not satisfactorily complete 12 hours in a quarter, then for the remainder of the study the student is restricted to 16 hours per quarter.

Clinical Courses

A student may take no more than a total of two clinical courses for law credit and normally no more than one clinical course per quarter. Clinical courses are 8746-56, 8755, 8820, 8830, and 8855.

Policy for Graduate Students Taking Law Courses

Law courses are not available for graduate credit; however, a graduate student may be allowed to take up to 6 semester hours of law courses and receive credit toward a degree upon approval of the College of Law and the major chairperson. The graduate student must register for the law course during regular registration. The student cannot receive credit for law courses and receive credit for courses of other departments at the University. If a student requests an S/N grade for a College of Law course, a grade of S or N will be recorded. If a student earns a grade below a 2.0, an NC will be recorded and the course cannot be used toward meeting degree requirements. Grades for law courses will not be reflected in the cumulative average.

Different rules apply to the student enrolled in the Dual J.D.-M.B.A. Program. Grades must be earned according to the grading system of the respective college, e.g. numerical grades for law courses, letter grades for graduate courses. Refer to page 167 for the grading scale acceptable toward meeting degree requirements. Cumulative GPA for law courses will only be carried until graduation, at which time both the graduate and the law cumulative will be shown on the permanent record.

Admission

Information regarding admission, financial aid, academic policies, extracurricular activities, and student services is available in...
Program of Instruction

The following program is designed to give the student an adequate preparation for the practice of law. From 12 to 15 hours of classroom work a week are required of all full-time students. The required courses will be taken as early in the law curriculum as possible or as scheduled by the law faculty. See statement of course availability at end of this section.

REQUIRED COURSES


8840 Civil Procedure II (3) Pleading: joinder of parties and cases, discovery, trials, verdicts, judg-

ELECTIVE COURSES

8035 Comparative Law I (3) General introduction to the civil law systems of France and Germany, focusing on legal institutions, methodology and aspects of the law of obligations and commercial law.

8036 American Legal History I (3) Historical development of the law, legal institutions, legal profession, and legal education from colonial times to the present. Historical relationship of legal system to society.

8037 Criminal Law I (3) A study of the theoretical foundations of criminal law, including an examination of concepts of justice and morality and pertinent materials in the physical and behavioral sciences.
8320 Legal Writing (1) By arrangement. Academic
representation, usually at preliminary hearings and
fieldwork requiring participation in criminal defense
and prosecution. Preparation for and participation in
other course during a subsequent semester. A student
who has successfully completed one

elected either a civil or criminal work component.

8355 Selected Problems in Remedies (3) Advanced

8360 Family Law (3) Survey of laws affecting the

6920 Bar and Notes (3) Negotiable Instruments,

7300 Taxation (3) Federal income, estate, and gift
taxation. Federal income tax; state and local
taxes. Wills, trusts, and estate administration.

8060 Criminal Process (4) Examination of the con-

8320 Administrative Law (3) Administrative aген-
cise and process, including administrative and
judicial review. Construction of administrative
rules and regulations. Adjunctive procedures, review
of remedies, ripeness, and standing. Fieldwork and
scope of review.

8325 International Business Transactions (3) Legal
issues involving the use, enforcement, and
acquisition of property within a foreign country.
Doing business abroad. A multinational business
within a foreign country. Introduction to the field
of international business and participation in

8300 Wealth Transfer Taxation (3) Transfers of

8720 Criminal Procedure (3) Examination of the first
trials, double jeopardy, and habeas corpus.

8350 Remedies (4) Study of judicial remedies, in-

8320 Judicial and Administrative Procedure (3) En-
jforcement of orders, Bankruptcy and its alternatives for the

8300 Constitutional Law (2) Freedom of expres-
sion, association, and religion. Fourteenth Amend-
ment excluding rights of criminally accused, includ-
ing discrimination as to race, sex, etc., right to

8305 Federal Taxation (3) Principles of federal tax-

8300 Federal Taxation (3) Principles relating to
government procurement, both federal and state.

8250 International Corporate Law (3) Legal
issues involving the domestic corporation. The
formation, use and abuse, transfer and
acquisition of property within a foreign country.
Doing business abroad.

8250 International Corporate Law (3) Legal
issues involving the interaction between

courses after the successful completion of

8200 Advanced Business Associations (2) Selected

8200 Advanced Business Associations (2) Selected

8270 Business Associations (4) Advanced course in

8300 Constitutional Law (2) Freedom of expres-
sion, association, and religion. Fourteenth Amend-
ment excluding rights of criminally accused, includ-
ing discrimination as to race, sex, etc., right to

8670 Legal Writing (1) By arrangement. Academic

8700 Local Government (3) Distribution of power

8700 Local Government (3) Distribution of power

8325 International Business Transactions (3) Legal
issues involving the use, enforcement, and
acquisition of property within a foreign country.
Doing business abroad. A multinational business
within a foreign country. Introduction to the field
of international business and participation in

8985 Directed Research (1-2) By arrangement. In-

8320 Administrative Law (3) Administrative aген-
cise and process, including administrative and
judicial review. Construction of administrative
rules and regulations. Adjunctive procedures, review
of remedies, ripeness, and standing. Fieldwork and
scope of review.

8320 Judicial and Administrative Procedure (3) En-
jforcement of orders, Bankruptcy and its alternatives for the

8300 Constitutional Law (2) Freedom of expres-
sion, association, and religion. Fourteenth Amend-
ment excluding rights of criminally accused, includ-
ing discrimination as to race, sex, etc., right to

8305 Federal Taxation (3) Principles of federal tax-

8300 Federal Taxation (3) Principles relating to
government procurement, both federal and state.

8250 International Corporate Law (3) Legal
issues involving the domestic corporation. The
formation, use and abuse, transfer and
acquisition of property within a foreign country.
Doing business abroad.

8250 International Corporate Law (3) Legal
issues involving the interaction between

8775 Advanced Advocacy (2) Arbitration of labor agreements. Jurisdictional and legislative developments, forum selection, choice of law, motions, hearings, evidentiary issues, written and oral advocacy, documents, discovery, settlement. Students receive credit for 40 hours credit or 84 hours credit. Credit is determined at the option of the instructor.


8800 Integrated Advocacy Seminar (2) Credit hours determined at the option of the instructor. Serves as laboratory for students; professional staff accompany the professor and work with teams of students who will prepare and present arguments to a court or an administrative agency. Students receiving credit for a second Introduction to Advocacy course will receive four (4) hours credit for taking the Introduction to Advocacy course. Students receiving credit for a second Introduction to Advocacy course will receive six (6) hours credit rather than eight (8) hours credit. Students enrolling in 8785 after completing 8746 will receive zero (0) hours credit for the Introduction to Advocacy course.

8810 Consumer Protection Seminar (2) Selected topics on corporate and tax aspects of business planning and transactions. Prereq: 8860, 8862, and 8740.


8850 Business Planning Seminar (2) Selected problems on corporate and tax aspects of business planning and transactions. Prereq: 8860, 8862, and 8740.

8870 Business Law Seminar (3) Credit hours determined at the option of the instructor. Change in core offerings only on an every-other-year basis. Change in core offerings subject to prior notification in writing.


8910 Administrative Law Seminar (2) In-depth study of the law of administrative agencies. Emphasis on the representation of clients before administrative agencies, the acquisition or development of large pieces of raw land. Prereq: 8990.

8920 Trade Regulation Seminar (2) Study and discussion of antitrust and trade regulation laws and policies. Prereq: 8990.

8930 Consumer Protection Seminar (2) Study and discussion of selected consumer protection laws and policies. Prereq: 8840 or 8862.

8935 Law and Medicine Seminar (2) Examination of the medical profession's involvement in judicial proceedings, including (1) medical malpractice and alternative dispute resolution, (2) responsibilities for disposition and care of dead bodies and legal principles governing organ transplantation, (3) medico-legal aspects of euthanasia, and (4) malpractice litigation. Prereq: 8800 or 8860.

8945 Legal Professional Competence Seminar (2) Credit hours determined at the option of the instructor. Change in core offerings only on an every-other-year basis. Change in core offerings subject to prior notification in writing.

8950 Tax Seminar (2) Advanced topics in taxation, including corporate and individual income taxation, estate planning, and other related areas. Prereq: 8990.

8955 Tax Theory (3) Theory and practice of taxation, emphasizing the definitions, tax rates, and bases of federal income, estate, gift, and excise taxes. Prereq: 8990.

8960 Office Practice Seminar (2) Techniques of law office management, including rules of court, personnel, interviewing and counseling, document preparation, business planning and transactions. Prereq: 8840.

8970 Law and Mental Health Seminar (2) Introduction to the laws, principles, role of the psychiatrist, and relationship to role of legal counsel, assigned readings, field work, and case studies. Prereq: 8990 or 8995.

8980 Labor Relations Law Seminar (2) Study and discussion of selected labor relations law problems. Prereq: 8990.

9000 Advanced Advocacy Seminar (2) Credit hours determined at the option of the instructor. Change in core offerings only on an every-other-year basis. Change in core offerings subject to prior notification in writing.

9010 Administrative Law Seminar (2) In-depth study of the law of administrative agencies. Emphasis on the representation of clients before administrative agencies, the acquisition or development of large pieces of raw land. Prereq: 8990.


9035 Law and Medicine Seminar (2) Examination of the medical profession's involvement in judicial proceedings, including (1) medical malpractice and alternative dispute resolution, (2) responsibilities for disposition and care of dead bodies and legal principles governing organ transplantation, (3) medico-legal aspects of euthanasia, and (4) malpractice litigation. Prereq: 8800 or 8860.

9045 Legal Professional Competence Seminar (2) Credit hours determined at the option of the instructor. Change in core offerings only on an every-other-year basis. Change in core offerings subject to prior notification in writing.

9050 Tax Seminar (2) Advanced topics in taxation, including corporate and individual income taxation, estate planning, and other related areas. Prereq: 8990.

9055 Tax Theory (3) Theory and practice of taxation, emphasizing the definitions, tax rates, and bases of federal income, estate, gift, and excise taxes. Prereq: 8990.

9060 Office Practice Seminar (2) Techniques of law office management, including rules of court, personnel, interviewing and counseling, document preparation, business planning and transactions. Prereq: 8840.

9070 Law and Mental Health Seminar (2) Introduction to the laws, principles, role of the psychiatrist, and relationship to role of legal counsel, assigned readings, field work, and case studies. Prereq: 8990 or 8995.

9080 Labor Relations Law Seminar (2) Study and discussion of selected labor relations law problems. Prereq: 8990.

9090 Environmental Protection Seminar (2) Through team-teaching and the input of selected experts, course will focus on specific problems of complying with federal and state environmental standards. Emphasis on non-federal environmental standards. Prereq: 8990 or 8995.

9100 Administration Seminar (2) In-depth study of principles of administrative law not covered in tax seminars. Emphasis on choice of adjudicative procedures, delegation of enforcement and delinquency policy, compliance in administrative action.

9110 Consumer Protection Seminar (2) Selected topics in consumer rights law, including consumer protection laws and policies. Prereq: 8840 or 8862.

9120 Tax Seminar (2) Advanced topics in taxation, including corporate and individual income taxation, estate planning, and other related areas. Prereq: 8990.

9130 Criminal Law Seminar (2) Advanced problems in criminal law and administration of justice. Prereq: 8800.

9140 Estate Planning Seminar (2) Problems of estate planning both intra vivos and testamentary. Advantages and disadvantages of various types of ownership. The law and practice of fiduciary administration, insurance, wills, future interests, trusts, corporations, partnerships, and gifts as related to estate planning. Research on assignment cases. Drafting of estate plan for hypothetical facts situations. Prereq: 8990 and 8960.

9150 Medical Law Seminar (2) Examines the unique history and philosophy of juvenile justice system. Consideration of jurisdiction, and judicial and extrajudicial functions of juvenile court, and various dispositional alternatives. Students will read judicial decisions, canons of ethics, and so forth. Prereq: 8990.

9160 Office Practice Seminar (2) Techniques of law office management, including rules of court, personnel, interviewing and counseling, document preparation, business planning and transactions. Prereq: 8840.

9170 Land Acquisition and Development Seminar (2) Alternative business forms and business planning for students who are interested in the precise practice of the law. Prereq: 8990 or 8995.
The arts and sciences encompass the entire range of human knowledge, from the earliest records to the latest laboratory results. All that human beings have observed about themselves, about their societies, and about the natural world around them is of concern to one or another of the arts and sciences.

The curriculum of the College of Liberal Arts reflects this wide-ranging concern with the life of the mind. It emphasizes the breadth of human knowledge, perceived not only in terms of the traditional categories of the humanities and the natural and social sciences, but also in broader perspectives which extend across academic fields and reach beyond the boundaries of a college of liberal arts. It also stresses depth of learning, which extend across academic fields and reach beyond the boundaries of a college of liberal arts. It also stresses depth of learning, which extend across academic fields and reach beyond the boundaries of a college of liberal arts.

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The arts and sciences encompass the entire range of human knowledge, from the earliest records to the latest laboratory results. All that human beings have observed about themselves, about their societies, and about the natural world around them is of concern to one or another of the arts and sciences.

The central purposes of a liberal education include the development of intellectual tolerance, a dedication to the quest for knowledge as a worthwhile goal in and of itself, and the cultivation of a responsible, critical, individual mind. These qualities should enable one to develop through life an ability to reason and to express oneself clearly, an incentive to absorb emerging knowledge, and a competence to confront the uncertainties of human experience. For the student whose interests and talents lead into research, scholarship, and teaching, a liberal education provides an invaluable foundation. For the individual who enters business, industry, the professions, or government service, it furnishes a broadly useful and well-rounded educational background. For all it offers the opportunity to share in a rich intellectual heritage, in the adventures of the mind, and in the life of the educated imagination. A liberally educated person is identified not so much by specific knowledge as by quality of mind and by creative response to the challenges of the times.

At the heart of a liberal education is an appreciation of and a familiarity with a great tradition: language, literature, and the arts; history and society; science and mathematics. These three great well-springs of human thought are sources of the programs of study offered students in the College of Liberal Arts.

Programs of Study

Granting the broad, general goals of a liberal education, students come into the college with a wide variety of specific educational and vocational objectives. Recognizing this diversity, the college offers a number of different programs of study leading to the baccalaureate degree, and also several pre-professional curricula which prepare the student for advanced study but do not lead to a degree from this college.

Degrees Offered

1. BACHELOR OF ARTS

The Bachelor of Arts is the basic liberal arts degree, representing the attainment of a broad knowledge of the arts and sciences as well as a comprehensive understanding of one or more areas of special interest. Four programs leading to this degree are open to the student:

(a) Basic Program—The program appropriate for most B.A. students, it is developed around the broad area requirements in the Triad plus intensive study in one or more of the specified departmental or interdepartmental major fields described below.

(b) Individualized Program—Designed for students whose educational goals are best met by a program tailored to their particular needs, it is similar to the Basic Program in broad area requirements but permits the student to develop an individual concentration incorporating work in two or more departments.

(c) College Scholars Program—Intended for a limited number of students who are especially highly qualified and motivated and who have been selected to undertake the honors-level programs, the College Scholars Program permits the student maximum freedom to design a curriculum to meet particular interests and goals.

(d) Pre-Professional Program—The Pre-Professional Program is offered for those who wish to participate in one of the cooperative 3-1 curricula in the health sciences (medicine, dentistry, pharmacy, veterinary medicine, or medical technology). The student proceeds directly to specialized training in the chosen area after the third year.

Programs of Study

The programs leading to the Bachelor of Arts degree are offered to students in the College of Liberal Arts and offer the first year of liberal arts study and offers the first year of professional study in lieu of a major concentration in the college in satisfying the requirements for the B.A. degree.

2. BACHELOR OF FINE ARTS

The Bachelor of Fine Arts degree represents intensive study preparing students for graduate study and professional positions in art. The degree is offered with a major in studio art. Recommended course combinations for those who desire to major in music include music history and literature, piano literature, composition, music history and literature, piano literature, and applied music (voice-organ, strings-woodwind, brass, and percussion).
Program Planning
Each student's academic program is highly individualized, reflecting personal and special interests, goals, and aspirations. Usually it will reveal a growing intellectual sophistication and the development of particular motivations. Occasionally, unfortunately, it gives indication of frustration and lack of clear direction. Viewed as a whole it may appear to be a miscellany of unrelated courses which were chosen almost capriciously, or it may be a carefully selected curriculum which the student brought together in a way which represented for that individual the most appropriate and effective way of attaining educational goals. The importance of program planning cannot be overemphasized. Few students enter college with fully formed educational goals in mind. Their programs develop quite readily around these predetermined goals. Many students do not reach that stage of certainty until their academic careers are relatively far advanced. For these persons the planning process is especially important after they major are offered and are available in most departments or programs. In consultation with faculty advisers, is essential part of the educational process. It is essential for these students to develop programs carefully and creatively in order that maximum flexibility in their ultimate decision making may be assured. At least one of the degrees to be sought. If it is one of the three professional degrees (Bachelor of Fine Arts, Bachelor of Music, or Bachelor of Science in Chemistry), the student's program will be somewhat circumscribed. For those degrees it is necessarily more prescriptive than the general liberal arts degree. If the student chooses to work for the Bachelor of Arts degree, the three elements which make up the curriculum leading to that degree will need to be held in balance; the broad requirements in the Triad, the major area, and the elective courses which support and supplement the work in the two other categories. If the student finds it desirable to lay a broad foundation by taking courses in areas other than the major requirements in the first two years, thus remaining more open the final years for in-depth study in the area of concentration. Elective courses may be needed to fulfill the requirements. Advisers in the Liberal Arts Advising Center (216 Ayres Hall), in the various major departments, in the University Counseling Center, and elsewhere on campus are available to assist students with their program planning. In the final analysis, however, only the student can determine the program which will best satisfy particular needs.

Requirements for Degrees

Bachelor of Arts

As has already been stated, the general liberal arts degree is the Bachelor of Arts, and it is the appropriate objective for most students in the college. Requirements for this degree and the several curricular programs which led to it will now be discussed in detail.

Note: Students are advised to consult the University's degree requirements as stated in the front section of this catalog as well as the requirements for the college or department.

GENERAL REQUIREMENTS:
Each student seeking a Bachelor of Arts degree must develop a program which includes the following:

1. A minimum of 180 credit hours.
2. At least 60 credit hours in courses numbered 3000 or above.
3. Appropriate work to satisfy the broad requirements of the Triad, counting no course for more than one Triad Area. (Basic Program, Individualized Program, and Pre-Professional Program only).
4. A major consisting of at least 36 credit hours, in courses numbered 2000 or above, as specified by the department or program, and counting no course in this major which has been used for Triad credit. (A course which satisfies a Triad requirement may, however, as prerequisite or corequisite to a major. A minimum grade of C must be earned in every course counted as part of a major. A student transferring from other institutions must complete at least 12 credits at The University of Tennessee, Knoxville, in a major area awarded on this campus.

Multiple Majors: After the general requirements described above have been satisfied, additional courses may be recorded on the transcript without regard to course overlap among majors or among these additional majors and Triad requirements. Students developing multiple majors must specifically declare an intent to that effect at the time they apply for graduation. Once a student has graduated, the approval of the department or of additional majors becomes subject to University second-degree requirements.

Optional Minors: If desired, and at the time of selecting a major for graduation, single or multiple minors may be recorded on the academic record without regard to course overlap among minors and majors or among minors and Triad requirements. Minors require a minimum of 24 credit hours in courses numbered 2000 or above. They are available in the departments or programs in which credit majors are offered and are available in the following:

Biochemistry
Physical Sciences
Portuguese
Women's Studies

Minors may be developed in other colleges or schools of the University, but they must be approved by the department head in which the minor is proposed as well as the Assistant Dean for Student Academic Affairs in Liberal Arts.

Bachelor of Science

At least six of the 24 credit hours required for a minor must be completed at The University of Tennessee, Knoxville. A business minor is available to students who successfully complete 91 hours of the following required courses:

Accounting 2100-20, 2301, 2110-20, 10-30, and Statistics 2110. Also, 15 hours of upper-level business electives must be taken at UTK. Not more than six upper-level hours of accounting, economics, or statistics may be used for this minor. Students are responsible for meeting prerequisites listed for any upper-level courses taken in a particular concentration.

I. Basic Program

A. THE TRIAD:

1. Language, literature, and the Arts

2. History and Society

3. Science and Mathematics

Language, literature, and the arts play a vital role in shaping human experience and perception. They give expression to human thought and feeling and give form and order to a sense of the world. The written and spoken word, the dramatic motion and gesture of theatre, film, and dance, the sensual structures which address the eye and ear in painting and sculpture, architecture, and music—all of these help to define what is human.

It is important that every student of liberal arts become acquainted with these modes of expression and to develop an awareness of cultures and an exposure to cultures that are foreign, distant, and unfamiliar. The student is encouraged to develop an interest in the English language, literature, and the arts which are a major part of the American heritage. Because human beings are social animals, they develop language, literature, and the arts as a means of communication to shape human experience and to give expression to that experience. How people feel about the past depends on the present and is a result of the past.

The study of history is an integral part of a liberal education. Because human beings build on their experience, a clear understanding of the present requires a historical perspective. Such perspective may be developed by a number of courses, including the traditional survey of western civilization or other broad surveys such as Asian history, Latin American history, history of the United States, and Afro-American history. More specialized courses in the historical perspective are also available at the University of Tennessee, Knoxville.
Study of science and mathematics develops in the student an inquiring attitude toward the natural environment and confidence in the ability to understand scientific explanations of diverse phenomena. These ends may be realized through an understanding of the empirical and the rational in scientific methods of inquiry and an awareness of the limitations of science and technology in solving problems. The student should attain a knowledge of the way in which the development of science and technology has affected beliefs, philosophies, and the development of civilization.

Specific Requirements in the Triad

(i) Language, Literature, and the Arts

(a) Writing Proficiency

Each student is required to demonstrate ability to use the English language effectively and coherently in one of the following four ways:

(i) By completing nine credits in English writing courses in one of the following series: (1) English 1010 or 1011, 1020, and three additional credits drawn from 1031, 1032, or 1033. Students who complete 1020 with the grade of A have the additional option to satisfy the remaining three credits in any 2000- or 3000-level writing course offered by the department. (2) English 1018, 1028, 1038. Students who obtain the grade of A in 1028 have the additional option, with permission, to satisfy the remaining three credits in any 2000- or 3000-level writing course in English at The University of Tennessee, Knoxville, with a grade of B or better.

(ii) By passing (normally after completing one quarter of freshman English at UTK) a proficiency examination in English, administered by the Department of English in cooperation with the Committee on Writing Standards.

(iii) By completing three hours of freshman English followed by a minimum of six hours in courses numbered 2000 or above, including prerequisite and corequisite courses, the student may be admitted with an entrance deficiency. Students who have had less than two years of high school study of the same language, demonstrated by diagnostic (non-credit) or proficiency examination or by completion of any 2000-level sequence in that language, may be able to satisfy the requirement for intermediate-level competence in that language, and the rational in scientific methods of inquiry and an awareness of the limitations of science and technology in solving problems. The student should attain a knowledge of the way in which the development of science and technology has affected beliefs, philosophies, and the development of civilization.

Prerequisite to this option is intermediate-level competence in the language, demonstrated by diagnostic (non-credit) or proficiency (credit) examination or by completion of any 2000-level sequence in that language.

(iii) Intermediate-level competence in a foreign language demonstrated by diagnostic (non-credit) or proficiency examination or by completion of any 2000-level sequence (or an approved equivalent) in that language, and a minimum of two courses of literature in English (excluding translation) drawn from the list of courses published by the Committee on Language, Literature, and the Arts, available in the Liberal Arts Advising Center. A minimum of two years of high school study will often qualify a student for this option.

(iv) By completing 24 hours of course work in an area recognized as equivalent to one year of college study. Students who have had four years of high school study of the same language, in addition to the credit they earn for course work undertaken in the college, may be able to satisfy the requirement for intermediate-level competence in another language, and those who have had less than four years of study may be able to satisfy a portion of the requirement by examination. Full credit for an intermediate-level sequence having a substantial impact of science; or from designated courses in the biological and/or physical sciences or from designated courses in the history, philosophy, or social impact of science; or in mathematics and logic.

A list of courses which satisfy this requirement is published by the Committee on Science and Mathematics and is available in the Liberal Arts Advising Center.

B. THE MAJOR

In many ways the most important part of each student's program is the major, for it is in this intensive study of one more or less limited field of knowledge that the individual begins to find a niche in the world of intellectual endeavor. The major may be drawn from the offerings of a single department or it may bring together related concerns of two or more departments. In either case the student should work out a program which has a definite design and aims at some overall objective. Guidelines are published by each major department or interdepartmental committee to assist the student in ascertaining goals and to provide a framework within which to develop a particular program. Additional assistance in the form of personal counseling is available in the Liberal Arts Advising Center and from designated faculty advisers in each major department or area.

Requirements for the specified majors available to students in the Basic Program vary from a minimum of 36 to a maximum of 56 credits in courses numbered 2000 and above, including prerequisites and corequisites (i.e., supporting courses in other departments or areas). In general, as is consistent with the objective of a liberal professional education, the student may elect as many courses as desired in any department or area.

Note: Students should normally take English in the first quarter of their registration and continue to take English or a writing-emphasis course in each succeeding quarter until this requirement is met.

(b) Literature, Foreign Language, and the Arts

The student may select any one of the following three options to satisfy this requirement:

(i) Eight hours of literature in a foreign language in the 3000-level or above.

(c) The remaining hours may be taken in either categories (a) or (b).

A list of courses which satisfy this requirement is published by the Committee on History and Society and is available in the Liberal Arts Advising Center.

(3) Science and Mathematics

Each student must complete 24 hours of course work in this area, including:

(a) One of the following two options:

(i) An eight-hour sequence in a biological science; or

(ii) An eight-hour sequence in a physical science.

(b) 16 hours drawn from additional courses in the biological and/or physical sciences or from designated courses in the history, philosophy, or social impact of science; or in mathematics and logic.

No more than 16 hours may be applied toward this requirement from any one of the above four categories.

A list of courses which satisfy this requirement is published by the Committee on Science and Mathematics and is available in the Liberal Arts Advising Center.

See Phi Beta Kappa requirements in mathematics, page 39.
through intensive work in two or three central purposes, usually implemented in an Individualized Program. The proposed consultation with an adviser, and the submission of a plan for the Basic Program (i.e., a minimum of 36 credit hours) for admission to the Triad. This dimension of the student's experience in the University represents that freedom within which total education may be rounded out and enriched. Elective courses should be chosen with care so that they will truly enhance the student's total program and help in the achievement of well thought out educational objectives.

Some of the choices which the student might make in selecting the elective courses are:

1. Additional courses in the major field;
2. A related minor;
3. An area in the arts;
4. An off-campus quarter.

Only the student's imagination and initiative and the willingness to be proactive and develop a totally meaningful academic program limit the choices of supplementary elective courses.

II. Individualized Program

The Basic Program described above will meet the educational needs of most of the students enrolling in the college. Some, however, come with particular strengths in their preparation or with special interests which do not coincide with the departmental or interdepartmental majors specified in the Basic Program. For these students the Individualized Program has been established as a means of forming a closer correlation between student needs and academic programs.

Students in the Individualized Program satisfy the broad requirements of the Triad, i.e., do those things which are inherent in the major in all the health professions. The programs preparing students for the study of medicine, medical technology, veterinary medicine, dentistry, and pharmacy include the specified courses required for admission to the respective colleges of The University of Tennessee Center for the Health Sciences at Memphis (UTCHS), as well as those required for the Bachelor of Arts degree in the College of Liberal Arts at The University of Tennessee, Knoxville. Pre-Medical Record Administration, Pre-Pharmaceutical Therapy, and Other Health Professions are available for students who are planning a career in one of the health professions. The programs preparing students for the study of medical technology, veterinary medicine, and pharmacy include the specified courses required for admission to the respective colleges of The University of Tennessee Center for the Health Sciences at Memphis (UTCHS), as well as those required for the Bachelor of Arts degree in the College of Liberal Arts at The University of Tennessee, Knoxville. Pre-Medical Record Administration, Pre-Pharmaceutical Therapy, and Other Health Professions are available for students who are planning a career in one of the health professions. The programs preparing students for the study of medical technology, veterinary medicine, and pharmacy include the specified courses required for admission to the respective colleges of The University of Tennessee Center for the Health Sciences at Memphis (UTCHS), as well as those required for the Bachelor of Arts degree in the College of Liberal Arts at The University of Tennessee, Knoxville.

Pre-Dental

Pre-Dental Hygiene

Pre-Tech-Med

Pre-Medical Record Administration

Pre-Technology

Pre-Nursing

Pre-Pharmacy

Pre-Physical Therapy

Pre-Veterinary Medicine

Pre-Medical Record Administration

Pre-Dental Hygiene

Pre-Medical Record Administration

Pre-Physical Therapy

Pre-Veterinary Medicine

Pre-Dental Hygiene

Pre-Medical Record Administration

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Pre-Medical Record Administration

Pre-Physical Therapy

Pre-Veterinary Medicine

Pre-Dental Hygiene

Pre-Medical Record Administration

Pre-Physical Therapy

Pre-Veterinary Medicine

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Pre-Veterinary Medicine

Pre-Dental Hygiene

Pre-Medical Record Administration

Pre-Physical Therapy

Pre-Veterinary Medicine

Pre-Dental H
A Bachelor of Science in Dental Hygiene is granted upon satisfactory completion of the degree program the student completes while enrolled in the College of Liberal Arts. Students who complete this four-year program must complete the last 45 credit hours while enrolled in the college, including a major of 36 or more hours in addition to the prescribed courses. Classes are admitted in quarters in length and leads to the degree of Bachelor of Science in Medical Record Administration. Administration requirements and program in detail may be obtained from the College of Liberal Arts. The requirements for admission to the course of study in medical technology at The University of Tennessee are encouraged to complete an entire mathematics sequence (1530-50 or 1430-50). Calculus is required if graduate work is planned. Pre-Medical Technology Program

Students planning to seek admission to the medical technology course of study at UTCHS must complete 50 credit hours of prescribed courses while enrolled in the College of Liberal Arts. The program at Memphis is a four-year program, leading to the degree of Bachelor of Science in Medical Technology from UTC. Classes are admitted in September and application must be made one year in advance. Students interested in the medical technology course of study at UTCHS are encouraged to consult with a health professions adviser in the Health Professions Office for the specific requirements for admission.

PRE-MEDICAL TECHNOLOGY PROGRAM

The college offers two three-year and four-year programs leading to the degree of Bachelor of Arts for students preparing for the study of medicine. Both programs are based upon the program outlined below. In the three-year program the student must complete at least 153 credit hours while enrolled in the college. The B.A. degree is granted upon satisfactory completion of the three-year program the degree is granted upon completion of 150 or more credit hours while enrolled in the college including a major of 36 or more hours in addition to the courses outlined below. The requirements for a major are waived for those taking their fourth year at UTCHS. Students in either the three- or four-year program must complete the last 45 hours of credit in residence at UTK before entering UTCHS.

Although the B.A. degree is not required for admission to the College of Medicine, most students accepted into the study of medicine have the baccalaureate degree before admission. Therefore, pre-medical students are encouraged to plan to complete all requirements for the degree before enrolling in the College of Medicine.

Freshman

Hours Credit

English 1010, 1020, 1210, 1220 or 1231 or 1250
Mathematics 1110-20-30
Chemistry 1180-20

Sophomore

Hours Credit

Chemistry 1190-20-30 or 1200-20-30
Microbiology 1118-20-30

Junior

Hours Credit

Chemistry 2110-21-31 and Microbiology 2118-20-30

Senior

Hours Credit

Chemistry 2120-21-31 and Microbiology 2128-20-30

Pre-Medical Technology Administration Program

The college offers two programs leading to the degree of Bachelor of Science in Medical Record Administration, requiring completion of 135 hours of prescribed courses. Courses are admitted in September; applications must be filed by March 1. The selection process usually includes interviews with members of the faculty. Students interested in the pre-medical record administration program are encouraged to consult with a health professions adviser in the Health Professions Office for the specific requirements for admission to the course of study. The requirements for admission to the pre-medical record administration program at UTCHS, leading to a Bachelor of Science in Medical Record Administration, require completion of 135 hours of prescribed courses. Classes are admitted in September; applications must be filed by March 1. The selection process usually includes interviews with members of the faculty. Students interested in the pre-medical record administration program are encouraged to consult with a health professions adviser in the Health Professions Office for the specific requirements for admission to the course of study.

Pre-Medical Technology Curriculum

The Science-Medical Technology Curriculum is a three-year program consisting of a minimum of 135 credit hours in the college. Students who complete this curriculum satisfactorily may apply for admission to the course of study in medical technology at The University of Tennessee Memorial Research Center and Hospital in Knoxville (UTMRCH). Successful completion of this course, which results in the granting of 50 credit hours, makes the student eligible for a Bachelor of Arts degree with a major in medical technology from The University of Tennessee. In addition, a Certificate of Laboratory Training will be awarded by UTMRC. Students will then be eligible for examination by the Board of Registry of the American Society of Clinical Pathologists in order to be certified as registered medical technologists.

Pre-Medical Program

A Bachelor of Science in Dental Hygiene is granted upon completion of a program which includes 96 hours of prescribed courses in the College of Liberal Arts and six quarters of study at UTCHS. Students interested in the pre-dental hygiene program are encouraged to consult with a health professions adviser in the Health Professions Office for more information. Students describing the pre-dental hygiene program and requirements in detail may be obtained from the pre-dental hygiene program of study at UTCHS are encouraged to consult with a health professions adviser in the Health Professions Office. Students who complete this three-year or four-year program are encouraged to plan to complete all requirements for the degree before enrolling in the College of Medicine. Although the B.A. degree is not required for admission to the College of Medicine, most students accepted into the study of medicine have the baccalaureate degree before admission. Therefore, pre-medical students are encouraged to plan to complete all requirements for the degree before enrolling in the College of Medicine.

Freshman

Hours Credit

English 1010, 1020, 1210, 1220 or 1231 or 1250
Mathematics 1110-20-30

Sophomore

Hours Credit

Chemistry 1190-20-30 or 1200-20-30
Microbiology 1118-20-30

Junior

Hours Credit

Chemistry 2110-21-31 and Microbiology 2118-20-30

Senior

Hours Credit

Chemistry 2120-21-31 and Microbiology 2128-20-30

Pre-Medical Program

The college offers two three-year and four-year programs leading to the degree of Bachelor of Arts for students preparing for the study of medicine. Both programs are based upon the program outlined below. In the three-year program the student must complete at least 153 credit hours while enrolled in the college, and the B.A. degree is granted upon satisfactory completion of the three-year program the degree is granted upon completion of 150 or more credit hours while enrolled in the college, including a major of 36 or more hours in addition to the courses outlined below. The requirements for a major are waived for those taking their fourth year at UTCHS. Students in either the three- or four-year program must complete the last 45 hours of credit in residence at UTK before entering UTCHS.

Although the B.A. degree is not required for admission to the College of Medicine, most students accepted into the study of medicine have the baccalaureate degree before admission. Therefore, pre-medical students are encouraged to plan to complete all requirements for the degree before enrolling in the College of Medicine.
### Bachelor of Fine Arts

The Bachelor of Fine Arts degree represents intensive study preparing the student for graduate programs and careers relating to art. A minimum of 189 credit hours are required for graduation. Although there are no specific concentrations within the major, guidelines for the following recommended programs are available in the departmental office (1) ceramics, (2) communication design, (3) drawing, (4) fiber-fabrics, (5) painting, (6) printmaking, (7) sculpture, and (8) watercolor. Inter-area concentrations are also possible. Transfer students are advised that a minimum of 28 credit hours in studio courses and eight upper-division hours in art history must be earned at The University of Tennessee, Knoxville. The Bachelor of Fine Arts degree and its major is recorded as follows:

<table>
<thead>
<tr>
<th>Degree</th>
<th>Major</th>
<th>Studio Art</th>
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</thead>
<tbody>
<tr>
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### Chemistry

<table>
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<th>Title</th>
<th>Credits</th>
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<tbody>
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<td>3211-21-31 &amp;</td>
<td>Chemistry 3211</td>
<td>12</td>
</tr>
<tr>
<td>3219-29-39 &amp;</td>
<td>Chemistry 3219</td>
<td>12</td>
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</table>

### Biology

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>3210-20-30 &amp;</td>
<td>Biology 3210</td>
<td>12</td>
</tr>
<tr>
<td>3211-29-39 &amp;</td>
<td>Biology 3211</td>
<td>12</td>
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</table>

### Math

<table>
<thead>
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<th>Title</th>
<th>Credits</th>
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<td>1541-110</td>
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<td>1550-60</td>
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<tr>
<td>1840-50</td>
<td>Math 1840</td>
<td>8</td>
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</table>

### Pre-Nursing Program

The minimum requirements for admission to the College of Nursing at UTCHS is 90 hours of prescribed courses in the College of Liberal Arts. The program in Memphis, which leads to the Bachelor of Science in Nursing from UTCHS, is two years in length.

### Pre-Pharmacy Program

The college offers three programs preparing students for the study of pharmacy at UTCHS. The Bachelor of Science in Pharmacy degree is conferred by UTCHS upon completion of three years of professional study at Memphis following any of the three programs.

The two-year program prepares students to be admitted to the College of Pharmacy upon completion of 90 hours of prescribed courses in the College of Liberal Arts. Further information may be obtained from the Health Professions Office, 218 Ayres Hall.

### Pre-Physical Therapy Program

Admission to the physical therapy program at UTCHS, leading to the degree of Bachelor of Science in Physical Therapy from UTCHS, requires completion of 127 hours of prescribed courses while enrolled in the College of Liberal Arts. The program in Memphis is 15 months in length.

Students interested in the pre-physical therapy program are encouraged to consult with a health professions adviser in the Health Professions Office for more information.

### Pre-Veterinary Program

The following program is designed for students who wish to pursue a Bachelor of Science while preparing for the study of Veterinary Medicine. Students in this program must complete at least 144 credit hours while enrolled in the College of Liberal Arts.

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>DESCRIPTION</th>
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<tr>
<td>3</td>
<td>Major: Studio Art</td>
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</tr>
<tr>
<td>4</td>
<td>Major: Studio Art</td>
<td>12</td>
</tr>
</tbody>
</table>

### Pre-Health Professions

- **Bachelor of Fine Arts**
- **Bachelor of Pre-Medical**
- **Bachelor of Pre-Physical Therapy**
- **Bachelor of Pre-Veterinary**
- **Bachelor of Pre-Pharmacy**

### Other Health Professions

- **Cytotechnology**
- **Dentistry**
- **Optometry**

A library of materials about career opportunities in the health professions, including most allied health areas, has been developed and is located in the Health Professions Offices, 218 Ayres Hall. Academic advisors are available to assist students in planning their programs in order to meet the requirements for admission to other programs.
Careers in art administration, gallery and sciences are designed to help the student
transcript.

Artists Program will be noted on the student's
foreign study in addition to formal classwork.

education in studio art, which may include
Option II: Career preparation electives
Option I: Additional art or non-art electives

C. Non-art electives .................................. 20

above) to be approved by the department.

communication design, drawing, fiber-fabrics,

II. Art Concentration (A or B)

A. Art 1000 (to be completed during
freshman year) ........................................ 9

2. Introduction to Media (to be completed prior to
junior year) ............................................. 12

3. Science-Mathematics ................................ 8

4. Non-art electives ................................... 20

III. General Curriculum

1. English Composition ............................. 9

2. History (all college-level courses)............. 4

III. General Curriculum

4. Non-art electives ................................... 20

V. Electives

Option I: Additional art or non-art electives
Option II: Career preparation electives

TOTAL: 180 hours

COLLEGE ARTISTS PROGRAM

A program of 180 hours is to be determined
by the student and approved by the
Department of Art honors committee. This
program allows the gifted student greater
opportunity for establishing advanced
education in studio art, which may include
independent study, off-campus study, or
foreign study in addition to formal classwork.
Participation and graduation in the College
Artists Program will be noted on the student's
transcript.

Students may apply for the program upon
completion of 45 credit hours, but will not
normally be considered after the completion
of 90 hours. Admittance to the College Artists
Program is based on four criteria: (1) an
overall grade-point average of at least 3.0,
(2) a portfolio of work, (3) the proposed
course of study, and (4) a personal interview.
A minimum grade-point average of 3.25, at
least 12 hours per quarter, and evidence of
continuing motivation and interest must be
maintained to remain in the program.

Each College Artist will normally enroll in
one or more general or departmental honors
course each quarter, and must participate in
an honors exhibition prior to graduation.

STUDIO HONORS COURSES

Courses are designed for the exceptional
student. Honors courses may be taken in any
of the areas of studio instruction, and
admittance is based on the following criteria:

A. Grade-point average of 3.2 in studio art
courses
B. Portfolio of class and/or outside work
C. Recommendation of the studio faculty,
and/or approval of the instructor

Continued participation is subject to
periodic review by the faculty. Students
qualified for honors courses will enroll in
course numbers which most closely parallel
their present level, i.e., sophomore in 2000,
juniors in 2008, seniors in 4008. Each course
number may be repeated for a maximum of 24
credit hours.

Bachelor of Music

The Department of Music offers the degree of
Bachelor of Music with concentrations in
music theory, music composition, music history
and literature, and applied music (piano, voice-
piano—organ—organ and church music; strings—
tuba, French horn, trumpet, trombone,
percussion instruments—multiple woodwind
instruments—studio music and jazz; Suzuki
string pedagogy). The study is designed to
prepare students for graduate study or for
positions in music for which a professional
degree is required.

Qualifying students who wish to work for this
degree are assigned an advisor in the
Department of Music at the time they enter the
program. Continuation in the program at the 3000 level
requires an average of 3.5 or better in all music courses taken.

The minimum requirement for the degree is 180
credit hours, including the specified courses
outlined below.

In addition to the concentrations
offered in the Bachelor of Music curriculum,
students may take an independent concentration in
music history and literature or music applied
music is available in the Bachelor of Arts curriculum.

MUSIC THEORY

Freshman

Music 1001 or 1011; 1020; 1031
Music 1111-21-31
Music 1119-23-33
Music 1199
Music 2000
Applied music

Sophomore

Music 2111-21-31
Music 2123-23-33
Music 2200-30-40
Music 2099

Junior

Music 3111
Music 3113-23-33
Music 4100
Music 4111-21-31
Music 4121 or 4131

Senior

Music 5111
Music 5113-23-33
Music 5199
Music 5200
Music 5999

COMPOSITION

Freshman

Music 1001 or 1011; 1020; 1031
Music 1111-21-31
Music 1119-23-33
Music 1199
Music 2000
Applied music

Sophomore

Music 2111-21-31
Music 2123-23-33
Music 2200-30-40
Music 2099

Junior

Music 3111
Music 3113-23-33
Music 4100
Music 4111-21-31
Music 4121 or 4131

Senior

Music 5111
Music 5113-23-33
Music 5199
Music 5200
Music 5999

MUSIC HISTORY AND LITERATURE

Freshman

Music 1001 or 1011; 1020; 1031
Music 1111-21-31
Music 1119-23-33
Music 1199
Music 2000
Applied music

Sophomore

Music 2111-21-31
Music 2123-23-33
Music 2200-30-40
Music 2099

Junior

Music 3111
Music 3113-23-33
Music 4100
Music 4111-21-31
Music 4121 or 4131

Senior

Music 5111
Music 5113-23-33
Music 5199
Music 5200
Music 5999
### PIANO LITERATURE

<table>
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<th>Department</th>
<th>Hours</th>
<th>Credit</th>
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<td>Sophomore</td>
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### Music Electives

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<td>Music 1111-21-31</td>
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<tr>
<td>Music 1211-23-33</td>
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<tr>
<td>Music 1411-23-33</td>
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### Music History/Literature

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<td>Music 1411-23-33</td>
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### Music History/Literature or Theory Electives (3000 level or above)

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<td>Music 1411-23-33</td>
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### Music Electives

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### Total Hours

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### VOICE

<table>
<thead>
<tr>
<th>Department</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Freshman</td>
<td>9</td>
<td>9</td>
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<tr>
<td>Sophomore</td>
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### Music Electives

<table>
<thead>
<tr>
<th>Course Number</th>
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<tr>
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<td>9</td>
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### Music History/Literature

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### Music History/Literature (3000 level or above)

<table>
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<th>Course Number</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
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### Music History/Literature or Theory Electives (3000 level or above)

<table>
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<tr>
<th>Course Number</th>
<th>Hours</th>
<th>Credit</th>
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<tbody>
<tr>
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### Music History/Literature or Theory Electives

<table>
<thead>
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<tbody>
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### Music Electives

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Hours</th>
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<tbody>
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<td>Music 2000</td>
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### Total Hours

<table>
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<tr>
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### ORGAN AND CHURCH MUSIC

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<th>Hours</th>
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<tr>
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### Music Electives

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### Music History/Literature

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<table>
<thead>
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<th>Course Number</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
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### Music History/Literature or Theory Electives (3000 level or above)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Hours</th>
<th>Credit</th>
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<table>
<thead>
<tr>
<th>Course Number</th>
<th>Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 2000</td>
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### Total Hours

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>180</td>
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### STRINGS

<table>
<thead>
<tr>
<th>Department</th>
<th>Hours</th>
<th>Credit</th>
</tr>
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<tbody>
<tr>
<td>Freshman</td>
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### Music Electives

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Hours</th>
<th>Credit</th>
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<table>
<thead>
<tr>
<th>Course Number</th>
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</thead>
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</table>

### Music History/Literature (3000 level or above)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Hours</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>Music 1111-21-31</td>
<td>9</td>
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<tr>
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<tr>
<td>Music 1411-23-33</td>
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</table>

### Music History/Literature or Theory Electives (3000 level or above)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Hours</th>
<th>Credit</th>
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### Music History/Literature or Theory Electives

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<th>Credit</th>
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### Music Electives

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Hours</th>
<th>Credit</th>
</tr>
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<tbody>
<tr>
<td>Music 2000</td>
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### Total Hours

<table>
<thead>
<tr>
<th>Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>0</td>
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</tbody>
</table>
### WOODWIND, BRASS, AND PERCUSION INSTRUMENTS

**Freshman**
- English 1010 or 1011; 1020; 1031 or 1032 or 1033 9
- Music 1113-23-33 9
- Music 1340 9
- Principal applied study 10
- Music 1010-20-30 9
- Ensemble 3
- Liberal arts electives (not in music) 6
- Music 2000 0

**Sophomore**
- Music 2113-23-33 9
- Music 2133-23-33 9
- Music 2300-30-30 9
- Principal applied study 12
- Music 1060-30-60 9
- Ensemble 3
- Liberal arts electives (not in music) 6
- Music 2000 0

**Junior**
- Music 2340 3
- Music 2312 3
- Music 3113-23 6
- Principal applied study 12
- Junior recital 0
- Music electives 3
- Liberal arts electives (not in music) 9
- Electives 8
- Music 2000 0

**Senior**
- Music Education 4430 3
- Principal applied study 12
- Ensemble 3
- Senior recital 0
- Music electives 6
- Liberal arts electives (not in music) 9
- Electives 8
- Music 2000 0

### TOTAL 180 hours

### STUDIO MUSIC AND JAZZ

**Freshman**
- English 1010 or 1011; 1020; 1031 or 1032 or 1033 9
- Music 1111-21-31 9
- Music 1112-23-33 9
- Music 1340 9
- Principal applied study 10
- College applied study 6
- Music 1010-20-30 9
- Ensemble 3
- Liberal arts electives (not in music) 3
- Music 2000 0

**Sophomore**
- Music 2111-21-31 9
- Music 2113-23-33 9
- Music 2300-20-30 9
- Principal applied study 6
- College applied study 6
- Music 1060-60-60 9
- Ensemble 3
- Liberal arts electives (not in music) 3
- Music 2000 0

**Junior**
- Music 2340 3
- Music 2312 3
- Music 3113-23 6
- Principal applied study 6
- College applied study 6
- Ensemble 3
- Junior recital 0
- Liberal arts electives (not in music) 8
- Electives 8
- Music 2000 0

**Senior**
- Music Education 4430 3
- Principal applied study 6
- College applied study 6
- Senior recital 0
- Music electives 5
- Liberal arts electives (not in music) 6
- Electives 12
- Music 2000 0

### TOTAL 180 hours

### FINANCIAL AID

Students who desire to major in chemistry may select either the curriculum leading to the degree of Bachelor of Arts or that leading to the degree of Bachelor of Science in Chemistry. This latter program is approved by the American Chemical Society and is designed to train students to go directly into positions in the chemical industry or to enter graduate study leading to positions in research and college teaching. A minimum average of C must be made on all chemistry courses applied toward the Bachelor of Science in Chemistry degree.

**COOPERATIVE PROGRAM IN CHEMISTRY**
A cooperative program is available to students in the B.S. in Chemistry curriculum. After the freshman year the student alternates a period in school with a quarter in a job in a chemical industry. The program normally requires 7 work quarters and twelve school quarters. Students are required to have at least a 2.5 average to enter and remain in the program. Some opportunity exists for

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**NOTE:** The curricula in strings, woodwinds, brass, and percussion; multiple woodwinds; and voice allow 12 hours of ensemble credit to apply toward electives. This is in addition to the hours in ensemble listed in the tabular resumes.

**Bachelor of Science in Chemistry**
Students who desire to major in chemistry may select either the curriculum leading to the degree of Bachelor of Arts or that leading to the degree of Bachelor of Science in Chemistry. This latter program is approved by the American Chemical Society and is designed to train students to go directly into positions in the chemical industry or to enter graduate study leading to positions in research and college teaching. A minimum average of C must be made on all chemistry courses applied toward the Bachelor of Science in Chemistry degree.
students to enter the program later than the end of the freshman year. Students interested should make application to the head of the department at least one quarter in advance of the beginning of the first work period. Further information will be supplied on request.

CURRICULUM REQUIREMENTS

Freshman

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<tr>
<th>Hours Credit</th>
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<tr>
<td>12</td>
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<td>12</td>
<td>Math 1840-30-60 or Math 1840-30-60</td>
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<td>Language, Literature, Art Triad (foreign language Option I or II)</td>
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Sophomore

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<tbody>
<tr>
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<td>Chemistry 2211-21-31</td>
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<td>11</td>
<td>Math 2505-40-60 or 2442-15-60</td>
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<td>Language, Literature, Art Triad (foreign language Option I or II)</td>
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Junior

<table>
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<tr>
<th>Hours Credit</th>
<th>Description</th>
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<tbody>
<tr>
<td>8</td>
<td>History and Society Triad</td>
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<td>8</td>
<td>Language, Literature, Art Triad (foreign language Option I or II)</td>
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Senior

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<td>8</td>
<td>Electives</td>
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TOTAL: 156 (189) hours

*These requirements are subject to change. Please consult the latest catalog for the most up-to-date information.

Preparation for Other Professions

Law

Students who plan to study law should consult the statement regarding admission to the College of Law (page 169) and discuss their programs with advisors in the Liberal Arts Advising Center.

Library Science

Certain courses in the Graduate School of Library and Information Science are open to students in the College of Liberal Arts. Interested students should contact the Graduate School of Library and Information Science for information on admission requirements and the curriculum.

Planning

Students who wish to consider a career in social work or related fields may wish to consult the Director of the Graduate School of Library and Information Science for information about careers and curricula, as well as requirements for admission.
Lower Division—Upper Division

Courses numbered at the 1000 and 2000 levels are considered lower division and are normally taken by students in the freshman and sophomore years. Courses numbered 3000 and above are upper division and are designed for students of the junior and senior levels.

Satisfactory/No Credit Courses

(1) S/NC courses, except those offered only on this basis, may not count for Triad requirements or major or minor requirements unless specifically permitted by petition. This restriction applies also to major or minor prerequisites or corequisites.

(2) The maximum number of S/NC elective hours which may be counted toward graduation is 30, exclusive of courses offered only S/NC, physical education courses, and for satisfactory hours earned by examination, military service, etc.

(3) A student who desires to take a course S/NC should indicate that intention at the time of registration. The course must be counted toward regular grading or from regular grading to S/NC, but the student may not change classification of grades beyond the add deadline in each quarter. (Exception: Students who register for a course S/NC in a restricted area will be required to change to regular grading when the error is discovered.)

(4) A transfer student with S/N Correspondence, S/NC course credits will count as hours for graduation although neither S nor NC will appear on the student's permanent record.

(5) A transfer student with S/N Correspondence, S/NC should indicate that intention at the time they need assistance. Most students are assisted by examination, military service, etc.

Recommended courses for students of the Liberal Arts Advising Center, helping students determine their major, continue in this relationship to the Advising Center until they have determined their major, normally by the beginning of the junior year, at which time they may be transferred for advising to a faculty member in the major department.

Student Academic Affairs Office

Academic advising for students is also provided through the Student Academic Affairs Office, 216 Ayres Hall. This office serves primarily those students not assigned to the Liberal Arts Advising Center, helping them meet a variety of academic needs relating to the development of their academic programs, satisfying graduation requirements, etc. For those who are planning careers in the health sciences it provides a liaison with the Center for the Health Sciences.

Office of African and Afro-American Studies

The Office of African and Afro-American Studies, 802 Volunteer Blvd., Suite 416, cooperates with the various departments and colleges of the University with respect to the development of curricular changes and innovations which incorporate the Black experience into academic and extracurricular programs of the institution, supplies information on financial assistance for Black students, and serves as the focal point for the coordination and development of an improved and expanded African and Afro-American Studies Program at the University.

Bureau of Public Administration

The University has established in the college a Bureau of Public Administration for the purpose of promoting sound governmental administration through research, publication, and consultation. Offices and staff are maintained in both Knoxville and Nashville.

Psychological Clinic

The Psychological Clinic is an outpatient psychodiagnostic and treatment center which provides for students to earn credit toward graduation in the college, although individual departments may limit the number of hours which may be applied toward a specific major.

Study Abroad and Foreign Study Courses

Several opportunities for study abroad are available to students in the college. One avenue is through program arrangements made by departments, including study on a full-quarter or summer term basis. A second avenue is through program arrangements conducted abroad by other academic institutions which have established courses which are open to students for whom S/NC approval may enroll for credit. Assistance in identification of and enrollment in such programs may be obtained through the Overseas Study Information Service located in the University's Division of International Education. A third opportunity is through individualized programs under the foreign study number 4101. The nature of this work as well as credit for it should be negotiated by students prior to departure with the appropriate liberal arts departments. Credit will be awarded only after completion of all agreed upon requirements, and may vary from 1-16 hours in any one department. Up to 24 hours of such credit, exclusive of that earned in group programs offered by departments, could apply toward a degree in the college. Departmental approval may be in any of the above forms, however, limit the hours of credit which can be applied toward a given major.

Liberal Arts Advising Center

Academic advising for students of the college is offered through the Liberal Arts Advising Center, 212 Ayres Hall, as well as through the several major departments. The Advising Center is staffed on a regularly scheduled basis by members of the college faculty, each of whom has been trained for the purpose. Students of the junior quarter of residence are assigned to the Advising Center where they may register for courses, meet with the advisor of their choice or consult the person on duty at the time they need assistance. Most students

Colleges and Schools of the University

Liberal Arts College

The College of Liberal Arts is divided into three parts: Arts, Humanities, and Social Sciences. The College offers a wide range of courses, including general education, professional education, and special programs.

Arts

The Arts and Sciences offers a wide range of courses in the liberal arts, including history, literature, philosophy, and the natural sciences.

Humanities

The Humanities offers a wide range of courses in the humanities, including music, dance, and visual arts.

Social Sciences

The Social Sciences offers a wide range of courses in the social sciences, including economics, sociology, and psychology.
staging and can be converted for open-air performances in the summer.

Instructional Facilities

The college carries out its varied teaching and research activities in more than two dozen principal buildings in two areas of the campus, as well as in a number of converted residences which provide office, studio, or clinical space. The older of the two clusters of buildings is on "The Hill," and includes Ayres Hall (psychology and mathematics), Austin Hall (botanical sciences), Physics (physics and astronomy), Geology-Geography (geology and geography), and Dobney and Bushman (chemistry). Most of "The Hill" is a recently built group of buildings for the humanities, social sciences, and fine arts. McClung Tower and the Humanities-Social Sciences classroom building (obstetrics, English, foreign languages, history, human services, philosophy, political science, religious studies, sociology, and speech and theater), the Music Building (music), and the Hearing and Speech Center (audiology and speech pathology) are in this older area. The McClung Museum and the Clarence Brown and O'Dell Theaters, as well as the Lutcher Library, Anthropology is housed in South Stadum, and art utilities several small buildings for its studies.

College Offices

The College Administrative Office is in 226 Ayres Hall. The Student Academic Affairs Office is in 218 Ayres Hall. The Liberal Arts Center is in 220 Ayres Hall.

Departments of Instruction

American Studies

See Cultural Studies.

Anthropology (122)


Visiting:

Associate Professor: J. M. Nowlin.

Undeclared/Undeclared:

A major in anthropology shall consist of 42 hours, 12 of which are to be in the introductory 2000-level courses. Of the remaining 30 hours, 3330, 4480 and six hours of 3000 level or above courses are required in each of these subfields:

1. Cultural;
2. Physical;
3. Archaeology.

(a) Cultural: 3410, 3440, 3450, 3540, 3780, 3790, 3811, 4070, 4010, 4020, 4030, 4120, 4400, 4420, 4430, 4440, 4550, 4580, 4740, 4870, 4890. (b) Physical: 3070, 3900, 3920, 3930, 4930, 4950, 4960, 4970. (c) Archaeology: 3610, 3620, 3630, 3640, 3660, 3670, 4620, 4650, 4660, 4690.

A minor in anthropology consists of 27 hours including the 2510, 2520, 2530 introductory courses.

2510 Human Origins (4) Non-technical survey of man's prehistoric background, fossil primates, fossil man, and living races of mankind.

2520 Prehistoric Archaeology (4) Survey of prehistoric culture with specific emphasis on method and theory in the prehistory of the Near East and Africa; archaeology in America.

2530 Human Culture (4) Introduction to ethnology survey of nature of culture and society and similarities and differences in man's material culture, social, economic, and political organizations, ideology, art, and language.

2540 Introduction to Linguistic Anthropology (4) Basic linguistic concepts. Aspects of language studied by anthropologists and sociolinguists.

2610 Prehistoric Humans and their Liteways (4) A survey of the development of man and their culture through earliest evidence of humans until the end of the Pleistocene. Emphasis on the intersection between cultural and biological de- velopment and aspr. 2510; 2520 rec- omnend.

2670 Genetics and Society (3) (Same as Biol 3570).

3333 Visiting Lecture Program (2) Offered during lecture by visiting scholars in physical anthropology, cultural anthropology, or archaelogy. Credit for this course will count toward a major only with the approval of the anthropology department.

3410 Principles of Cultural Anthropology (3) Basic concepts and principles in study of culture. Range of cultural phenomena and approaches to its study. 2510 recommended.

3440 Religion of Primitive Peoples (3) Religions of non-literate peoples. Peace of religion in their social and cultural systems. 2510 recommended.

3450 Community Studies in Complex Culture (3) Review of cross-cultural comparative urban and vil- lage societies and the similarities and differences used in com- munity studies. 2510 recommended.

3460 American Prehistory 1A (4) Prehistoric prehistory, including prehistory and methodologies used in ar- chaeological excavation, interpretation, documentation, and publication. 2510 recommended.

3510 Peoples and Cultures of Mainland Asia (3) Ethnographic survey indigenous cultures of mainland Asia. Cultural diversity and human ecology in real perspective. 2530 recommended.

3520 Peoples and Cultures of Africa (3) Ethno- graphic survey indigenous cultures of Africa. Cultural diversity and human ecology in real perspective. 2530 recommended.

3530 Peoples and Cultures of Africa (3) Ethno- graphic survey indigenous cultures of Africa. Cultural diversity and human ecology in real perspective. 2530 recommended.

3540 North American Indians (3) Ethnographic survey of Native American tribes and cultures. Emphasis on prehistoric and historic peoples in the Americas. 2510 recommended.

3545 Indians of Northwestern North America (3) Survey of American Indian cultures found in the great plains of the United States. Emphasis on prehistoric and historic peoples in the Americas. 2510 recommended.

3610 Introduction to Museology (3) (Same as Art 3610).

3611 Museum Studies (3) (Same as Art 3611).

3620 Prehistory of Tennessee (3) History of ar- chaeology in Tennessee. Emphasis on prehistoric and historic peoples in the Americas. 2510 recommended.

3630 European Prehistory 1A (3) Ethnographic survey indigenous cultures of Europe. Emphasis on prehistoric and historic peoples in the Americas. 2510 recommended.

3660 Prehistory of Mexico (3) History of ar- chaeology in Mexico. Emphasis on prehistoric and historic peoples in the Americas. 2510 recommended.

3690 Prehistory of Central America (3) History of ar- chaeology in Central America. Emphasis on prehistoric and historic peoples in the Americas. 2510 recommended.

3700 Introduction to Physical Anthropology (3) Introduction to human evolution. Emphasis on evolution, growth, and nutrition. 2510 recommended.

3800 Language and Culture (3) Traditional aspects of the way we express in technology, beliefs, art, and folklore, under changing historical and socio- cultural circumstances.

3810 Language and Culture (3) Traditional aspects of the way we express in technology, beliefs, art, and folklore, under changing historical and socio- cultural circumstances.

3811 Introduction to Anthropology (3) Survey of methods and methods in physical anthropo- logy. 2510 recommended.

3820 The Biology of Race (3) Processes of racial differentiation; criteria of significant differ- ences among existing stocks; influence of biology and culture in race formation. Emphasis on human evolution. 2510 recommended.

3830 Prehistory of the Americas (3) Ethnographic survey indigenous cultures of America. Emphasis on prehistoric and historic peoples in the Americas. 2510 recommended.

4110 Foreign Study (1-6) See page 183.

4120 Off-Campus Study (1-6) See page 183.

4130 Independent Study (1-6) See page 183.

4140 Education and Cultural Perspectives (3) (Same as Edu. C & 4110).

4111 Foreign Study (1-6) See page 183.
Undergraduate:

B.A. Major: History—Consists of 36 hours in art history courses numbered 2000 and above. Greek and Roman art and archaeology from the Department of Classics may be included. Art 1815 and 1825 are prerequisites to the major. Undergraduate work in art history is enhanced by knowledge of at least one foreign language and by studio art experience. Graduate work normally requires reading knowledge of at least two foreign languages, usually German and French.

B.A. Minor: Art History—Consists of 24 hours on art history courses numbered 2000 and above. Art 1815 and 1825 are prerequisites to the minor.

B.A. Major: Art (Concentration in Studio)—Art 1000, 1115, 1125, 1135, and the course number 2405. In addition, eight additional hours of art history are required to a major of 36 hours of courses numbered 2000 and above, including a minimum of 21 hours in upper-division courses.

B.A. Minor: Art (Concentration in Studio)—None offered.

For information regarding the Bachelor of Fine Arts degree, see page 170.

1000 The Visual Artist (4) Lecture course with guest artists for art majors and minors in art. Rule of visual artist. Language of art and design. Materials and processes of art disciplines (painting, sculpture, graphics, crafts, photography, and architecture). Major issues and concerns in visual arts and career opportunities. Must be taken freshman year.


1120 Studio Fundamentals (4) Surface composition and design, knowledge of wood as design media, interior design, and art education majors.

1125 Studio Fundamentals (4) Studio space and overall student and instructor interaction. May be repeated.

1130 Introduction to Crafts (4) Introduction to crafts as an academic discipline. Prerequisites: 1115-25-35 for art majors, none for non-art majors.

1135 Survey of Drawing (4) Further development of drawing with more emphasis on composition and techniques. May be repeated. Maximum credit 9 hrs.

1205 Survey of Painting (4) Further exploration of painting, color as a major medium of expression. May be repeated. Maximum credit 9 hrs.


1219 Drawing, Design, and Color (2) Prereq: 1115-25-35 for art majors, none for non-art majors.

1230 Introduction to Watercolor (4) Capacities of transparent watercolor. Prerequisites: 1115, 1125, 1135 for art majors, none for non-art majors.

1235 Watercolor I (4) Techniques that make watercolor a major medium of expression. May be repeated. Maximum credit 8 hrs. Prerequisites: 1115 for art majors, none for non-art majors.

1240 Introduction to Sculpture (4) Problems in clay modeling and basic casting techniques. Prerequisites: 1115, 1125, 1135 for art majors, none for non-art majors.

1245 Special Topics in Sculpture (4) Student or instructor initiated course to be offered at convenience of department. Prerequisites: Determined by department. May be repeated. Maximum credit 8 hrs.

1246 Technical Drawing (3) Drawing of objects and structures in their three-dimensional form. Prerequisites: 1115, 1125, 1135 for art majors, none for non-art majors.

1250 Technical Drawing II (3) Computer-aided technical drawing. Prerequisites: 1115, 1125, 1135 for art majors, none for non-art majors.

2205 Introduction to Wood (4) Wood as a material and as an art form. Prereq: 1115, 1125, 1135 for art majors, none for non-art majors.

2245 Introduction to Metals (4) Basic principles and processes. Prerequisites: 1115, 1125, 1135 for art majors, none for non-art majors.
3119 Design Resources (4) Sources, development, and application of design as it relates to visual arts. Design procedures, tools, and materials utilized in developing design resources. Prereq: Completion of studio course.

3125 Painting III (11) Individual expression with var- ious media; both in two- and three-dimensional. May be repeated. Maximum credit 12 hrs. Prereq: 8 hrs of credit in 2970 for an major; consent of instructor for non-art majors.

3260 Fabric Design III: Stitchery and Applique (4) Prereq: 2935. May be repeated. Maximum credit 8 hrs.

3960 Ceramics III: Individual Class Projects (4) Prereq: 2935 or consent of instructor. May be re- peated. Maximum credit 8 hrs. Prereq: 3950 or consent of instructor. May be repeated. Maximum credit 8 hrs.

3726 The Art of Northern Europe, 1550-1675 (4) From courtly art of the late Middle Ages to Northern Renaissance. Jan van Eyck, Roger van der Weyden, Raphael, Pontormo, and Giorgione.

3735 History of Nineteenth-Century Painting in America (4) From 1800 to 1900: Neoclassicism to modernism. Turner, Corot and Barbizon landscapists, Hudson River school, Impressionism, Realism, Post-impressionism, Cubism, Der Blaue Reiter, Futurism, Dada and Surrealism.

3746 History of Modern Sculpture in Europe and America (4) From 1900 to 1945: Impressionism, Cubism, Constructivism, Expressionism, Assemblage, Pop, Primary Forms, Environment, and Earthworks.


3767 Nineteenth Century American Painting (4) From Hudson River school to emergence of "The Eight." Study of advanced pictorial perception; a broad range of con- cepts and techniques applied to all types of painting. May be repeated. Maximum credit 12 hrs. Prereq: Consent of instructor. May be repeated. Maximum credit 12 hrs.

3776 Chinese Art (4) Concentrated study of Chinese painting from 1600 to 1900. Emphasis on landscape, genre, and historical development of museums of art, archaeology, anthropology, and science. (Same as 18 7 College of Liberal Arts


3820 The Growth of Modern Photography (4) History of techniques of photography, including artistic potential of film, aesthetic problems, and ethical values of photography. May be repeated. Maximum credit 12 hrs. Prereq: Determined by department. May be repeated. Maximum credit 12 hrs.

3822 Advertising Design (4) Study of contemporary techniques and concepts applied to all types of printed material. May be repeated. Maximum credit 12 hrs.

3825 Production (4) Theory and practice of me- dia, social, economic, and aesthetic values of the art of design in society as producer and consumer. May be repeated. Maximum credit 12 hrs.

3836 History of the Graphic Arts (4) Study of contemporary concepts and techniques applied to all types of graphic arts. May be repeated. Maximum credit 12 hrs.

3854 History of the Theater (4) A broad range of con- cepts and techniques applied to all types of theatrical production. May be repeated. Maximum credit 12 hrs. Prereq: Completion of studio course.
for the exceptional student. May be repeated for a maximum of 24 credit hrs.

4013 Individual Problems (4) May be repeated for a maximum of 12 credit hrs. Prereq: Consent of instructor.

4010 Foreign Study (1-16) See page 183.

4012 Off-Campus Study (1-16) See page 183.

4013 Independent Study (1-16) See page 183.

4016 Special Topics in Drawing (4) Student or instructor initiated course offered at convenience of department. Prereq: Determined by department. May be repeated. Maximum credit 16 hrs. Prereq: 12 hrs of 3115.

4115 Drawing IV (4) Individualized pursuit of personal drawing techniques and concepts, supplemented by individual and group critiques, self-analysis, searching for aesthetic potential in depth. Prereq: Determined by department or graduate standing or consent of instructor.

4150 Craft Media (4) Possibilities and limitations of variety of craft media; designing and executing craft problems using inexpensive materials and tools. For non-art majors only.

4206 Special Topics in Painting (4) Student or instructor initiated course offered at convenience of department. Prereq: Determined by department. May be repeated. Maximum credit 16 hrs. Prereq: Consent of instructor.

4215 Painting IV (4) Individual concepts on personal expression with varied water media on canvas. May be repeated. Maximum credit 12 hrs. Prereq: 12 hrs in 3115 for art majors; consent of instructor for non-art majors.

4210 Fiber Construction in Fabric and Fibers (4) Student or instructor initiated course to be offered at convenience of department. Prereq: Determined by department. May be repeated. Maximum credit 16 hrs.


4265 Watercolor IV (4) Individual concepts in personal expression with varied water-based media on paper. May be repeated. Maximum credit 12 hrs. Prereq: 12 hrs in 3150 for art majors; consent of instructor for non-art majors.

4260 Special Topics in Sculpture (4) Student or instructor initiated course offered at convenience of department. Prereq: Determined by department. May be repeated. Maximum credit 16 hrs.

4215 Sculpture IV (4) Individual development of student's creative ability in the field of sculpture. May be repeated. Maximum credit 12 hrs.

4210 Wood Design: Advanced Practical Construction (4) Application of terminology, cutting, joining, and finishing techniques in designing and constructing contemporary furnishings. Prereq: 2205 or consent of instructor. Maximum credit 12 hrs.

4265 Special Topics in Communication Design (4) Student or instructor initiated course offered at convenience of department. Prereq: Determined by department. May be repeated. Maximum credit 16 hrs.

4215 Corporate Design (4) Concepts of corporate graphic style in communication design and illustration. Prereq: 3203. May be repeated. Maximum credit 16 hrs.

4516 Visuobisual Communications Seminar (2) Political, social, economic, and ethical problems of contemporary designer. Sessions with outside guest speakers and field trips are arranged. Prereq: 4515.

4508 Special Topics In Printmaking (6) Student or instructor initiated course offered at convenience of department. Prereq: Determined by department. May be repeated. Maximum credit 16 hrs. Prereq: Consent of instructor.

4613 Intaglio IV (4) Photographic, college techniques; combination printing with other print media. May be repeated. Maximum credit 12 hrs.

4613 Lithography IV (4) Extensive use of aluminum plates, color separations, printing, photographic techniques. May be repeated. Maximum credit 12 hrs.

4617 Screen Printing (4) Traditional hand out and photographic stencils, combine printing on paper and other surfaces. May be repeated. Maximum credit 12 hrs.

4665 Special Topics in Metal Design (4) Student or instructor initiated course to be offered at convenience of department. Prereq: Determined by department. May be repeated. Maximum credit 16 hrs. Prereq: Consent of instructor.

4666 Special Topics in Ceramics (4) Intermediate to advanced. May be repeated.


4952 Glaze Calculations (4) Prereq: Senior or graduate standing and consent of instructor.

4711 Kin Construction (4) Prereq: Senior or graduate standing and consent of instructor. The following courses are offered periodically only at the Pi Beta Phi Arrowmont School of Arts and Crafts, Gatlinburg, Tennessee. Content varies with faculty. Students are required to check specific course content as printed in the Arrowmont timetable published each spring.

2164 Drawing I (4) Beginning to intermediate. May be repeated.

2204 Fiber Processes I (4) Beginning to intermediate. May be repeated.

2244 Fiber Construction I (4) Beginning to intermediate. May be repeated.

2274 Fabric Surface Design I (4) Beginning to intermediate. May be repeated.

2424 Fabric Construction I (4) Beginning to intermediate. May be repeated.

2354 Watercolor I (4) Beginning to intermediate. May be repeated.

2204 Clothing I (4) Beginning to intermediate. May be repeated.

2364 Communication Design I (4) Beginning to intermediate. May be repeated.

2274 Printmaking I (4) Beginning to intermediate. May be repeated.

2214 Enameling I (4) Beginning to intermediate. May be repeated.

2254 Sculpture I (4) Beginning to intermediate. May be repeated.

2504 Communication Design I (4) Beginning to intermediate. May be repeated.

2525 Graduate Painting I (2-6)

2515 Graduate Drawing I (2-6)

5627 Graduate Printmaking-Screen Printing II (2-6)

5626 Graduate Printmaking-Intaglio II (2-6)

5616 Graduate Printmaking-Intaglio I (2-6)

5525 Graduate Communication Design II (2-6)

5515 Graduate Communication Design I (2-6)

5425 Graduate Watercolor I (2-6)

5445 Graduate Sculpture I (2-6)

5515 Graduate Communication Design I (2-6)

5515 Graduate Communication Design II (2-6)

5415 Graduate Printmaking—Lithography I (2-6)

5416 Graduate Printmaking—Intaglio I (2-6)

5417 Graduate Printmaking—Screen Printing I (2-6)

5625 Graduate Printmaking—Lithography II (2-6)

5626 Graduate Printmaking—Intaglio II (2-6)

5627 Graduate Printmaking—Screen Printing II (2-6)

5755 Reading and Research in Art History (2)

5770 Seminar in Art History (4)

5805 Graduate Ceramics 1 (2-6)

5915 Drawing I (4) Intermediate to advanced. May be repeated.

5945 Painting I (4) Intermediate to advanced. May be repeated.

5946 Fiber Processes I (4) Intermediate to advanced. May be repeated.

5945 Communication Design I (4) Intermediate to advanced. May be repeated.

5945 Printmaking I (4) Intermediate to advanced. May be repeated.

5945 Metal Design I (4) Intermediate to advanced. May be repeated.

5945 Photography I (4) Intermediate to advanced. May be repeated.

5945 Ceramic I (4) Intermediate to advanced. May be repeated.

GRADUATE

There are two advanced degrees available in this department: Master of Arts and Master of Fine Arts. In addition to meeting requirements of the Graduate School, applicant must have an undergraduate major in art or outstanding proficiency. Examples of work will be requested. For additional information regarding these programs, write to the head of the department.

5000 Thesis

5001 Thesis Graduation Completion (3-15)

5011-21-31 Exhibition in Lieu of Thesis (3, 3, 3)

5101 Foreign Study (1-12)

5102 Independent Study (1-12)

5115 Graduate Drawing I (2-6)

5125 Graduate Drawing II (2-6)

5125 Graduate Painting I (2-6)

5125 Graduate Painting II (2-6)

5125 Graduate Fabric and Fibers I (2-6)

5125 Graduate Fabric and Fibers II (2-6)

5125 Graduate Watercolor I (2-6)

5125 Graduate Watercolor II (2-6)

5125 Graduate Sculpture I (2-6)

5125 Graduate Sculpture II (2-6)

5125 Graduate Ceramics I (2-6)

5125 Graduate Ceramics II (2-6)

5125 Graduate Communication Design I (2-6)

5125 Graduate Communication Design II (2-6)

5125 Graduate Printmaking—Lithography I (2-6)

5125 Graduate Printmaking—Intaglio I (2-6)

5125 Graduate Printmaking—Screen Printing I (2-6)

5125 Graduate Printmaking—Lithography II (2-6)

5125 Graduate Printmaking—Intaglio II (2-6)

5125 Graduate Printmaking—Screen Printing II (2-6)
Additional recommended courses for audiology majors are Audiology and Speech Pathology 4500, 4610, 4750, Psychology 2500, 2520, 2540, and 3150.

A major in audiology consists of Audiology and Speech Pathology 3010, 3040, 3050, 3065, 3070, 3090, 3110, 3110, 4000, 4400, 4720, plus not less than 10 nor more than 22 credit hours from the following:

2036, 2050, 2070, 2090, 2310, 2330, 2350, 2360, 2400, 2420, 2430, 2450, 2470, 2490, 2500, 2520, 2540, 2560, 2580, 2590, 2610, 2620, 2630, 2650, 2660, 2670, 2680, 2690, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 3420, 3430, 3440, 3450, 3460, 3470, 3480, 3490, 3500, 3510, 3520, 3530, 3540, 3550, 3560, 3570, 3580, 3590, 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680, 3690, 3700, 3710, 3720, 3730, 3740, 3750, 3760, 3770, 3780, 3790, 3800, 3810, 3820, 3830, 3840, 3850, 3860, 3870, 3880, 3890, 3900, 3910, 3920, 3930, 3940, 3950, 3960, 3970, 3980, 3990, 4000, 4010, 4020, 4030, 4040, 4050, 4060, 4070, 4080, 4090, 4100, 4110, 4120, 4130, 4140, 4150, 4160, 4170, 4180, 4190, 4200, 4210, 4220, 4230, 4240, 4250, 4260, 4270, 4280, 4290, 4300, 4310, 4320, 4330, 4340, 4350, 4360, 4370, 4380, 4390, 4400, 4410, 4420, 4430, 4440, 4450, 4460, 4470, 4480, 4490, 4500, 4510, 4520, 4530, 4540, 4550, 4560, 4570, 4580, 4590, 4600, 4610, 4620, 4630, 4640, 4650, 4660, 4670, 4680, 4690, 4700, 4710, 4720, 4730, 4740, 4750, 4760, 4770, 4780, 4790, 4800, 4810, 4820, 4830, 4840, 4850, 4860, 4870, 4880, 4890, 4900, 4910, 4920, 4930, 4940, 4950, 4960, 4970, 4980, 4990.

Audiology and Speech Pathology 160


Assistant professors: S. B. Burchfield, Ph.D, Michigan State; C. G. Mekel, M.B, Texas.


UNDERGRADUATE General information. One of society's most significant developments has been the acquisition of organized systems of communication. Basic to most human language systems has been dyadic oral-aural communication. The Department of Audiology and Speech Pathology offers courses in the scientific study of oral-aural communication with special attention to variations considered normal or different. Many of the courses offered in the department involve content that should be valuable to students planning to enter any social service discipline. Suggested electives for non-departmental majors include 3010, 3040, 3050, 3065, 3070, 3090, 3110, and 4720.

Majors. The two majors (audiology and speech pathology) within the department are: (1) Audiology; that is, they are preparing to graduate work and to professional certification in some aspect of communicative disorders. The master's degree is required for professional certification and employment positions. Within the broad coverage of audiology, it is possible for a student to specialize to a limited extent by choosing elective courses which emphasize traditional diagnostic audiology or oral habilitation-rehabilitation. Students in speech pathology may specialize to a limited extent by choosing elective courses which emphasize speech disorders, language disorders, or cultural language differences. Students preparing for school certification in speech and hearing or education of the deaf should consult the Department of Special Education and Rehabilitation for specific requirements.

A major in speech pathology consists of Audiology and Speech Pathology 3010, 3040, 3050, 3065, 3070, 3090, 3110, 3130, 4300, 4360, 4500, 4720, plus not less than 9 nor more than 22 credit hours from the following:

3010, 3040, 3050, 3065, 3200, 3310, 4040, 4450, and 4930 plus not less than 10 nor more than 15 credit hours from the following:

3070, 4310, 4340, 4400, and 4940.
A. Concentration in Cell Biology
   Consists of Biology 3110-20-30, Chemistry
   3211-21-31, 3219-29-39, Biochemistry
   4110-20, and 12 hours of upper-division
courses from Biochemistry 4119, 5010;
   Botany, any 5000- or 4000-level courses, a
   year sequence in physics (except
   1410-20-25), and Chemistry 2140-49.

B. Concentration in Organizational and Systems Biology
   Consists of Biology 3110, 3120, 3130, Chemistry
   3211-21-31, 3219-29-39, and 18 hours of upper-division
courses from Biochemistry 4119-20, 4119, 5010;
   Botany, any 4000- or 4000-level courses
   (Physics 1550-60) and Chemistry 1110-20-30.

1210-20-30 General Biology (4, 4, 4) 1210-Biology
   prerequisites; consult the catalog description
   Chemistry 1118-28) and Chemistry 1110-20-30.
   4000-level courses except 3010-20-30. (In
   4000-level courses; Zoology, any 3000- or
   Botany 1110-20 or 1118-28 or Zoology
   department, and not more than 4 hours of
   credited from any one biological science
   requirement, not more than 10 hours may be
   credited from any one biological science
   department, not more than 4 hours of
   research courses may be credited:
   Prerequisites to this concentration are
   Biology 1210-20-30 or Botany 1110-20, or
   1118-28 or Zoology 1118-28 and Chemistry
   1110-20-30. Corequisites are Math 1841-51 (see course listingunder
   1 year sequence in physics (except
   1410-20-25), and Chemistry 2140-49.

Minor: Consists of Biology 3110-20-30 and 12 hours of upper-division
courses chosen from the list below. Biochemistry 4110-20, 4119, 5010;
   Botany, any 3000- or 4000-level courses;
   Microbiology, any 3000- or 4000-level courses,
   any 4000-level courses except 3010-20-30. (In
   meeting the upper-division requirement,
   not more than 10 hours may be credited
   from any one biological science
   department, and not more than 4 hours of
   research courses may be credited):
   Prerequisites to the minor are introductory biology courses (Biology 1210-20-30 or
   Biology 1110-20-30 or Botany 1110-20-30 or
   Zoology 1118-28) and Chemistry 1110-20-30.

Minor: Certain upper-division courses require organic chemistry or other
   prerequisites, consult the catalog description
   in each case.

1210-20-30 General Biology (4, 4, 4) 1210-Biology
   of microorganisms, cell and molecular biology, cell and organelle function,
   energy metabolism, cell division, DNA
   RNA, and protein synthesis, memen, protein, and
   lung. 1230-Biology of plants and animals: survey
   of plant kingdom, structure and function of plant
   tissues, plant growth and reproduction; survey of the
   animal kingdom, reproduction and development
   in animals, internal tissues and organs
   systematics, and evolutionary biology. May be
even in any sequence. Students who receive
   credit for Botany 2410-20-30 may not also
   receive credit for Botany 1110-20-30 or
   Zoology 1110-20-30.

Prerequisites to this major are Biology
   1210-20-30 or Botany 1110-20, or
   1118-28 or Zoology 1118-28 and Chemistry
   1110-20-30. Corequisites are Math 1841-51 (see course listingsunder
   1 year sequence in physics (except
   1410-20-25), and Chemistry 2140-49.

Minor: Consists of Biology 3110-20-30 and 23
   upper-hours of biology, including
   3210 and at least 2 hours from 4710-20-30,
   4 additional hours of upper-division courses
   from a related biological science
   (zoology, microbiology, biochemistry, and plant
   pathology, forestry, or plant and soil sciences).

1100-22 Fundamentals of Botany (4, 4) Nature and
   development of plants, including processes, struc-
   ture, life histories, other biology, ecology, and impor-
   tance to man. Enrollement in sequence is desirable.
   Two 1-4hr interview discussions and approximately 3 hrs
   audio-tutorial laboratory per week. Students may
   not receive credit for both Botany 1100-20-30 and
   Botany 1120-20-30.

1110-20-30 General Botany (4, 4, 4) Classical and modern
   concepts of botany, history of botany, student;
   morphology, life cycle, and ecology of
   plants. Students may not receive credit for
   both Botany 1100-20-30 and Botany 1110-20-30.
   Corequisites are 4 hours
   upper-division courses in a related
   biological science (zoology, microbiology,
   biochemistry, and plant pathology, forestry, or plant and soil sciences).

1120-20-30 Plant Physiology (4, 4, 4) Plant growth and
   development, anatomy and physiology of
   higher plants, role of sunlight, temperature,
   water, and mineral nutrition; reproduction
   in plants. Students may not receive credit for
   both Botany 1100-20-30 and Botany 1110-20-30.
   Corequisites are 4 hours
   upper-division courses in a related
   biological science (zoology, microbiology,
   biochemistry, and plant pathology, forestry, or plant and soil sciences).

Black Studies

See Cultural Studies.

Botany (198)


Instructors: C. C. D'Emannelli, Ph.D. Colorado; J. D. Caponetti, Ph.D. Ohio State; L. W. Shulman, Ph.D. Ohio State; W. G. Hughes, Ph.D. Utah; O. J. Schmitt, Ph.D. North Carolina State.


I. M. Heid, Ph.D. Ohio State.

UNDERGRADUATE:

Major: Consists of Biology 3110-20-30; 23
   upper-hours of biology, including
   3210 and at least 2 hours from 4710-20-30.
   4 additional hours of upper-division courses
   from a related biological science
   (zoology, microbiology, biochemistry, and plant
   pathology, forestry, ornamental horticulture and landscape design, or
   plant and soil science). Not more than 3 hours from
   3050, 3070, 3090 allowed for major credit.

Prerequisites to this major are Botany
   1100-20-30 or 1118-28 or Botany 1210-20-30
   and Chemistry 1110-20-30. Corequisites are
   Math 1841-51 or Math 1550-60; Physics
   1210-20-30 or Physics 3210-20-30 or
   Chemistry 3211-21-31, 3219-29-39, or
   Geology 1510-20 plus 4 additional hours in
   geology.

Minor: Consists of Biology 3110-20-30 and
   18 upper-hours of biology. Not more than 3 hours from 3050, 3070, 3090 are
   allowed for minor credit. Prerequisites to this

*Students with two years of high school biology and satisfactory ACT scores may, with the consent of the department, omit the freshman year sequence and enter Botany 1110-20-30 directly (see course listingsunder
   biological science).
3050 Socio-Economic Impact of Plants (3) Significance in sequence.
3031-32 Field Botany (4,4) Emphasis on fall
192 and spring of an environment in which humans and their
3090 Biology and Human Affairs (3) Basic biological
3070 Genetics and Society (3) An introduction to
Not for botany graduate credit.
1210-20-30 or Botany 1110-20 or Geology 2710.
5030 Field Methods in Plant Ecology (4)
5020 Field Methods in Plant Ecology (4,3)
5012 Morphology and Evolution of Phycomycetes
5011 Mycology (4)
J.L. Adcock, Ph.D. Texas; M.C. Kanata, Assistant Professors:
J.H. Wood (Emeritus), Ph.D. North Carolina.
T.F. Williams', Ph.D. London (England); W.A. Van Hook,
G.K. Schweitzer', Ph.D. Illinois; D.A. Shirley
5010-20-30 Senior Seminar (1,1,1) At least 2 hr
6210 Photobiology (3)
5080 Pteridology (4)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5065 Phytoplankton Ecology (4)
5061 Phycology (4)
Wisconsin; F.M. Schell, Ph.D. Indiana.
5060 Morphology and Evolution of Basidiomycetes
5050 Marine Botany (4,3)
5040 Synecology (3) Field experience on iden-
tification of species and habitats.
Laboratory sessions for discussion and practice with techniques and literature for accurate
identifications. Prereq: 6 hrs of botany. Recommended:
Botany 1080-20.
5035 Field Methods in Plant Ecology (4)
5034-04 Non-Thesis Research (3,3)
5032 Field Liicolomy (3) Field experience on iden-
tification of species and habitats. Laboratory sessions for discussion and practice with techni-
cues and literature for accurate identification.
Prereq: 6 hrs of botany. Recommended:
Botany 1080-20.
5031 Field Bryology (3) Field experience on identifi-
cation of mosses and ferns. Frequent field trips emphasizing field identification of species and
habitats. Laboratory sessions for discussion and practice with techniques and literature for accurate
identification. Prereq: 6 hrs of botany. Recommended:
Botany 1080-20.
5029 Field Liicolomy (3) Field experience on iden-
tification of bryophytes. Frequent field trips emphasizing field identification of species and
habitats. Laboratory sessions for discussion and practice with techniques and literature for accurate
identification. Prereq: 6 hrs of botany. Recommended:
Botany 1080-20.
5028 Field Methods in Plant Ecology (4)
5019 Bryophytes (1,1,1)
5018 Marine Botany (4,3)
J.R. Peterson, Ph.D. California (Berkeley); K. Scherber,
5017 Marine Botany (4)
5016 Photobiology (3)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5015 Advanced Morphology of Flowering Plants (4)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5014 Marine Botany (4,3)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5013 Botany (4)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5012 Morphology and Evolution of Phycomycetes
5011 Mycology (4)
J.L. Adcock, Ph.D. Texas; M.C. Kanata, Assistant Professors:
J.H. Wood (Emeritus), Ph.D. North Carolina.
T.F. Williams', Ph.D. London (England); W.A. Van Hook,
G.K. Schweitzer', Ph.D. Illinois; D.A. Shirley
5010-20-30 Senior Seminar (1,1,1) At least 2 hr
6210 Photobiology (3)
5080 Pteridology (4)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5065 Phytoplankton Ecology (4)
5061 Phycology (4)
Wisconsin; F.M. Schell, Ph.D. Indiana.
5060 Morphology and Evolution of Basidiomycetes
5050 Marine Botany (4,3)
J.R. Peterson, Ph.D. California (Berkeley); K. Scherber,
5040 Synecology (3) Field experience on iden-
tification of species and habitats. Frequent field trips emphasizing field identification of species and
habitats. Laboratory sessions for discussion and practice with techniques and literature for accurate
identification. Prereq: 6 hrs of botany. Recommended:
Botany 1080-20.
5035 Field Methods in Plant Ecology (4)
5034-04 Non-Thesis Research (3,3)
5032 Field Liicolomy (3) Field experience on iden-
tification of bryophytes. Frequent field trips emphasizing field identification of species and
habitats. Laboratory sessions for discussion and practice with techniques and literature for accurate
identification. Prereq: 6 hrs of botany. Recommended:
Botany 1080-20.
5029 Field Liicolomy (3) Field experience on iden-
tification of bryophytes. Frequent field trips emphasizing field identification of species and
habitats. Laboratory sessions for discussion and practice with techniques and literature for accurate
identification. Prereq: 6 hrs of botany. Recommended:
Botany 1080-20.
5028 Field Methods in Plant Ecology (4)
5019 Bryophytes (1,1,1)
5018 Marine Botany (4,3)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5017 Marine Botany (4)
5016 Photobiology (3)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5015 Advanced Morphology of Flowering Plants (4)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5014 Marine Botany (4,3)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
5013 Botany (4)
J.A. Dean, Ph.D. Michigan; J.F. Eastham, Ph.D.
student to take in designing a program for a B.A. degree with a major in chemistry. Concentration A is designed to prepare the student for a career as a professional chemist or for entrance into graduate school in such fields as chemistry, biochemistry, geochimistry, etc. This program has similarities to that leading to the degree of Bachelor of Science in Chemistry, (page 179), but with more opportunity for selection of electives outside the department and outside of science. Unlike the Bachelor of Science degree, the B.A. degree using Concentration A is not approved by the Committee on Professional Training of the American Chemical Society.

The prerequisites consist of Chemistry 1110-20-30, Mathematics 1400-50-60, 2940-50, Physics 2110, 2310-20. The concentration consists of Chemistry 2140, 2141, 2310-20, 3110-20; 4310-20-30 plus at least 10 hours of additional upper-division work in chemistry, including at least one of the following courses: 4110, 4210, 4220, 4450, 4550. To use six hours of biochemistry, biology 600 level and above or Geology 4610 may be applied to the 10-hour requirement but at least one three-chemistry course must be included.) While not required, Math 2600 is highly recommended as an elective for majors in this concentration.

Concentration B is designed for students who have career objectives in fields other than chemistry, but in fields where chemistry has direct applications, such as medicine, dentistry, pharmacy, law, business, and ecology. This concentration, supplemented by courses from other disciplines, is suitable for students planning careers in these fields. Students are encouraged to specifically design programs to provide more electives while still maintaining a strong science background related to chemistry. Concentration B is not appropriate for students intending to become professional chemists.

The prerequisites consist of Chemistry 1110-20-30, Mathematics 1400-50-60, and any one of the following natural science courses (Physics 2210-30 or 2510, 2310-20; (b) Biology 1210-20-30; (c) Biology 1210-20-30; (d) Biology 2230 and 3211, toward graduation or Math 2860 is highly recommended as an elective for majors in this concentration.

Concentration B is designed for students who have had high school chemistry and who have had additional experience (eg, summer institute study, special research projects, home laboratory) to apply during the summer after completing 1110 series. Such a department permission to take a proficiency examination in Chemistry 1110 as a prerequisite. If Chem 1110, 1120, 1130 is exempt, then 1110, 1120, 1130 will not be given credit. Beginning students who have had high school chemistry and who have had substantial experience (eg, summer institute study, special research projects, home laboratory) are invited to apply during the summer after completing 1110 series. Such a department permission to take a proficiency examination in Chemistry 1110 as a prerequisite. If Chem 1110, 1120, 1130 is exempt, then 1110, 1120, 1130 will not be given credit. Beginning students who have had high school chemistry and who have had substantial experience (eg, summer institute study, special research projects, home laboratory) are invited to apply during the summer after completing 1110 series. Such a department permission to take a proficiency examination in Chemistry 1110 as a prerequisite. If Chem 1110, 1120, 1130 is exempt, then 1110, 1120, 1130 will not be given credit.
solutions, and chemical equilibria. 4170—Gases and kinetic theory, chemical kinetics, molecular spectroscopy, and introduction to chemical stability.

4210 Advanced Analytical Chemistry Lab (2) Experiments on topics discussed in 4200. Credit 2 hrs. Lab 2 hrs.

4220 Advanced Analytical Chemistry (3) Techniques of analysis, including principles of titration, coulometry, polargraphy, and voltammetry; qualitative and quantitative analysis; spectrophotometry, x-ray absorption and fluorescence techniques. Prereq: 2140-49 or 4920 recom. credit 3 hrs.

4220 Advanced Analytical Chemistry Lab (2) Experiments on topics discussed in 4220. Credit 2 hrs. Lab 2 hrs.

4420 Physical Inorganic Chemistry (3) Theoretical chemistry, applications of quantum chemistry to chemical bond and molecular structure, electronic structure of molecules, and electronic spectra, with appropriate deficiencies which must be mastered. Prereq: 2140-49 or equivalent. Credit 3 hrs.

4510 Qualitative Inorganic Analysis (3) Techniques of qualitative analysis of inorganic compounds. Prereq: 3110-21-31, 3119-29-39, 3219-39-39, 3430-39, 4220. Students who register for this course are required to pass the appropriate National Test at termination of project. May be repeated. Maximum credit 6 hrs.


4680 Chemical Instrumentation (4) Principles of instrumental analysis of chemical and physical properties. Prereq: 2140-49; 3420 or 4920 recom. credit 4 hrs.

4710 Research in Chemistry (2) Open to senior majors with consent of department head. Written report must be submitted to research director at completion of project. May be repeated. Maximum credit 8 hrs.

5170 Physical Chemistry of Polymers (3) Theoretical concepts leading to an understanding of inorganic and organic compounds. Prereq: 3330. Nine hours from the following general courses may be substituted: Classics 3210-20, 3310, 3320. Credit 3 hrs.

5194-24-34 Thematic Institute (1,1,1) Prereq: Classics 1210-20-30 or equivalent. Credit 4 hrs.

5195 Survey of Analytical Chemistry (3) Identical with Classics 5195. Credit 3 hrs.

5197 Survey of Inorganic Chemistry (3) Prereq: Classics 5197. Credit 3 hrs.

5259-69-79 Advanced Analytical Chemistry Laboratory (1,1,1) Experiments on topics discussed in 5220. Coreq: Classics 5220. Credit 1 hr.

5300 Thesis 1111 Selected Topics in Organic Chemistry (3) 3231-39 or 3231-35 39, 3430-39, 4220. Students who enter with high school units in these or other areas for the Ph.D. degree must register for the Thesis. Prereq: 2140-49 or equivalent. Credit 3 hrs.


5351 Survey of Analytical Chemistry (2) Prereq: Classics 5351. Credit 2 hrs.


5355 Industrial Chemical Research (3) Prereq: Classics 5355. Credit 3 hrs.

5410 Survey of Chemical Basis of Energy Conversion (1,1,1) Prereq: Classics 5410. Credit 1 hr.

5420 Nuclear Magnetic Resonance (3) Prereq: Classics 5420. Credit 3 hrs.

5430 Photochemistry and Radiation Chemistry (3) Prereq: Classics 5430. Credit 3 hrs.

5440 Vibrational Problems in Molecular Spectra (3) Prereq: Classics 5440. Credit 3 hrs.

5450 Organic Reaction Mechanisms (2) Prereq: Classics 5450. Credit 2 hrs.

5461-20-30 Biophysical Chemistry (3,3,3) Physical chemistry of biological systems. Must be taken in sequence. Not open to students having 2450-20-20, 2450-30-30, or 4920-49-49 for credit. Prereq: Classics 5461-20, 5360-20-30, 3430-39, 4220. Students who register for this course are required to pass the appropriate National Test at termination of project. May be repeated. Maximum credit 6 hrs.

5470-20-30 Biophysical Chemistry Laboratory (2) Experiments on topics discussed in 5460-20-30. Sequence must be taken in sequence. Not open to students taking 3470-20-20, 3470-30-30. Credit 2 hrs. Lab 2 hrs.

5492 Biophysical Chemistry Laboratory (3) Experiments on topics discussed in 5480-20-30. Sequence must be taken in sequence. Not open to students taking 3492-20-20, 3492-30-30. Credit 3 hrs. Lab 3 hrs.

5510 Survey of Theoretical Organic Chemistry (3) Prereq: Classics 5510. Credit 3 hrs.

5560 Physical Organic Chemistry (3) Prereq: Classics 5560. Credit 3 hrs.

5570 Advanced Analytical Spectroscopy (3) Advanced topics in analytical spectroscopy, introduction to chemical statistics. Prereq: Classics 5570. Credit 3 hrs.

5610-20 Analytical Chemistry Laboratory (1,1,1) Experiments on topics discussed in 5610. Coreq: Classics 5610. Credit 1 hr.

5695 Advanced Chemical Kinetics (3) Prereq: Classics 5695. Credit 3 hrs.

5710 Physical Chemistry of Polymers (3) Prereq: Classics 5710. Credit 3 hrs.

5800 Statistical Thermodynamics (3) Prereq: Classics 5800. Credit 3 hrs.

5811-21-31 Chemistry Seminar (1,1,1) Credit 1 hr.

5911-21-31 Chemistry Seminar (1,1,1) Credit 1 hr.

5921 Doctoral Research and Dissertation 1210-20-30 Advanced Chemical Experimentation (2) (2,2) 3210-20 Advanced Chemical Experimentation (3) credits.

5930 Synthetic and Analytical Techniques in Organic Chemistry. 2 hrs. and 2 labs. (Not open to students who have completed 4610.) Credit 2 hrs.

5942 Advanced Analytical Chemistry Laboratory (1) Experiments on topics discussed in 5920. Coreq: Classics 5920. Credit 1 hr.

5945 Physical Organic Chemistry (3) Prereq: Classics 5945. Credit 3 hrs.

5950 Organic Chemistry Laboratory (3) Prereq: Classics 5950. Credit 3 hrs.

5960-20-30 Advanced Chemical Experimentation (2) Experiments on topics discussed in 5950. Sequence must be taken in sequence. Not open to students taking 3560-20-20, 3560-30-30. Credit 2 hrs. Lab 2 hrs.

5980 Advanced Analytical Spectroscopy (3) Advanced topics in analytical spectroscopy, introduction to chemical statistics. Prereq: Classics 5980. Credit 3 hrs.
such credits. During the first week of the course, a placement test will be given, and students will be advised if a change in registration is indicated.

Proficiency Examinations. Students who have acquired a knowledge of Latin through private study or tutoring should request a proficiency test. A student who earns a grade of B or better in this examination is eligible for credit toward graduation. A student who omits any course in a sequence may receive credit for it by passing the appropriate proficiency examination.

Certification for Teaching Latin in Tennessee. Consult Certification Clerk, Room 212, Claxton Education Building.

1110 10:30-10:45 Beginning Latin (3, 3) Must be taken in sequence.

2321-23 Intermediate Latin (4, 4) 2311-22 Readings from the age of Cicero, 2321-23 Vergil's Aeneid. Open to those who have had at least two years of high school Latin, or equivalent.

2340 (3) Prereq: 3 or 4 years of high school Latin or 2321.

2350 (2) Prereq: 3 or 4 years of high school Latin or 2321.

2360 (3) Prereq: (2) or Equivalent.

2360 (3) Prereq: A level Latin or equivalent.

2370 Beginners Latin (3) (2) Prereq: 400 or equivalent.

2380 Latin (average) (3) Prereq: 2321.

2390 Greek (3) Beginners Latin (2) or equivalent. Students who have completed high school Latin should take the proficiency examination with emphasis on recognition of basic Greek myths. Students may not receive credit for both 2390 and 2321.

2390 Greek Life (4) Manners and customs, social and economic aspects of classical civilization. Tutoring and computer systems. Selections made from comedies written by Greek and Roman authors. May be repeated for credit.

2410 Teaching of Latin (3) Careers in the teaching field, Latin literature, practice in literature, grammar, prose composition, and use of reference texts.

2420 Seminar in Classical Studies (2) Special problems in literature and other arts of Greece and Rome. Intended primarily for students in Latin and Ancient Near Eastern Studies.

2430 Classical Mythology and Its Uses (3) Introduction to classical mythology and its modern uses. May be repeated for credit with consent of department.

2450 Selected Readings in Latin Literature in Translation (3) Content varies; may be repeated for credit with consent of department.

2460 Comparative Literature (3) See Cultural Studies.

2510 Greek Epic, Hesiod, Iliad, Odyssey (3) C. L. Mattingly. May be repeated for credit with consent of department.

2521 Intermediate Latin (4, 4) 2511-22 Readings from the age of Cicero, 2521-22 Vergil's Aeneid. Open to those who have had at least two years of high school Latin, or equivalent.

2540 (3) Prereq: 3 or 4 years of high school Latin or 2521.

2550 (2) Prereq: 3 or 4 years of high school Latin or 2521.

2560 (3) Prereq: A level Latin or equivalent.

2570 Beginners Latin (3) (2) Prereq: 250 or equivalent.

2580 Latin (average) (3) Prereq: 2521.

2590 Greek (3) Beginners Latin (2) or equivalent. Students who have completed high school Latin should take the proficiency examination with emphasis on recognition of basic Greek myths. Students may not receive credit for both 2590 and 2521.

2590 Greek Life (4) Manners and customs, social and economic aspects of classical civilization. Tutoring and computer systems. Selections made from comedies written by Greek and Roman authors. May be repeated for credit.

2610-20-30 The Latin Epic. Lucretius, Virgil, Lucan, Caesar, and Cicero. Emphasis on the influence of Latin epic poetry, including Roman and Sapphic. Andorre, N. C. Emphasis on Roman history and literature. May be repeated for credit with consent of department.

2620-21 Intermediate Latin (4, 4) 2611-22 Readings from the age of Cicero, 2621-22 Vergil's Aeneid. Open to those who have had at least two years of high school Latin, or equivalent.

2640 (3) Prereq: 3 or 4 years of high school Latin or 2621.

2650 (2) Prereq: 3 or 4 years of high school Latin or 2621.

2660 (3) Prereq: A level Latin or equivalent.

2670 Beginners Latin (3) (2) Prereq: 260 or equivalent.

2680 Latin (average) (3) Prereq: 2621.

2690 Greek (3) Beginners Latin (2) or equivalent. Students who have completed high school Latin should take the proficiency examination with emphasis on recognition of basic Greek myths. Students may not receive credit for both 2690 and 2621.

2700 Scientific and General Vocabulary from Greek (3) Scientific and general vocabulary from Greek. All classes meet in English. May be repeated for credit with consent of department.

2750 Scientific and General Vocabulary from Latin (3) Study of word roots and words in English language derived from Latin. Designed to build general vocabulary with special emphasis on scientific and technical terminology.

2810 Greek Life (4) Manners and customs, social and economic aspects of classical civilization. Tutoring and computer systems. Selections made from comedies written by Greek and Roman authors. May be repeated for credit with consent of department.

2820 Seminar in Classical Studies (2) Special problems in literature and other arts of Greece and Rome. For graduate students and advanced undergraduates. May be repeated for credit with consent of department.

2830 Classical Mythology and Its Uses (3) Intensive review and survey of Greek and Roman mythology by graduate students and advanced undergraduates. Emphasis on uses of classical mythology in travel and music, and in modern times.

2840 Selected Readings in Latin Literature in Translation (3) Content varies; may be repeated for credit with consent of department.

2850 Problems in Old World Archaeology (3) Comparative Literature. See Cultural Studies.

2900 Latin (average) (3) Prereq: A level Latin or equivalent. Students who have completed high school Latin should take the proficiency examination with emphasis on recognition of basic Greek myths. Students may not receive credit for both 2900 and 2901.

2901 Latin Life (3) Careers in the teaching field, Latin literature, practice in literature, grammar, prose composition, and use of reference texts.

2920 Teaching of Latin (3) Careers in the teaching field, Latin literature, practice in literature, grammar, prose composition, and use of reference texts.

2930 Classical Mythology and Its Uses (3) Introduction to classical mythology and its modern uses. May be repeated for credit with consent of department.

2950 Selected Readings in Latin Literature in Translation (3) Content varies; may be repeated for credit with consent of department.

2960 Comparative Literature (3) See Cultural Studies.

2990 Latin (average) (3) Prereq: A level Latin or equivalent. Students who have completed high school Latin should take the proficiency examination with emphasis on recognition of basic Greek myths. Students may not receive credit for both 2990 and 2991.

3000 Greek Life (4) Manners and customs, social and economic aspects of classical civilization. Tutoring and computer systems. Selections made from comedies written by Greek and Roman authors. May be repeated for credit with consent of department.

3010 Machine Organization (3) Elementary computer architecture. Introduction to machine and assembly language programming. Use of general purpose language PL1. Students may not receive credit for both 3010 and 3010.

3020 Structural Programming in PL/1 (3) Intermediate computer programming. Concepts of structuring programming. Use of general purpose language PL/1. Students may not receive credit for both 3020 and 3020 or equivalent.

3030 Problems in Old World Archaeology (3) Comparative Literature. See Cultural Studies.

3040 Latin (average) (3) Prereq: A level Latin or equivalent. Students who have completed high school Latin should take the proficiency examination with emphasis on recognition of basic Greek myths. Students may not receive credit for both 3040 and 3040 or equivalent.

3050 Machine Organization (3) Elementary computer architecture. External devices and direct access input and output. For students who have prior programming experience in an assembly language. Prerequisite: 1510 or 1610 or 3100 or consent of instructor.

3060 Structural Programming in PL/1 (3) Intermediate computer programming. Concepts of structuring programming. Use of general purpose language PL/1. Students may not receive credit for both 3060 and 3060 or equivalent.

3070 Classical Mythology and Its Uses (3) See Cultural Studies.

3080 Problems in Old World Archaeology (3) Comparative Literature. See Cultural Studies.
3150 Introduction to Numerical Algorithms and Programming (3) Roots of equations, systems of linear equations, numerical integration, methods of interpolation, fitting and smoothing. Prerequisites: credit; students with a knowledge of FORTRAN should take 2600. (Same as Math 3150.)

3155 Introduction to Numerical Algorithms (3) Roots of equations, systems of linear equations, numerical integration, interpolation and approximation, digital signal processing, optimization. Students with knowledge of FORTRAN should take 3160. Prerequisite: or consent to instructor. (Same as Math 3155.)

3410 Computer Programming-COBOL (3) Computer programming in business-oriented language COBOL. Prerequisite: 1410 or 1510 or 3150 or consent to instructor. (Same as Math 3150.)

2910 Computer Concepts and Control (3) Elements, operation, and control of computers in a business environment. Topics include input, storage, data manipulation, output, flow-charting, and error control. Prerequisite: 3410 and Accounting 2610.

4310 Statistical Data Processing (3) FORTAN language and its use for computation and analysis of statistical data. Emphasis on standard statistical analysis such as frequency distributions, percentiles, data reduction, correlation and regression, analysis of variance. Not for credit for computer science majors. Prerequisite: Statistics 2105 or equivalent.

4320 Advanced Statistical Data Processing (3) Use of computer languages and packages for statistical analysis and research, including data management and graphing. Prerequisite: 4310.

4410 Interactive Statistical Programming (3) Statistical data processing using interactive computer programming languages. Emphasis on use of interactive user-oriented computer packages such as Staphell, editors, and FORTRAN to process for credit for computer science majors. Prerequisite: 2160 or equivalent. Computer Science 4310 or knowledge of a procedure-oriented language such as FORTRAN.

4610 Interactive Data Analysis (3) Computer programs for data analysis and scientific computing. Emphasis on use of interactive user-oriented computer packages such as Staphell, editors, and FORTRAN to process for credit for computer science majors. Prerequisite: 2160 or equivalent. Computer Science 4310 or knowledge of a procedure-oriented language such as FORTRAN.

3610 Computer Organization and Programming (3) The assembly language implementation of instruction set processors. Prerequisite: 1510 or 2510, or 3150 or consent to instructor.

3920 Assembly Language Programming II (3) Microscopic aspects of instruction set processors. Emphasis on the representation of memory dumps. Prerequisite: 2170. 3150.

3715 Discrete Structures (3) Introduction to discrete structures useful in computer science. Sets, relations, functions, proof techniques, induction, graph, recursive representations and induction. Preparatory: 1510 or 3150 or equivalent. Prerequisite: or coreq: Math 2690. (Same as Math 3715.)

3725 Advanced Discrete Structures (3) Advanced topics in discrete structures useful in computer science. Graphs and algorithms for manipulating data, especially those related to computer science applications; Boolean algebra, circuits, graphs, semigroups, monoids, groups. Prerequisite: or consent to instructor. (Same as Math 3725.)

4550 Number Systems for Digital Computers (3) Introduction and implementation of mixed-radix number representation methods, including the representation of digital numbers, max and min methods of number representation, errors in floating-point computation, finite fields, and exact computation using digital computers. Prerequisite: 3150.

4210 Introduction to Artificial Intelligence (3) Intelligence processes and their performance by a computer. Computer representation of knowledge, problem solving and search, game playing, automated deductive systems, natural language understanding, computer vision and learning. Computer implementation of AI problems. Prerequisite: 4310. (Same as Electrical Engineering 4215.)

4950 Elementary Equations and Numerical Approximations (3) (Same as Math 4225.)

4264 Numerical Methods for Ordinary Differential Equations (3) (Same as Math 4225.)

4470 Programming Languages (6) Comparison and analysis of some programming languages, their design features, and implementation. Topics include processes, expressions, sequence control, data control, and storage management. Detailed discussion and programming experience. In EISP and either SIMULA, APL, or SIMULA. Prerequisite: 4510.

4610 Data Structures and Nonnumeric Programming (6) Data structures and algorithms for their manipulation. Arrays and orthogonal lists, stacks, queues, lists, dynamic allocation, organization of files, program packages, languages for information structures. Prerequisite: 2710 or either 3510 or 2510. Prerequisite or consent to instructor. (Same as Math 5760.)

4450 Systems Programming (3) Computer organization and advanced programming. Machine language and design of computers, representation of information, microprogramming, software packages, system design and macro assembler. Prerequisite: 3520 or equivalent.

4670 Introduction to Database Management Systems (6) Introduction to database management systems, network, and relational models of data. Logical and physical views of data. Data definition and manipulation, database security, independence. Implementation and operational characteristics, such as performance, reliability, and security. Prerequisite: 4510 and 4550 or equivalent. (Same as Computer Science 4570 and 4570.)

4670 Operating Systems—Concepts and Facilities (6) Detailed examination of major operating system processes. Emphasis on design and implementation, interrupts, machine-level I/O, users and resource allocation, device characteristics, data set organization, SP/UNIX, and OS/2. Prerequisite: 4520 and 4510. Students may not receive credit for both 4670 and 4570.

4680 Operating Systems—Case Studies (3) Alternatives in operating system implementation. Topics include: virtual memory, protection, scheduling, time sharing, time slicing, processors, computer/network, and operating system characteristics. Examples from different operating systems examined as appropriate. In EISP. Prerequisite: 4610 and 4570.

4660 Compiler Construction (3) Practical experience with design and implementation of computer languages, compiler construction, and optimization. Topics will include a complete compiler for a small block-oriented language. Prerequisite: 4510.

4710 Formal Languages and Automata (3) Grammars of Chomsky hierarchy and their recognizers. Properties of languages and machines. Emphasis on regular and context-free languages. Introduction to computability and undecidability. Prerequisite: 3150.


4910 Interactive Computer Graphics (3) Point plotting, vector generation, interactive graphical technique, two- and three-dimensional computer graphics, design, depth, hidden line elimination, shading, software and hardware design, display conventions, display systems, design, problem solving, mapping, modeling, architecture, and many other areas. Prerequisite: Senior standing in computer science, electrical engineering, or geography and a knowledge of computer programming at an advanced level. (Same as Elec. Engr. 4700 and Geophysics 4700.)

4820 Pattern Recognition (6) (Same as Elec. Engr. 4820.)

4830 Digital Image Processing (6) (Same as Elec. Engr. 4830.)

4850 Small Computer Systems (6) (Same as Elec. Engr. 4850.)

4910 Analysis and Management of Computer In- stallations (3) Analysis and design of computer systems; implementation, justification, personnel in responsibility on systems. Prerequisite: 3520 or equivalent.

4990-50 Special Topics in Computer Science (1-4, 1-6) Credit determined at time of registration. May be repeated. Maximum credit 9 hrs. with consent of department. Prerequisite: Recommendation of computer science faculty.

GRADUATE

5000 Thesis (1-5)

5003 Non-Thesis Graduation (3-5)

5100 Computer Assisted Instruction (3)

5200 Computer Modeling and Simulation of Physical Systems (3)

5205 Immigration to Computer Science (3)

5919 Immigration to Computer Science Practicum (6-10)

5915 Introduction to Logic Design (3)

5210 Artificial Intelligence (3)

5220 Medical Computing (3)

5430 Theory of Computing (3)

5450 Finite Difference Methods for Partial Differential Equations (3)

5460 Finite Element Methods (3)

5470 Advanced Topics in Numerical Partial Differential Equations (3)

5670 Advanced Data Base Management Systems (3)

5650-75-75 Numerical Mathematics (3, 3, 3)

5630 Advanced Operating Systems (3, 3)

5710 Finite Automata Theory (3)

5720 Computational and Computer Complexity (3)

5730 Theory of Formal Languages (3)

5771 Combinatorial Algorithms (3)

5910 Information Organization and Retrieval (2)

5480-50 Pattern Recognition (3, 3)

5620 Data Safety (3)

5900-90 Special Topics in Computer Science (1-6, 1-6, 1-6)

5940-90 Advanced Small Computer Systems (3, 3)

5960 Independent Study in Computer Science (1-4, 1-6, 1-6)

Cultural Studies

Director: Dr. Charles O. Jackson


Director: Charles O. Jackson

Cultural Studies

The ideal curriculum encourages not only
proficiency in a given field of knowledge but also the comprehension of similarity and complementarity between areas of intellectual endeavor. One answer to the need for fusion and integration of knowledge is the interdisciplinary program. The college has joined the resources of several departments to offer a cultural studies major with concentrations in American studies, Ancient Mediterranean Civilizations, Asian studies, Black studies, comparative literature, Latin American studies, linguistics, Medieval studies, Russian and East European studies, and urban studies. Minors are provided in Asian studies, Black studies, comparative literature, Latin American studies, linguistics, Medieval studies, urban studies, and women's studies.

American Studies (999)
History 2510-20 (or equivalent honors courses) are prerequisite to a concentration in American studies which consists of 36 quarter hours: English 3010-20, American Studies 3010 and 4010, and 21 hours of upper-division electives dealing with the American experience. Nine hours of the elective group must be from one of the following disciplines: anthropology, economics, political science, or sociology. A list of acceptable elective courses is published annually by the American Studies Committee.

For further information consult the chairman of the American Studies Committee, Dr. Charles Jackson.

3234-33 Forms of Popular Literature and Culture (3, 3) (Same as English 3234).

4010 Topics in Asian Language and Literature (2) Content varies. May be repeated once.

Asian Studies (145)
The Asian studies concentration consists of 36 quarter hours: Asian Studies 2510-20 plus 28 additional credits from Asian studies or approved departmental courses. The latter should constitute a coherent program, involving a minimum of one course (3 or 4 hours) from each of the following three areas: (a) art, Asian culture, literature, and music; (b) economics, geography, history, and political science; (c) anthropology, philosophy, religious studies, and sociology. Students who prefer to use Asian Studies courses (2510-20 for Taaped language program) with permission of the program chairperson, substitute 8 additional upper-division hours in acceptable courses for that required sequence in the concentration.

The Asian studies minor consists of 24 quarter hours: Asian Studies 2510-20 plus 16 additional credits from Asian studies or approved departmental courses. The latter should include a minimum of one course (3 or 4 hours) from each of the following areas: (a) art, Asian culture, literature, and music; (b) economics, geography, history, and political science; (c) anthropology, philosophy, religious studies, and sociology. Students who prefer to use Asian Studies courses 2510-20 for Taaped elective credit may, with permission of program chairperson, substitute 8 additional upper-division hours in acceptable courses for that required sequence in the minor.

It is strongly recommended that students planning to attend graduate school take an appropriate Asian language through the intermedial level.

Further information may be obtained from the chairperson of the Asian Studies Committee, Dr. Eric Gangloff.

2510-20 Asian Civilization (4, 4) Introduction to Asian civilization by comparative study of development of religion, social institutions, and high culture in India, China, Japan, and the Islamic world. 2520-25 (optional) electives: 2525-16 Trad-itional cultures and their modern developments.

3310 Indian Culture (4)
3320 Chinese Culture (4)
3330 Japanese Culture (4)
3340 Islamic Culture (4)

4010-30 Readings in Asian Literature (4, 4, 4) Prereq: Mastery of intermediate-level of Japanese, Chinese, Arabic, or Sanskrit. Prepare and consent of instructor.

4102 Selected Topics in Asian Studies (3) Content varies. May be repeated. Maximum credit 12 hrs.

4750-80 Elementary Sanskrit (3, 3, 3) (Same as Religious Studies 4750-04-06).

7700-80 Intermediate Sanskrit (4, 4, 4) (Same as Religious Studies 4751/50/51) 1317-30-33 Indian Civilization and Religion (3, 3, 3) (Same as Religious Studies 1317/30/33).

Arabic (127)
(See Romance Languages)

1910-30 Elementary Modern Standard (3, 3, 3)
3510-20 Intermediate Modern Standard (4, 4)
3610 Islamic Literature in English Translation (4)
1510 Foreign Study (1-16)
5101 Foreign Study (1-2)
5102 Off-Campus Study (1-12)
1385 Independent Study (1-12)

Chinese
Asian Studies 2531-32-33 Elementary Chinese (4, 4, 4) Taped language program. Prereq: 3531-32 or equivalent or consent of instructor. Must be taken in sequence.
Asian Studies 3531-32 Intermediate Chinese (4, 4, 4) Taped language program. Prereq: 2531-32 or equivalent or consent of instructor. Must be taken in sequence.

CHINESE

Asian Studies 2531-32-33 Elementary Chinese (4, 4, 4) Taped language program. Must be taken in sequence.
Asian Studies 3531-32-33 Intermediate Modern Chinese (4, 4, 4) Taped language program. Prereq: 2531-32 or equivalent or consent of instructor. Must be taken in sequence.

HEBREW

Asian Studies 2531-32-33 Elementary Modern Hebrew (4, 4, 4) Taped language program. Must be taken in sequence.
Asian Studies 3531-32-33 Intermediate Modern Hebrew (4, 4, 4) Taped language program. Prereq: 2531-32 or equivalent or consent of instructor. Must be taken in sequence.

JAPANESE

Asian Studies 2531-32-33 Elementary Japanese (4, 4, 4) Taped language program. Must be taken in sequence.
Asian Studies 3531-32-33 Intermediate Japanese (4, 4, 4) Taped language program. Prereq: 2531-32 or equivalent or consent of instructor. Must be taken in sequence.

Japanese Studies

Asian Studies 2531-32-33 Elementary Japanese (4, 4, 4) Taped language program. Must be taken in sequence.

Political Science

Asian Studies 2531-32-33 Elementary Japanese (4, 4, 4) Taped language program. Must be taken in sequence.

Philosophy

Asian Studies 2531-32-33 Elementary Japanese (4, 4, 4) Taped language program. Must be taken in sequence.

Religious Studies

Asian Studies 2531-32-33 Elementary Japanese (4, 4, 4) Taped language program. Must be taken in sequence.
The concentration and minor in African and Afro-American Studies offers an interdisciplinary and off-campus study to foster knowledge of the Black experience through a traditional academic approach as well as experiential learning. Black Studies 2010-20 are prerequisites to the concentration which consists of 36 hours from the Black Studies curriculum. A minimum of 24 hours must be in upper-division credit. Every student's program must include some individualized work under Black Studies 4102, 4103, and 4310, the nature of which should be negotiated with the program director. A maximum of 8 hours in 4102 and 4103 combined can be applied to a minor and a maximum of 4 hours in 4102 and 4103 combined can be applied to a minor. In addition, courses from at least two other departments must be selected. For further information consult the coordinator of the African and Afro-American Studies Committee. Mr. Marvin Peace.

Black Studies (195)
1910-20 Elementary Swahili (4,4) Taped language program. Must be taken in sequence.
2010-20 Introduction to Black Studies (4, 4) 3140-50 Directed Readings in Black Studies (1, 1) Designed for students who are interested in doing intensive reading in some area of Black studies which is defined by the student and the instructor. Prereq.: 2010 (or 2020) and consent of instructor.
3330 Prejudice and Racism in the United States (4) (Same as Sociology 3330)
3340 Sociology of Poverty and Inequality (4) (Same as Sociology 3340)
3490 African Religions (4) (Same as Religious Studies 3490)
3500 Religion and Race in America (4) (Same as Religious Studies 3500)
3580 Black Religion in America (4) (Same as Religious Studies 3580)
3630-40 The Education of Black People (4, 4) Sequence will trace, analyze, and interpret educational systems established for and by Blacks. Special emphasis will be placed on the effects of society and culture on education and the probability of increasing integration, compensatory programs, desegregation, voucher systems, Black Studies and Freedom Schools will be discussed. Sociology 2010-20, History 1950-60 recommended. Prereq.: Consent of instructor.
4101 Foreign Study (1-16) See page 183.
4102 Off-Campus Study (1-16) See page 183.
4103 Independent Study (1-16) See page 183.
4230 Seminar on Pan-Africanism (4) Explores concepts and philosophies of Pan-Africanism and implications of the ideology for various social institutions.
4310 Research in Black Studies (4) Deals with Black experience and research projects.
4490 Current Issues and Topics in Black Studies (3-4) Problems, topics, and issues in area of Black studies. Content and credit determined by instructor. May be repeated. Maximum credit 12 hrs.
4510 African-American Families (3) (Same as Child and Family Studies 4510)
4530 Black Women in American Society (4) (Same as Religious Studies 4530) History 1950-60 recommended. Prereq.: Consent of instructor.
4810 Afro-American Psychology (3) (Same as Psychology 4810)

Approved Area Courses
Anthropology 3350 Peoples and Cultures of Africa (3)
Anthropology 3603 Biology of the Races of Man (3)
Art 3270 Black Art (4)
CFS 4310 The Afro-American Family (3)
English 2540 The Literature of Black America (4)
English 3510-20 Black Literature (4, 4) Geography 3630 Geography of Africa (3)
History 1950-60 African History: An Introductory Survey (4)
History 2950 Introduction to Afro-American History (3)
History 4500-40 The Negro in American History (3, 3)
Music 2330 Introduction to Afro-American Music (3)
Music 4270 Evolution of Jazz (3)
Political Science 2020-18 Black Africa: The Politics of Change and Stability (4, 4)
Political Science 3025 Minority Group Politics in the U.S. (3, 3)
Psychology 4880 Afro-American Psychology (4)
Religious Studies 2050 Religion and Racism in America (4)
Religious Studies 3690 Black Religion in America (4)
Sociology 3330 Race, Class, and Power (4)
Sociology 3340 Sociology of Poverty and Inequality (4)
Sociology 4380 American Minority Ethnic Groups (4)
Speech 4582 Black Rhetoric (4)

Recommended for the concentration and the minor:
(a) Those with a concentration in Black Studies are encouraged to take a second major, with which an individually designed program in Black Studies can be completed.
(b) Students should seek academic advising from the Chairman of Black Studies for courses for the concentration or the minor which relate to career plans, preparation for graduate study, and relationship to the requirement.
(c) Those with a concentration and a minor or with majors in education will graduate with a classroom and experiential learning through courses, e.g. Human Services 4400 and for Black Studies 4102.

Cinema Studies
Minor: Consists of English 2690 and Art 2955 plus sixteen additional hours of approved area courses. It strongly recommended that English 2690 and Art 2955 be taken before selection of electives provided for in the minor. For further information, consult the chairperson of the Cinema Studies Committee, Dr. Ferdinand A. Hilaire.

Approved Area Courses
Art 3935 Film Design (4)
Broadcasting 3670 TV Film News (3)
Broadcasting 4320-40 Television Production (3, 3)
Comparative Literature 4520 Topics in Film and Literature (3, 3)
English 2330 Film and American Culture (3)
English 3440 Literature and Film (3)
English 4890 Topics in Film Study (3)
Ralian 5540 The Korean Cinema (3)

Comparative Literature (280)
Preparation in comparative literature consists of 36 hours including Comparative Literature 4010, 4012-22-32, 6 hours of literature in a foreign language in courses numbered 3000 and above, and one classics course selected from Classics 4010, 4230, 4320. 4101-32, 9 hours of study in a foreign language, numbered 3000 and above, from at least two of the following departments: English, Germanic and Slavic Languages, Religious Studies, Romance Languages (certain courses in Philosophy and Psychology may be substituted with the approval of the chairperson of the Comparative Literature Program). Students concentrating in comparative literature are strongly encouraged to acquire a working knowledge of a second foreign language, especially if they hope to pursue comparative literature on the graduate level.

A minor in comparative literature consists of 24 hours including Comparative Literature 4010, two courses from Comparative Literature 4012-22-32, 6 hours of literature in a foreign language in courses numbered 3000 and above, and 9 hours of literature courses numbered 3000 and above, either in English or in a foreign language, from at least two of the following departments: Classics (4010, 4230, 4320), English, Germanic and Slavic Languages, Religious Studies, Romance Languages (certain courses in Philosophy and Speech and Theatre may be substituted with the approval of the Comparative Literature Program). Students concentrating in comparative literature are strongly encouraged to continue their studies in a foreign language as the minimum requirement.

For further information, consult the chairman of the Comparative Literature Committee, Dr. Harry C. Puttke.
2010 Introduction to Comparative Literature (4)
Basic knowledge, techniques, and sources necessary to compare literatures of various cultures, ages, and nations.
3336-37 Special Topics in Literature (3, 3) (Same as English 3336-37)
4101 Methodology of Comparative Literature (2)
Research and writing of comparative literary studies. Major project will be preparation of seminar paper in comparative literature. Prerequisite: 2010 and one course from 402-22-32 or consent of instructor.
4123-23 Special Topics in Comparative Literature (3, 3; 3-9) Content varies; may be repeated for credit.
5012 Comparative Theories of Literature (3)
5022 Approaches in Comparative Literature (3)
5032 Studies in Comparative Literature (3)
5034 Approaches to Literature (3)
Major project will be preparation of seminar paper in comparative literature. Prerequisite: 2010 and one course from 4012-22-32 or consent of instructor.
Research and writing of comparative literary studies in the Departments of Art, Classics, History, Philosophy, or Religious Studies can be applied to the three divisions as appropriate.
Students are encouraged to satisfy the Language, Literature, and Arts Triad requirement with Greek, Latin, or Hebrew in either Option I or Option II. Upper-division courses in these languages may be applied to the appropriate division listed above.
For further information, consult Dr. C.C. Rutledge (Classics) or Dr. W.L. Humphreys (Religious Studies).
Latin American Studies (600)
Concentration consists of 36 hours, including Spanish 3130-20-30 or Portuguese 3150-20, History 3870-80-90, Political Science 3625-26, and Geography 3800 or 3790 and 7 hours of acceptable elective courses in any of the participating departments or in the Latin American studies sequence 2510-20 (4) or Independent Research 4010.
Two years of Spanish or Portuguese or a practical working knowledge acquired independently is a prerequisite.
Minor: Consists of 24 quarter hours selected from Geography 3900 or 3790, History 3970-80-90, Political Science 3625-26, Spanish 3710-20 or Portuguese 3510-20, and the Latin American studies sequence 2510-20 or Independent Research 4010.
For further information, consult the chair of the Latin American Studies Committee, Dr. H.E. Lewald.
2510-20 Independent Research in Latin American Studies (4)
Introduction to professional concentration in Latin American studies. Descriptive or interpretive research paper that is written under the direction of a faculty member; independent work must be approved and evaluated by the Latin American Studies Committee and reported to the Office of the Dean.
4010 Independent Research in Latin American Studies (3-4)
Research project including the study of the Latin American area. Credit to vary according to the scope and length of the project.
4070 Senior Seminar (3-6) Selected topics in Latin American studies. May be repeated with consent of instructor.
Linguistics (623)
This concentration offers a broad exposure to the various fields of linguistics (including historical, descriptive, and theoretical linguistics) along with an opportunity to study areas where linguistics overlaps with other disciplines such as psycholinguistics, sociolinguistics, speech pathology, and the like. It is designed to prepare a student for graduate work in linguistics or related areas, or to serve as a general survey of language and linguistics. It provides the additional possibility of emphasizing the teaching of English as a second language for the student interested in employment at the B.A. level.
The requirements of this concentration are:

- Core courses (36 hours)
- A 3000-level sequence or its equivalent of a foreign language. (This can be accomplished by electing Option I of the Language, Literature, and Arts section of the Triad requirements. The following languages offer sequences which fulfill Option I: French, German, Greek, Latin, Italian, Russian, Portuguese. Spanish.) By special permission of the Linguistics Committee, certain language-related courses may be substituted for a 3000-level sequence of the foreign language.
- Two quarters of a non-Indian European language to be selected from the following: Russian Studies 3141-51 (Hebrew), Arabic 3120-31; Asian Studies 2801-32 (Chinese); Asian Studies 2801-32 (Japanese).

Concentration The concentration shall consist of 38 hours distributed as follows:

(a) 32 hours composed of:
- Audiology and Speech Pathology 3060; French, German, Russian, or Spanish 4250-60-70; English 3330, 4430, 4461, Speech 4811; Linguistics 4020-30.
- 6 hours of the following, selected in consultation with the Linguistics Committee:
  - Anthropology 3800; Audiology and Speech Pathology 3060; French, German, Russian, or Spanish 4250-60-70.
  - 18 hours as follows: Audiology and Speech Pathology 3060; Linguistics 4020-30; English 4430; French, German, Russian, or Spanish 4250-60, 4461.

NOTE: In addition to the above listed courses for the concentration and the minor there are occasionally offerings in the Honors Series or in graduate seminars which may be substituted for certain requirements subject to written approval of the Linguistics Committee and the Office of the Dean.

For further information consult the chair of the program, Dr. Bethany Ouman.

3330 Introduction to Study of English Language (4) (Same as English 3331)
Minor: Consists of 24 quarter hours distributed as follows:

(a) 19 hours of a foreign language.
(b) 6 hours of the following, selected in consultation with the Linguistics Committee, and 18 hours as follows:
- Audiology and Speech Pathology 3060; Linguistics 4020-30; English 4430; French, German, Russian, or Spanish 4250-60.

Linguistics (623)
This concentration offers a broad exposure to the various fields of linguistics (including historical, descriptive, and theoretical linguistics) along with an opportunity to study areas where linguistics overlaps with other disciplines such as psycholinguistics, sociolinguistics, speech pathology, and the like. It is designed to prepare a student for graduate work in linguistics or related areas, or to serve as a general survey of language and linguistics. It provides the additional possibility of emphasizing the teaching of English as a second language for the student interested in employment at the B.A. level. The requirements of this concentration are:

- Core courses (36 hours)
- A 3000-level sequence or its equivalent
A concentration in Medieval studies focuses upon culture and society from the collapse of the Roman Empire to the 15th century. Such a concentration offers the opportunity to deepen one’s self-awareness and broaden one’s view of the range of human possibilities by studying a very different and remote culture—its conditions of life, social and political institutions, values and ideals, and modes of perception and expression. A concentration in Medieval studies consists of Medieval Studies 3010 and 4010 and 28 hours of upper-division courses concerned primarily with the Medieval experience, divided among the following three categories: (1) history, philosophy, political science, and religious studies; (2) language and literature; (3) the arts—history of art, architecture, music, and speech and theatre. Courses should not be selected at random but should either form a related pattern of courses in the history and literature of Medieval Europe or Italy, etc., or should revolve around a particular discipline, or two closely related disciplines, for example, courses in the history of art and architecture. A minor in Medieval studies consists of Medieval Studies Courses 3010 and 4010 and 16 additional hours distributed among the categories listed above for the major. Each student’s program, major or minor, must be approved in advance by the Medieval Studies Coordinating Committee, chairperson Dr. Tom Heffernan.

A concentration in Medieval studies consists of Medieval Studies 3010 and 4010 and 28 hours of upper-division courses concerned primarily with the Medieval experience, divided among the following three categories: (1) history, philosophy, political science, and religious studies; (2) language and literature; (3) the arts—history of art, architecture, music, and speech and theatre. Courses should not be selected at random but should either form a related pattern of courses in the history and literature of Medieval Europe or Italy, etc., or should revolve around a particular discipline, or two closely related disciplines, for example, courses in the history of art and architecture. A minor in Medieval studies consists of Medieval Studies Courses 3010 and 4010 and 16 additional hours distributed among the categories listed above for the major. Each student’s program, major or minor, must be approved in advance by the Medieval Studies Coordinating Committee, chairperson Dr. Tom Heffernan.

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