Introduction to Oceanography (3); Geology 370: Structural Geology (4); Geology 360: Response of Minerals and Energy (3); Physics 131-132: Fundamentals of Physics (4, 4) or Physics 141-142: Nature of the Physical World (3, 3) or Physics 210-222: Elements of Physics (4, 4).

Course has a prerequisite other than courses prerequisite to the major. See catalog for details.

 partes b and c 12 hours

(3) Mathematics

This concentration aims at developing a fundamental understanding of some of the primary avenues of mathematical thought including algebra, calculus, computing, geometry, history of mathematics, probability, and statistics.

Mathematics 115: Statistical Reasoning (3); Mathematics 122: Discrete Mathematics (3); Mathematics 141-142: Calculus I and II (4, 4); Mathematics 221: Discrete Mathematics (3); Mathematics 241-242: Calculus III (3); Mathematics 251: Matrix Algebra (3); Mathematics 335: Probability (3); Mathematics 403: History of Mathematics (3); Mathematics 401: Math and Microcomputing (3); Mathematics 469: Geometry (3).

Total: 35 hours

(4) Mathematics and Science

This concentration should develop the knowledge and understanding of the natural sciences and mathematics appropriate to the needs of the teacher in grades K-6 and is intended to provide the student pursuing the option with the maximal breadth of exposure in either or both disciplinary areas. Of necessity, depth in any particular discipline is secondary to obtaining breadth from an array of natural science and mathematics areas. Courses included in the major have been selected to maximize the number of upper division courses that can be taken without prerequisites.

Preprerequisite sequences: Mathematics 151-152: Biocalculus I and II (3, 3).

Mathematics (12 hours): Mathematics 221: Discrete Mathematics (3), Mathematics 251: Matrix Algebra (3) Any two of the following: Mathematics 400: History of Mathematics (3); Mathematics 401: Math and Microcomputing (3); Mathematics 460: Geometry (3).

Science (30-36 hours) NB: One of the science sequences listed below may be used to satisfy general education requirements.

Part I. (14-16 hours) A sequence from two of the following three scientific areas (A, B, or C):

A. Biological Sciences (two of the following three courses): Biology 210: Cell Biology (4); Biology 320: General Genetics (4); Biology 230: General Ecology (4); or Zoology 230-240: Human Physiology, Human Anatomy (4, 3).

B. Chemistry: Either Chemistry 172: Western Art I (3) or Art 183: Asian Art (3); Music 110: Music Appreciation (3); Theatre 100: Introduction to Theatre (3)

9 hours in performance courses from 2 or 3 of the following areas: Studio Art (any course); Dance (any course); Music Performance (any course). Speech Communication 240: Introduction to Oral Interpretation (3); Speech Communication 380: Oral Interpretation of Prose Literature (3); Speech Communication 385: Oral Interpretation of Poetry (3); Speech Communication 480: Extemporaneous Interpretation (3). Theatre 220: Acting (3); Theatre 221: Acting (3); Theatre 224: Basic Costume Design (3); Theatre 250: Introduction to Scene Technology (3); Theatre 260: Fundamentals of Light and Sound (3); Theatre 300: Advanced Acting (3); Theatre 340: Introduction to Costume Design (3); Theatre 350: Introduction to Scene Design (3); Theatre 360: Introduction to Lighting Design (3); Theatre 409: Stage Makeup (3); Theatre 430: Principles of Play Directing (4)

9 hours of Non-performance courses from 2 or 3 of the following areas: History of the Visual Arts (3); History of the Performing Arts (3); History of the Literary Arts (3); History of the Performing Arts (3); History of the Literary Arts (3); History of the Visual Arts (3).

Part II. (6-8 hours) Either another sequence from Part I above or two of the following courses:

Astronomy 161: Introduction to Astronomy with Lab (4); Anthropology 305: Global-Economic Impact of Plants (3); Botany 300: Biology of Human Affairs (3); Geography 334: Meteorology (3); Geology 251: Fossils and the Meaning of Evolution (3); Geology 203: Geology of Natural Park (3); Geology 360: Resource Crises: Minerals and Energy (3)

Total: 32-36 hours

PRE-TEACHING HUMANITIES OPTIONS: BACHELOR OF ARTS

(5) Arts

This concentration should develop the knowledge and understanding of the role of the arts in society and should include experiences with the visual arts, music, dance, and creative writing. Prerequisite to this concentration is Mathematics 201-202 or one of the Mathematics sequences listed under Natural Science, Part II of the Liberal Arts Distribution requirements: Math 121-115, 121-122, 121-Statistics 110, 111-112. If the Math 201-202 sequence is chosen, it will satisfy the distribution requirements under Natural Science, Part II.

Required courses:
Art 172: Western Art I (3) or Art 183: Asian Art (3); Music 110: Music Appreciation (3); Theatre 100: Introduction to Theatre (3)

9 hours in performance courses from 2 or 3 of the following areas: Studio Art (any course); Dance (any course); Music Performance (any course). Speech Communication 240 : Introduction to Oral Interpretation (3); Speech Communication 380 : Oral Interpretation of Prose Literature (3); Speech Communication 385 : Oral Interpretation of Poetry (3); Speech Communication 480 : Extemporaneous Interpretation (3); Theatre 220: Acting (3); Theatre 221: Acting (3); Theatre 224: Basic Costume Design (3); Theatre 250: Introduction to Scene Technology (3); Theatre 260: Fundamentals of Light and Sound (3); Theatre 300: Advanced Acting (3); Theatre 340: Introduction to Costume Design (3); Theatre 350: Introduction to Scene Design (3); Theatre 360: Introduction to Lighting Design (3); Theatre 409: Stage Makeup (3); Theatre 430: Principles of Play Directing (4)

9 hours of Non-performance courses from 2 or 3 of the following areas: History of the Visual Arts (3); History of the Performing Arts (3); History of the Literary Arts (3); History of the Performing Arts (3); History of the Literary Arts (3); History of the Visual Arts (3).

Part II. (6-8 hours) Either another sequence from Part I above or two of the following courses:
Astronomy 161: Introduction to Astronomy with Lab (4); Anthropology 305: Global-Economic Impact of Plants (3); Botany 300: Biology of Human Affairs (3); Geography 334: Meteorology (3); Geology 251: Fossils and the Meaning of Evolution (3); Geology 203: Geology of Natural Park (3); Geology 360: Resource Crises: Minerals and Energy (3)

Total: 32-36 hours

PRE-TEACHING HUMANITIES OPTIONS: BACHELOR OF ARTS

(6) Language Arts

This concentration should develop knowledge, understandings, and skills for effective communication, appreciation of literature, and competence in use of language.

Prerequisite to this concentration is Mathematics 201-202 or one of the Mathematics sequences listed under Natural Science, Part II of the Liberal Arts Distribution requirements: Math 121-115, 121-122, 121-Statistics 110, 111-112. If the Math 201-202 sequence is chosen, it will satisfy the distribution requirements under Natural Science, Part II.

Required: Linguistics 200: Language, Linguistics, and Society (3)
12 hours from at least two of the following areas: Audiology and Speech Pathology: Comparative Literature, English, Library and Information Science, Linguistics, Speech Communication.

6 hours in expository and/or creative writing courses in the English Department or Theatre 470-471: Playwriting (3, 3)

6 hours from: Audiology and Speech Pathology 305: Speech Science I: Phonetics and Acoustics of Speech (3); Audiology and Speech Pathology 320: Speech and Language Development (3); Audiology and Speech Pathology 456: Speech and Language Development (3); English 493: Creativity (3); English 494: Foundations of the English Language (3); English 495: The Structure of Modern English (3)
The purpose of this option is to develop both breadth and depth of understanding about American culture, its uniqueness, its strengths, and its origins. Prerequisite to this concentration is Mathematics 201-202 or one of the Mathematics sequences listed under Natural Science, Part II of the Liberal Arts Distribution requirements: Math 131-115, 121-122, 121-Statistics 201, 122-115, 141-142, or 151-152. If the Math 201-202 sequence is chosen, it will satisfy the distribution requirements under Natural Science, Part II.

Required courses: (6 hours)

American Studies 310: Introduction to American Culture: Voices of Dissent (3)
American Studies 410: Topics in American Culture (3)

6 hours from any U.S. History courses

3 hours in Appalachian Studies selected from:
Anthropology 312: Appalachian Culture (3)
Geography 353: Geography of Appalachia (3) History 440: History of Appalachia (3)

6 hours in American Literature at 400 level

9 hours from the following: Anthropology 310: North American Indian America (3); Anthropology 315: African-American Anthropology (3); Anthropology 363: North American Prehistory (3); Art 471: History of North American Art (3); Art 472: History of 20th century American Art (3); Art 473: 19th Century American Painting (3); Economics 311: Government and Business (3); Economics 325: Development in the North Atlantic Community (3); English 333: Women in American Literature (3); English 334: Film and American Culture (3); English 335: Film and American Culture (3); Geography 351: Regional Geography of the US and Canada (3); Geography 365: Geography of the American South (3); Geography 366: Geography of the American South (3); Geography 425: Historical Geography of the United States (3); Geography 441: Urban Geography (3); Geography 442: Rural Geography (3); History 440: American Mind, Mood and Society (3); History 445: The African-American Experience from the Colonial Period to the Present (3); History 450: Women in American History (3); History 545: Cities and Urbanization in American History (3); Music 350: History of Jazz (3); Music 440: Music of North America (3); Philosophy 345: African-American Philosophy (3); Philosophy 431: African-American Political Philosophy (3); Tennessee Government and Politics (3); Political Science 303: American Political Society (3); Political Science 331: Judicial Process (3); Political Science 336: American Political Thought (3); Political Science 411: The Presidency (3); Political Science 412: Congress (3); Political Science 431: U.S. Constitutional Law; Civil Rights and Liberties (3); Religious Studies 351: Introduction to U.S. Religious History (3); Religious Studies 362: African-American Religion in the U.S. (3); Religious Studies 363: Topics in African-American Religion (3); Sociology 428: Sociology of Sport (3); Sociology 451: Sociology of Aging (3); Sociology 455: Sociology and Law (3); at least 21 hours must be within the College of Liberal Arts. Prerequisite to this concentration is Mathematics 201-202 or one of the Mathematics sequences listed under Natural Science, Part II of the Liberal Arts Distribution requirements: Math 131-115, 121-122, 121-Statistics 201, 122-115, 141-142, or 151-152. If the Math 201-202 sequence is chosen, it will satisfy the distribution requirements under Natural Science, Part II.

Total: 30 hours

Human Learning and Behavior
The purpose of this option is to develop knowledge and insights into societal influences and the ways in which human learn, think, and act through various stages of development. Of the 33 hours, at least 21 must be within the College of Liberal Arts. Prerequisite to this concentration is Mathematics 201-202 or one of the Mathematics sequences listed under Natural Science, Part II of the Liberal Arts Distribution requirements: Math 131-115, 121-122, 121-Statistics 201, 122-115, 141-142, or 151-152. If the Math 201-202 sequence is chosen, it will satisfy the distribution requirements under Natural Science, Part II.

Core courses:
3 hours from: Child and Family Studies 210: Human Development (3); Educational and Counseling Psychology 210: Psychology of Human Development for Teachers (3); Psychology 300: Child Psychology (3)
9 hours from courses related to culture and society, selected from:
American Studies 460: Black Community in Africa (3); Anthropology 130: Cultural Anthropology (3); Anthropology 320: American Culture (3); Anthropology 331: Appalachian Culture (3); Anthropology 332: Peoples and Cultures of Mesoamerica (3); Anthropology 341: Peoples and Cultures of Africa (3); Anthropology 410: Principles of Cultural Anthropology (3); Anthropology 413: Dynamics of Population Change (3); Economics 320: Peoples and Problems of Appalachia (3); Sociology 310: American Society (3); Sociology 342: Race and Ethnicity (3); Sociology 351: Juvenile Delinquency (3); Sociology 352: Race, Class and Culture (3); Sociology 363: The City (3); Sociology 375: Gender and Society (3); Sociology 380: Rural Sociology (3)

6 hours from courses related to family from:
American Studies 420: Families: Race, Class and Culture (3); Child and Family Studies 213: Development in Middle Childhood and Adolescence (3); Child and Family Studies 312: Adulthood and Aging (3); Child and Family Studies 360: Family Stress (3); Sociology 311: Family (3); Women's Studies 230: Marriage and Family Roles; and Relationships (3)
15 hours related to human development, learning and behavior in at least 2 of the following areas (courses not taken in the core may be used): Child and Family Studies 202: Development in Infancy and Early Childhood (3); Child and Family...
This concentration should develop a greater sensitivity, appreciation, and knowledge regarding other cultures both nationally and internationally. It should also increase understanding of issues of race and ethnicity. Pre-requisites to this concentration is Mathematics 201-202 or one of the Mathematics sequences listed under Natural Science, Part II of the Liberal Arts Distribution requirements: Math 121-115, 121-122, 121-123 Statistics 201, 122-115, 141-142, or 151-152. If the Math 201-202 sequence is chosen, it will satisfy the distribution requirements under Natural Science, Part II.

Required courses: (9 hours)

1. Geography 101-102: World Geography (3,3); Anthropology 130: Cultural Anthropology (3,3)
2. Sociology 340: Class Structure (3); Sociology 343: Race and Ethnicity (3); Sociology 344: Power and Society (3)
3. Sociology 446: The Modern World System (3)
4. 3 hours Sociology and 3 hours Geology: Education in Cultural Perspective (3)
5. 18 hours selected from Geography, African-American Studies, Anthropology, Economics, History, Latin-American Studies, Religious Studies, Sociology with a multicultural/international emphasis or in a given geographic area (such as Africa, Asia, Latin America) (at least 18 at 300 level or above)

Total: 36 hours

(11.) Social Studies

This concentration should develop an understanding of the problems of both individual and society. Pre-requisites to this concentration is Mathematics 101-152 or one of the Mathematics sequences listed under Natural Science, Part II of the Liberal Arts Distribution requirements: Math 121-115, 121-122, 121-123 Statistics 201, 122-115, 141-142, or 151-152. If the Math 201-202 sequence is chosen, it will satisfy the distribution requirements under Natural Science, Part II.

Pre-requisite courses: History 151-152: Development of Western Civilization (3,3) or History 161-162: History of World Civilization (3,3); Geography 101-102: Political Geography (3,3); Government and Politics (3) or Political Science 102: Government and Politics (3,3); History 251-252: History of the United States (3,3); Anthropology 120: Prehistoric Archaeology (3) or Anthropology 120: Cultural Anthropology (3); or Sociology 100: General Sociology (3)

Total: 24 hours

Optional courses: (hours)

1. 6 hours from the following: History 360-361: History of Latin America (3,3); History 362-363: History of East Asia (3,3); History 364: History of China (3,3); History 365: History of Japan (3,3); History 366: Ancient Near East Civilization (3,3); History 369-370: History of the Middle East (3,3)
2. 6 hours from the following: African-American Studies: 371-372: African History (3,3); Economics 100: Survey of Economic Ideas (3); Economics 201: Introductory Economics: A Survey Course (4); History 376: History Behind the News (3); History 446: History of Tennessee (3); Human Services 220: Introduction to Human Services (3); Psychology 110: General Psychology (3); Sociology 315: Emergence of the Modern American Woman (3); Women's Studies 322: Women in American Literature (3); Women's Studies 340: Women, Politics, and The Law (3)

Total: 18 hours

Program: (33 hours)

12 additional hours at 300 level or above from one of the following: U.S. History; European History; Ancient and Medieval History; Geography; Political Science; Modern History; African and Asian History

Total: 30 hours (at the 300 level or above)

PRE-VETERINARY MEDICINE PROGRAM

The following program is designed for students who wish to pursue a Liberal Arts degree while preparing for the study of Veterinary Medicine. Students in this program must complete at least 80 credit hours while enrolled in the College of Liberal Arts, must satisfy the Basic Skills and Distribution requirements, and complete the last 30 hours in residence at UT, Knoxville before enrolling in the College of Veterinary Medicine. A departmental major is not required. Upon successful completion of the first year (the sophomore year) of the professional veterinary medicine curriculum, the B.S. in Animal Sciences degree will be conferred by the College of Liberal Arts.

Note: Admission to the College of Veterinary Medicine is at the discretion of the Admissions Committee of that College; admission to and successful completion of this program does not assure admission to the College of Veterinary Medicine.

Freshman

<table>
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<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Engineering 101</td>
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<tr>
<td>English 101, 102</td>
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</tr>
<tr>
<td>Chemistry 151-152</td>
<td>4</td>
</tr>
<tr>
<td>Biology 110, 120, Zoology 117-118</td>
<td>8</td>
</tr>
<tr>
<td>Basic Skills (Foreign Language)</td>
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<tr>
<td>Mathematics</td>
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Sophomore

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<th>Course</th>
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<tbody>
<tr>
<td>Biology 210</td>
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<tr>
<td>Chemistry 230, 231, 235, 240</td>
<td>6</td>
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<tr>
<td>Pharmacy 415</td>
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<tr>
<td>Divisional Distribution (A) Non-U.S. History</td>
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<tr>
<td>Divisional Distribution (B) Social Science</td>
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<td>Chemistry 310, 315, 316</td>
<td>6</td>
</tr>
<tr>
<td>Biology 310, Zoology 311, 312, 313</td>
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</tr>
<tr>
<td>Physical Education 390, 391</td>
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<tr>
<td>Upper Level Distribution (A) 400</td>
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<tr>
<td>General Psychology 410</td>
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<tr>
<td>Divisional Distribution (A) Social Science</td>
<td>4</td>
</tr>
<tr>
<td>Divisional Distribution (B) Humanitis Part I, II</td>
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<td>Total: 33 hours</td>
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Senior

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Computer Science 310</td>
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</tr>
<tr>
<td>Professional Seminar 410</td>
<td>4</td>
</tr>
<tr>
<td>Minor (300 level)</td>
<td>12</td>
</tr>
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<td>Total: 36 hours</td>
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</table>

Total: 124 Minor hours

Upon completion of major and B.A. (B.S.) requirements or completion of one year at UT College of Veterinary Medicine.

Students who complete the Science-Medical Technology Curriculum receive the B.S. degree with a major in medical technology from the College of Liberal Arts. The curriculum requires a minimum of 94 hours of credit which includes the Basic Skills and Distribution requirements of the college prior to application for admission to the first year of study at The University of Tennessee College of Veterinary Medicine (UTVCM). After the course of study is completed, UTVCM, as a member of the American Association of Veterinary Medical Colleges, authorizes the school to award the Bachelor of Science degree. Students are then eligible for examination to become certified by the American Veterinary Medical Association as a Professional Veterinary Medical Technologist.
A few courses in the college are offered only on a Satisfactory/No Credit (S/NC) basis, and students may elect to take others on this basis, except in areas where the option is specifically prohibited. Such courses, if successfully completed, will count as hours for graduation although neither 5 nor NC grades will be calculated in the student's grade point average. Satisfactory is defined as C or better work on the traditional grading scale and No Credit is defined as less than C. The following regulations apply:

(1) S/NC courses, except those offered only on this basis, may not count for Basic Skills or Distribution requirements unless specifically permitted by the faculty. Such courses, if successfully completed, will count as hours for graduation although neither 5 nor NC grades will be calculated in the student's grade point average. Satisfactory is defined as C or better work on the traditional grading scale and No Credit is defined as less than C. The following regulations apply:

(2) The maximum number of S/NC elective hours which may be counted toward graduation is 20, exclusive of courses offered only SNC, physical education courses, and/or 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. A change from S/NC grading to regular grading or from regular grading to S/NC grading will be permitted only in the semester in which the error is discovered. (Exemption: Students who are transfer students who have S/NC or equivalent credit earned prior to admission to The University of Tennessee, Knoxville, may apply for a course change at any time during the semester in which the error is discovered.)

(4) A transfer student who has more than 20 S/NC or equivalent hours earned prior to admission to The University of Tennessee, Knoxville, may not apply additional such credit to any one department. Up to 21 hours of such credit which can be applied toward a degree in the college, although individual departments may limit the number of hours which may be applied toward a specific major.

INDEPENDENT STUDY

Certain educational goals may best be met through independent study done by an individual under the direction of a faculty member. Students who wish to do such independent work should obtain the approval of the faculty member and the departments concerned prior to embarking upon their study. Credit per semester will vary from 1-15 hours. Up to 21 hours of credit earned in this way may be applied toward a degree 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 group programs arranged and supervised by departments of the college on a full-semester or summer term basis. A second is through group programs conducted abroad by other academic institutions in which UT, Knoxville students with approval may enroll for credit. Assistance in identification of and registration for such courses is provided to encourage the able student to take advantage of these facilities, and students may elect to take others on this basis, except in areas where the option is specifically prohibited.

Note: Students planning to seek admission to graduate or professional schools (especially in the health sciences) should discuss with their advisors possible limitations on exercise of the S/NC option before registering for courses on this basis.

OFF-CAMPUS STUDY

Certain educational goals may best be met through independent study done by an individual under the direction of a faculty member. Students who wish to do such independent work should obtain the approval of the faculty member and the departments concerned prior to embarking upon their study. Credit per semester will vary from 1-15 hours. Up to 21 hours of credit earned in this way may be applied toward a degree 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 group programs arranged and supervised by departments of the college on a full-semester or summer term basis. A second is through group programs conducted abroad by other academic institutions in which UT, Knoxville students with approval may enroll for credit. Assistance in identification of and registration for such courses is provided to encourage the able student to take advantage of these facilities, and students may elect to take others on this basis, except in areas where the option is specifically prohibited.

Note: Students planning to seek admission to graduate or professional schools (especially in the health sciences) should discuss with their advisors possible limitations on exercise of the S/NC option before registering for courses on this basis.
ART

Graduate Program in Visual Art

ART M.F.A.

Wisconsin; M. Brakke, M.F.A. Yale; D. F. Kurka (Head), Ph.D. New York; S. J. Blain, courses, chosen in consultation with an Anthropologist to a minor in anthropology, which consists for any portion of (1) or (2) above.

ART M.F.A.

Wisconsin; M. Brakke, M.F.A. Yale; D. F. Kurka (Head), Ph.D. New York; S. J. Blain, courses, chosen in consultation with an Anthropologist to a minor in anthropology, which consists for any portion of (1) or (2) above.

ART M.F.A.

Wisconsin; M. Brakke, M.F.A. Yale; D. F. Kurka (Head), Ph.D. New York; S. J. Blain, courses, chosen in consultation with an Anthropologist to a minor in anthropology, which consists for any portion of (1) or (2) above.

ART M.F.A.

Wisconsin; M. Brakke, M.F.A. Yale; D. F. Kurka (Head), Ph.D. New York; S. J. Blain, courses, chosen in consultation with an Anthropologist to a minor in anthropology, which consists for any portion of (1) or (2) above.
In addition to the general B.A. requirements (found in the Undergraduate Catalog), the following are required for B.A. majors in the Art Department:

**B.A. Majors in Art History**

<table>
<thead>
<tr>
<th>Prerequisite:</th>
<th>Hours Credit</th>
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<tbody>
<tr>
<td>Art 173, 175, 181</td>
<td>9</td>
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<tr>
<td>Art History courses numbered 200 and above</td>
<td>28-30</td>
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**B.A. Major in Studio**

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<th>Prerequisite:</th>
<th>Hours Credit</th>
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<tr>
<td>Art 101, 296, 303</td>
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<tr>
<td>Art and additional hours of Art History</td>
<td>12-21</td>
</tr>
<tr>
<td>Major courses numbered 200 and above, including a minimum of 15 hours in 300-400 level courses</td>
<td>24-30</td>
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</tbody>
</table>

In addition to the general B.A. requirements, the following are required for minors in the Art Department:

**B.A. Minor in Art History**

<table>
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<tr>
<th>Prerequisite:</th>
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<tbody>
<tr>
<td>Art 172, 173</td>
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<td>Major: Art history courses numbered 200 and above</td>
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**B.A. Minor in Studio**

<table>
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<tr>
<td>Art 101, 203, 295</td>
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<tr>
<td>Minor: Studio courses which include a minimum of 8 additional hours of concentration</td>
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<tr>
<td>Made up of 30-34 studio courses(e.g. Ceramics, Drawing, Fibers, Painting)</td>
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**ILLUSTRATION CONCENTRATION**

<table>
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<tbody>
<tr>
<td>Art Core: Art 171, 173</td>
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<tr>
<td>Art History electives: Art 601</td>
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<tr>
<td>Art 205, 211, 213 (or 215)</td>
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<tr>
<td>Graphic Design Art 350 (S/NC)</td>
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<tr>
<td>Art 210, 3 hours drawing elective</td>
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<tr>
<td>Art 211</td>
</tr>
<tr>
<td>Art 151</td>
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<td>Art 295, 211, 213 (or 215)</td>
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<tr>
<td>Art 601</td>
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<td>Art 456</td>
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**Design and Professional Electives**

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<td>Art 205, 331, 353, 355, 365, 366, 406, 407, 408, 409, 410, 413, 416, 419</td>
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<tr>
<td>English Composition</td>
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<tr>
<td>Natural Science/Mathematics</td>
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<tr>
<td>Liberal Arts Non-Art Electives</td>
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**ILLUSTRATION**

<table>
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<tbody>
<tr>
<td>Art Core: Art 171, 173</td>
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<tr>
<td>Art History: Art 601</td>
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<tr>
<td>Art 205, 211, 213 (or 215)</td>
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<td>Total: 28</td>
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<tr>
<td>Illustration Art 350 (S/NC)</td>
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<tr>
<td>Art 210, 9 hours drawing electives</td>
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<tr>
<td>Art 211</td>
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<tr>
<td>Art 151</td>
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<tr>
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Both courses must be taken concurrently.

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<tr>
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<tr>
<td>Art 351, 352, 353, 354, 355, 356</td>
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<td>Art 451</td>
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<td>Art 392, 396</td>
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disorders. The two undergraduate majors (audiology and speech pathology) are preparatory to graduate work and to professional certification. Requirements in anatomy, physiology, and in speech, language, and hearing disorders. The master's degree is required for most professional certificiation and employment positions. Information on audiology and speech pathology programs may be obtained from the department office, 457 South Stadium Hall, and students are strongly encouraged to consult with the graduate advisors in the department as early as possible in their program. Suggested elective courses for students not majoring in Audiology and Speech Pathology include 304, 305, 320, 371, 465 and 473.


Applicants for enrollment in clinical practice must submit an application to the departmental Director of Clinical Services. Requirements for enrollment in practical courses include a minimum of 3C in all courses taken within the department, successful completion of 453, and a minimum GPA of 2.75 within the major.

Undergraduate degrees in speech pathology and in audiology are pre-professional degrees. That is, a minimum of a Master's degree is required for professional certification. Students who fail to satisfy the above prerequisites for clinical practice experience may graduate with a degree in the department, but will not be recommended for graduate study at UTR. Requests for an exception to this rule should be submitted to the department head for consideration.

Additional requirements for professional certification include courses in biological/physical sciences, and at least six semesters of normal/abnormal behavior. Students majoring in biology and Speech Pathology are strongly encouraged to consult with their advisors before selecting elective courses.

BACTERIOLOGY

See Microbiology.

BIOCHEMISTRY

Professors: J.E. Churchich (Chancellor's Research Scholar), Ph.D. Sheffield, England; S.K. Khuroo, Ph.D., Ph.D. Harvard; M.H. Rana, Ph.D., Ph.D. Harvard.


Assistant Professors: K.D. Kout, Ph.D. Harvard; S. Srinivasan, Ph.D. Harvard; D. Smith, Ph.D. Harvard; T. Zhang, Ph.D. Harvard.


The B.S. major in Biology consists of Biology 190-200, Chemistry 350-360, 369, Physics 221-230, Biochemistry 410, 419, 420, 471, 481, and 485. Students who choose one of the three concentrations may be required to take an additional 450-level course in Biology and 471, 485, 487, and 495.

BIOLOGY CONSORTIUM

Director: R.W. Holton, Ph.D. Botany.

Biology CONSORTIUM consists of Biochemistry, Botany, and Cell Biology. 304, 305, 320, 371, 465, 473, and 495. It includes students majoring in Biology and Speech Pathology.

BOTANY

Profs.: E.S. Schilling (Head), Ph.D. Indiana; J.D. Caporale, Ph.D. New York University; J.R. Duke, Ph.D. Duke; J. D. Reifler (Alum), Ph.D. Ohio State; A.R. Smith, Ph.D. Texas; J.C. Walke, Ph.D. Texas; G. Hamond, Ph.D. Texas.

Associate Professors: W.R. Holton, Ph.D. Indiana; D.K. Smith, Ph.D. Missouri; R.M. Smith, Ph.D. Indiana; J.E. Churchich, Ph.D. England; S.K. Khuroo, Ph.D. Harvard.

The B.S. major in Botany may be obtained by completing one of the following concentrations:

Concentration A is designed for students whose career goals involve a broad-based education in the biological sciences and who are directed toward secondary education or the business world. Prerequisites are Biology 110-120 or Botany 110-120; and Biology 117-118, 119-120, or 117-118. Mathematics 112-120 or 117-120 or 111-120; and Chemistry 112-120 or 111-120 or 112-120.

Concentration B is designed for students whose career goals involve graduate study in a biological discipline. Prerequisites are Biology 110-120 or Botany 110-120; and Bard 110-120 or 111-120 or 112-120. Mathematics 112-120 or 111-120 or 117-120; and Chemistry 112-120 or 112-120.

Concentration C is designed for students whose career goals involve graduate study in a biological discipline. Prerequisites are Biology 110-120 or Botany 110-120; and Bard 110-120 or 111-120 or 112-120. Mathematics 112-120 or 111-120 or 117-120; and Chemistry 112-120 or 112-120.
Curriculum Requirements

- Freshman
  - Chemistry 120-130 or (preferably) 121-131 or 128-138
  - Literature Composition
  - English Composition
  - Chemistry 140
  - English Composition
  - Chemistry 350-360
  - Mathematics 241-251
  - Chemistry 473-483
  - Chemistry 409
  - Chemistry 410-420 or Geology 460

- Sophomore
  - Chemistry 211-220
  - English Composition
  - Chemistry 238
  - German Language (intermediate level; sequence)
  - German Language (intermediate level; sequence)
  - Chemistry 310-320
  - Chemistry 143-145
  - Chemistry 479-481
  - Chemistry 479-481
  - Chemistry 479-481
  - Chemistry 479-481
  - Chemistry 479-481
  - Chemistry 479-481

- Junior
  - Chemistry 340
  - Chemistry 406
  - Chemistry 406
  - Chemistry 406

- Senior
  - Total: 124 hours

- Must be chosen from German, French or Russian. Students who have not had at least two years of these languages in high school will need to study a semester or year prior to entering the university, and then complete the intermediate level sequence.

- The distribution requirements of the College of Liberal Arts (except for the 4 hours of Social Science) are met by taking: (a) U.S. History; or (b) Social Science (6 hours), Humanities (6 hours), and one (1) semester of a Foreign Language (6 hours) and one (1) unit of computer science.

- There is also a required course in German, French or Russian. Students may choose any of these languages as long as they are offered in the university.

- It is recommended that a portion of these elective hours be used to advance courses in biochemistry, microbiology, physics, or chemistry, metallurgy, and polymer engineering.

- To be chosen from Chemistry 400, 450, 460, 484, and 489. Chemistry 400 will also satisfy 3 hours of Upper-Level Distribution (Capstone Experience).

- B.S. Degree and Chemistry Major

- This major is designed for students with different career goals. The following paragraphs should be carefully considered before selecting courses.

- Students who desire to major in chemistry may select from either of two courses of study: Bachelor of Science or Bachelor of Science in Chemistry. Only the latter program is approved by the Committee on Professional Training of the American Chemical Society. It is designed to train students to go directly into positions in the industrial or other graduate study leading to positions in research and college teaching. A student in the B.S. in Chemistry program should, at the earliest opportunity, ask the Liberal Arts Advising Center for assignment of a faculty advisor in the Department of Chemistry. Further information, contact the Head of the Department of Chemistry, 575 Buehler Hall. For information concerning the Coopera- tive Program in chemistry, see description of the B.S. program below.

- CURRICULUM REQUIREMENTS:
  - Freshman
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The Greek minor consists of 18 hours including 12 hours of Greek language courses numbered above 200, and 6 hours chosen from Classics 221-222, 331, 334. The student minoring in Greek is encouraged to take Classics 422 (capstone).

The B.A. major concentration in Latin consists of 27 hours including 21 hours of Latin language courses numbered above 200, and 6 hours chosen from Classics 221-222, 331, 334, 491. The student minoring in Latin is encouraged to begin or take advanced work in Greek.

Placement Examination. Students who transfer to UT, Knoxville from other colleges and students who enter with high school units in Latin should register for the courses in which they would normally be placed on the basis of their credentials. During freshman orientation a placement test will be given, and students will be advised if a change in registration is indicated by the results.

Proficiency Examinations. Students who have acquired knowledge in Latin through private study or tutoring should request from the Department a proficiency test. A student who earns a grade of B or higher 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.

COMPARATIVE LITERATURE
See Interdisciplinary Programs.

COMPUTER SCIENCE

Professors: J.H. Poore (Head), Ph.D. Georgia Tech; Jack Dongarra, Ph.D. New Mexico; R.C. Gonzalez (ECE), Ph.D. Florida; M.A. Langston, Ph.D. Texas A&M; G.R. Sherman (Emeritus), Ph.D. Purdue; M.G. Thompson, Ph.D. Duke.

Associate Professors: J.D. Case, Ph.D. Illinois; B.J. MacLennan, Ph.D. Purdue.

Assistant Professors: Michael W. Berry, Ph.D. Illinois; J.R. Blair, Ph.D. Pittsburgh; H.A. Booth, Ph.D. Princeton; Jens Gregor, Ph.D. Aalborg (DK); D.C. Mutchler, Ph.D. Duke; J.S. Plank, Ph.D. Princeton; D.W. Straight, Ph.D. Texas; B.T. VanderZanden, Ph.D. Cornell; M.D. Vose, Ph.D. Texas.

Instructor: J.W. Mayo, M.S. Tennessee.

Computer Science 102, 111, and 112 are prerequisites to a major in computer science which consists of 311, 320, 340, 361, 371, and 380, plus an additional 3 hours of CS Advanced Topics Courses. Mathematics 141-142, 221-222, 231, 241, and 251, Physics 151-152, and English 411 are also required. Students must select a two-semester lab science sequence in either Biology or Chemistry, or a sequence approved by the Computer Science Department. It is highly recommended that all Computer Science majors own a personal computer with communications capability. An undergraduate minor in Computer Science consists of 111 and 112 plus fifteen hours of 300 or 400 level courses.

Progression Standards: Progression into the Computer Science major is based on the availability of space in the laboratories and other resources. Students must be placed in an advanced laboratory and the result must be confirmed by an advisor for the Undergraduate Programs Office or the Computer Science Department directly. Students who enter the College of Liberal Arts as freshmen or sophomores are expected to apply for the major immediately after attempting 10 hours in Computer Science.

In 1991 the progression standards were:
1. Has completed at least the following three courses at UT with an average of 3.0 or better: CS 102, 111, 112.
2. Has achieved an average of 2.5 or better in all Computer Science courses taken at UT that apply to the major. All grades received for these courses are averaged.
3. Has received at most one W or repeated grade in a Computer Science course.
4. Has not received the appropriate grade in a prerequisite course.
5. Has not received less than a D in any course.

Progression standards are subject to change, and credits earned in Undergraduate Programs Office and the Computer Science Department Office, 107 Ayres Hall.

Transfers from Other UTK Programs: Students in other colleges or majors at UTK must apply for progression to the major at the close of the course prior to 75 hours. As a minimum, all students must be admitted to the CS major for at least the last 30 hours of work. Only in exceptional circumstances will admission be considered after 75 hours of work. Office, or by contacting the Computer Science Department. Students who have completed at least 30 hours of work in the Computer Science major may be reviewed for progression standards. Students who are not reviewed for progression standards are subject to the progression standards that apply to the major.

Students who enter with similar names to UTK courses can be accepted toward the Computer Science major. It should not be assumed that courses with similar names to UTK courses can be accepted toward the major.
ECONOMY

The Graduation Program in Ecology offers Master of Science and Doctor of Philosophy degrees. This interdisciplinary program provides advanced coursework in contemporary ecology for students from undergraduate programs in basic and applied biology, social sciences, mathematics, and engineering. Research opportunities in both fundamental and applied ecology are intended to prepare students for academic careers as well as provide solutions to current environmental issues.

Degrees offered include:
- A Master of Science in Ecological Economics
- A Doctor of Philosophy in Ecological Economics

Applicants should have a background in the natural sciences, economics, or related fields. The program is open to students from various disciplines.

For more information, please contact the Department of Environmental Science and Policy, 123 Main Street, Box 4567, University of California, Berkeley, CA 94720-4567.
The study of the English language, 371 or 372, takes courses at the 300-400 level. Courses in American literature may be satisfied, if possible, before the student’s major program. (2) At least 9 credit courses in literature before 1800 (see departmental brochure). Undergraduate Study (in English, for a course list); and (3) Five other courses, at least one of which is based on an approach to literature other than literary history (see departmental brochure). Undergraduate Study (in English, for a course list).

Concentration in Writing: Ten English courses at the 300-400 level, including: (1) Two course-sequence in expository, technical, or creative writing; (2) Three other courses, at least two of which must be literature courses selected in consultation with the advisor. Individualized Program: The Director of Undergraduate Studies is empowered to approve individualized programs developed by students in consultation with their advisors. These programs should be designed to achieve academically sound objectives that are not addressed by the above requirements.

Honors: For students who qualify, the English Department offers specially designed courses for the freshman, sophomore, junior and senior levels. The freshman and sophomore courses are honors, given in several sections in composition, in introduction to the various genres, and world literatures. To be given “Honors” in English on the transcript, a student must have achieved a 3.0 or better in all literature courses numbered above the freshman and sophomore level with a 3.5 or better grade point in English courses, and grades of A or B in English.

An English minor consists of at least 15 semester hours of English, including English 300-400 level. Concentration for Teaching: Students planning to teach English in public schools should consult the Certification Clerk, Room 212, Clement Building.

Graduate Study: Students wishing to enter a graduate program in English should address inquiries to the Dean of the Graduate School. To be accepted for graduate study in English, the student should have generally had at least eighteen semester hours in English courses addressing the above freshman and sophomore level with a better than B average in all other undergraduate courses. Students who lack eighteen semester hours in English may be required to take and pass with a grade of B or better a designated number of undergraduate courses at The University of Tennessee before being admitted to graduate study. Admissions are also based on satisfactory GRE scores. Consult the Graduate Catalog for specific requirements.

FRENCH

See French Language.

GEOGRAPHY

Professors: S.R. Gier (Chair), Ph.D. Tennessee; C.S. Aiken, Ph.D. Georgia; T.L. Bell, Ph.D. Iowa; R.A. Foresta, Ph.D. Rutgers; E.H. Hammond (Emeritus), Ph.D. California (Berkeley); R.G. Long (Emeritus), Ph.D. Northern Illinois; D.W. Minch (Visiting Vicar Academic Affairs and Dean of the Graduate School), Ph.D. Syracuse; C.T. Peterson (Adjunct), Ph.D. Denver; B.A. Ruston, Ph.D. Northwestern; T.M. Schmidt, Ph.D. Wisconsin; T.J. Wilbanks (Adjunct), Ph.D. Syracuse.

Associate Professors: C.P. Hardon, Ph.D. Columbus (Bolivar); Cheng Lu, Ph.D. Pennsylvania; R. Moseley (Adjunct), Ph.D. Oregon; J.J. Ray (Adjunct), Ph.D. Tennessee.

A B.A. major in Geography consists of 111 and 122 prerequisite to a major in Geography, which consists of Geography 310, 330, 340, 370, 459, and 469, and 12 additional credits selected from Geography courses at the 300 and 400 levels. At least one course must be chosen from among Geography 361, 363, 365, 372, 373, 375, and 377, and at least nine hours must be at the 400 level.

Minor: The B.A. minor in Geography consists of 15 semester hours of Geography courses at the 300 level or above.

GEOLICAL SCIENCES


Assistant Professors: D. McKay, Ph.D. Watertown; C.I. Motz, Ph.D. Wisconsin.

Prerequisites to a B.S. major are: Geology 101-102, Chemistry 120-130, Mathematics 141-142, three semester hours between 241-242, Biology 110-120. This requirement includes a two-semester sequence in one area plus a single semester in the other; the single semester may be satisfied by high school coursework in that area.

Major requirement consists of: Geology 310, 330, 340, 370 (16 hours); any 3 Geography courses at the 400 level, and 6 hours of geography courses numbered 300 or above; Geology 440 (field camp). Strongly recommended.

Minor requirement consists of: 3 prerequisite: Geology 101-102; geography courses at least 18 credit hours of courses numbered 200 or higher.

Undergraduate in Engineering Geology: Students wishing to prepare for a career in environmental/engineering geology where communication with engineers is important may elect this multidisciplinary concentration. Electives in the major and some of the courses necessary to satisfy the Liberal Arts College Distribution requirements are specified. Required coursework includes: Geology 310, 330, 340, 370, 459, 465, 469, 470 and 486; Mathematics 141, 142 and 211; Physics 131 and 132; Basic Engineering 101 and 121; Civil Engineering 335, 336 and any of the following: 340, 390, 356, 356 or Environmental Engineering 535; Plant and Soil Science 210; English 459; and Speech 240. Courses from the College’s approved list for satisfying the Social Sciences, Humanities and Upper Level Distribution requirements will be recommended and approved by the student’s advisor.

Honors: Students who have completed 5 upper division courses in the major and have an overall GPA of 3.0 may elect to participate in an enrichment program involving research in the geological sciences at the University of Tennessee, in the form of an honors thesis. To be considered for the Senior Thesis, the student must have completed an honors thesis. The student must have a minimum of 16 semester hours of Geography 340, 350, or 350. The student must be an outstanding student in the major and have demonstrated an ability to work independently. The research project must be submitted to the Department of Geological Sciences. A GPA of 3.0 must be maintained throughout the program. Interested students must consult their advisor for advice about participation.

GERMANIC AND SLAVIC LANGUAGES


Associate Professors: Carolyn Hodges, Ph.D. Chicago; Nancy A. Lauten, Ph.D. Columbia; David E. Lee (Head), Ph.D. Stanford; Chasney J. Meikle, Ph.D. Chicago.

Assistant Professor: Steven Mosier, Ph.D. Georgetown.

GERMANIC AND SLAVIC LANGUAGES/College of Liberal Arts

1Students who enter the major with more than 40 hours of credit, and who have completed a laboratory science sequence before entering will be allowed to substitute certain upper division physical geography courses for 131 and 132.
Placement Examination: Students who have had previous work in German or Russian either in high school or at another college or university should take a placement test to determine what level course they should enter. Placement tests are given for incoming freshmen during orientation in the summer and also the first week of each semester.

Proficiency Examinations: Students who have acquired a knowledge of German or Russian through private study, tutoring, residence in foreign countries, or the like should request a proficiency test. A student earning a grade of C or better on such a test will receive credit for an appropriate number of courses. Superior students are encouraged to proceed as rapidly as their achievement permits. Students who omit any course in a sequence may receive credit for it by passing a proficiency examination.

Foreign Study: Students are encouraged to study abroad, particularly through participation in the University's International Student Exchange Program (ISEP). The department is also prepared to recommend summer study programs and year abroad programs for students who are interested in foreign study. Credits from recognized foreign study programs can readily be transferred to K.U. If qualified, students in the department also offer German Foreign Study and Russian Foreign Study. Students should consult the department before registering for the foreign study course.

B.A. Major in German: Majors or minors in German should carefully prepare their programs in consultation with a departmental faculty advisor. Placement tests are a prerequisite to the major. The major shall consist of at least 18 semester hours of courses numbered above 300, including at least two courses chosen from among German 321, 322, 363, 371, 372, or other courses numbered above 300 chosen with the departmental faculty advisor. The major in Russian shall consist of at least 36 semester hours of Russian courses, including Russian 301-302; 311-312; 341; 401-402; 411-412; and 4 hours from Russian 221, 222, 321, 322, 326, 371, 372, or other courses numbered above 400. It is recommended that majors also take Russian History 340-341 and 6 hours of senior English. Majors are encouraged to minor in some other area of the humanities.

Minor in Russian: Russian 201-202 is a prerequisite to the minor. The minor in Russian shall consist of at least 18 semester hours of courses numbered above 300 (excluding 331-332 and courses in English translation).

Major in German with a Concentration in Language and World Business: Students who wish to prepare for careers in international business may major in German and (a) a professional emphasis in either International Business or International Logistics and Transportation, and (c) some form of practical experience. A concentration in International Business with Admissions is with the permission of the program advisor. For further information contact the departmental office, 701 McClung Tower, or the program office, 703 McClung Tower.

(a) Language Major: The German major with a concentration in Language and World business consists of 28 hours. The following are required: German 199, 301-302, 311-312, 303, 485, 486 from either 491 or 493, and at least two courses chosen from among German 323, 321-322, 420-424, 423-426 or 311-312 to strongly support the major.

(b) Professional Emphasis: International Business students will take 25 hours. The following are required: Accounting, 310; Economics, 301 and 302, Business Administration 311 and 465, Management 471, Logistics and Transportation 441, and an elective from a related business area chosen in consultation with an advisor.

(c) International Logistics and Transportation students will take 25 hours. The courses required are: Accounting 201, Economics 201 or 207, Business Administration 311 and 495, Management 471, and Logistics and Transportation 441.

(d) Practice Experience: Through German 405 or Russian 400 each LWB student must undertake study abroad, an internship, or a relevant research project for a minimum of 3 hours (included in the requirements for a concentration in Language and World Business).

Additionally, LWB students must consult an advisor in the Department of Germanic and Slavic Languages for help in selecting relevant courses under the Basic Skills and Distribution requirements of the College.

Students interested in the Language and World Business program should contact the Director for advising as early as possible in their college career. Students must have attempted 45 hours in order to be considered for progression to the LWB concentration. The academic record presented will be assessed by the Director of Language and World Business. Minimum requirements for progression to the concentration are a 2.75 cumulative average in the courses specifically required by the College of Liberal Arts in Basic Skills and Distribution and in the Language and World Business plan of study. The minimum number of upper division hours, including at least 3 hours in History, is 30. Progression is based on availability of space in the program. Progression standards are adjusted periodically, and current requirements are available from the Director of LWB.

B.A. Major in Russian: Russian 201-202 is a prerequisite to the major. Russian majors should consult their program advisor, in consultation with the departmental faculty advisor. The major of Russian shall consist of at least 36 semester hours of Russian courses, including Russian 301-302; 311-312; 341; 401-402; 411-412; and 6 hours from Russian 221, 222, 321, 322, 326, 371, 372, or other courses numbered above 400. It is recommended that majors also take Russian History 340-341 and 6 hours of senior English. Majors are encouraged to minor in some other area of the humanities.

Minor in Russian: Russian 201-202 is a prerequisite to the minor. The minor in Russian shall consist of at least 18 semester hours of courses numbered above 300, including Russian 301-302, 311-312; 341; 401-402; 411-412; and 6 hours from Russian 221-222 or other Russian courses numbered above 300.

GREEK

See Classics.

HEBREW

See Religious Studies.
interdisciplinary programs

Director: Loryline Lester (College of Liberal Arts)

In keeping with the philosophy that integration of knowledge is as important as proficiency in a given field, the College of Liberal Arts has committed the resources of several departments to offer a series of interdisciplinary majors and minors. These programs are as follows:

- African-American Studies, American Studies, Ancient Mediterranean Civilizations, Asian Studies, Cinema Studies, Comparative Literature, Latin American Studies, Linguistics, Medieval Studies, Russian and East European Studies, Urban Studies, and Women's Studies. See individual program descriptions below for the major and/or minor requirements.

AFRICAN AND AFRICAN-AMERICAN STUDIES

Director: Dr. Cynthia G. Fleming (History and African and African-American Studies)

Assistant Professor: Dr. Askia Jalloa (Sociology), Ph.D. State University of New York (Binghamton).

The African-American Studies Program offers both a major concentration and a minor in African-American Studies. AAAS courses are offered not only by the program itself but also by numerous departments within the College of Liberal Arts and some other colleges as well. This diverse sponsorship of AAAS courses enables the University to offer a particularly varied curriculum in the field of African-American Studies.

Major concentration: African-American Studies 201-202 are required in the concentration which consists of 24 hours from the African-American Studies curriculum. At least 15 hours must be upper-division credits. Majors are required to take AAAS 431, preferably in their senior year. A minimum of 6 hours in AAAS 300 or above from at least two other departments which cross-list courses with African-American Studies in addition to the AAAS core courses.

Minor: African-American Studies 201-202 are required in the minor which consists of 15 hours at least of which must be upper-division credits. A minimum of 3 hours in AAAS 492 and 493 combined can be applied to a minor. In planning their programs minors must include courses from at least 2 other departments which cross-list courses with African-American Studies in addition to the AAAS core courses offerings.

ANCIENT MEDITERRANEAN CIVILIZATIONS

Chair: Dr. David W. Tandy (Classics)

Co-chair: Dr. Humphreys (Religious Studies)

The major concentration in Ancient Mediterranean Civilizations consists of Classics 381 and 382, History 380 and 18 additional hours from among the following 253, 331, 334, 383, History 310, Political Science 120, 320, Political Science 470; Philosophy; Classics 301, 302, 320; and Roman Culture; Classics 202, 203, 233, 383, 382; History 310, Philosophy 120, 320, Political Science 470, and Roman Culture; Classics 322, 263, 282, 363, 382, History 311, Philosophy 103, 105, Political Science 470, and Roman Culture; Classics 320, 322, 334, 382, 416. A minor in Ancient Mediterranean Civilizations consists of 18 hours, including at least two of the three core courses (Classics 381, 382, History 380). More than nine of the remaining hours can come from one division. Courses of variable content, topics courses, reading and research off-campus, or foreign study in the Departments of Art, Classics, History, Philosophy, or Religious Studies can be applied to the three divisions as approved. Students are encouraged to study in the foreign language requirement with Greek, Latin, or Classical Hebrew.

ASIAN STUDIES

Chair: Dr. Yun-ping Hao (History)

The Asian Studies major concentration consists of 26 credit hours from the upper-division courses of Asian Studies and approved departmental offerings. Twelve of the hours must be taken from courses listed within one of the four geographical-cultural areas (Islamic World, South Asia, China, Japan) and the other 12 hours must come from Subdivision A and Subdivision B. Subdivision A includes Art, Literature, Music, Philosophy, and Religion Studies; Subdivision B includes Anthropology, Economics, Geography, History, Political Science, and Sociology.

The Asian Studies minor consists of Asian Studies 101-102 and 15 credit hours at the 200 level and above. Twelve credit hours must be taken from courses within one of the four geographical-cultural areas. Six credit hours must come from Subdivision A or B or from Subdivision B. Three hours must be taken from courses in another geographical-cultural area.

CINEMA STUDIES

Chair: Dr. Charles Maland (English)

The Cinema Studies minor consists of fifteen hours, including English Introduction to Film Studies, A 292 Film Studies. It is strongly recommended that Introduction to Film and A 292 Film Studies be taken before selection of electives provided for in the minor. Further information and a list of approved electives and courses for the Cinema Studies minor are available through consultation with Dr. Maland. Approved Area Courses are: Art 292 Film Studies, English 430 International Film Studies and 435 Advanced Film Design (3); Broadcasting 275 Introduction to Broadcasting (3); Broadcasting 430 Producing for Television (3); English 281 Introduction to Film Studies (3); English 324 Film and American Culture (3); English 499 Special Topics in Film (3); French 423 French Cinema Topics (3); German 320 German Film (3); Italian 421 Italian Film and Cinema (3); Sociology 141 "The Populist Culture in American Politics (3); Women's Studies 469 Sexuality and Cinema (3).

COMPARATIVE LITERATURE

Chair: Dr. H.C. Rutledge (Classics)

A major concentration in comparative literature consists of 27 hours including Comparative Literature 301 and 401-402, and 9 hours of electives chosen in languages in courses numbered 300-499. The remaining 9-12 hours must be either in a foreign language or in a foreign language, numbered 300-450, or from at least two of the following:
departments: Classics, English, Germanic and Slavic Languages, Religious Studies, Romance Languages. Certain courses in Philosophy and Speech Communication may be substituted with the approval of the chairperson of the Comparative Literature Program. Students are strongly encouraged to acquire a working knowledge of a second foreign language, especially if they hope to pursue comparative literature courses on the graduate level.

A minor in comparative literature consists of 18 hours including Comparative Literature 201 or 402, 6 hours of literature in a foreign language, or courses numbered 300 and above, and 6 hours of literature courses numbered 300 and above (in a different department). These 6 hours may be in English or in a foreign language and must be chosen from the following departments: Classics, English, Germanic and Slavic Languages, Religious Studies, and Romance Languages. Certain Philosophy and Theatre courses may be substituted with the approval of the chairperson of the Comparative Literature Program. Minors in comparative literature are strongly encouraged to continue study of a foreign language beyond the minimum requirement.

LATIN-AMERICAN STUDIES

Chair: Dr. Cynthia K. Duncan (Spanish)

The major concentration consists of two optional tracks: (1) General Studies or (2) Brazilian Studies. Each program requires 27 semester hours and includes the following courses:

- A three-semester sequence of an approved Spanish or Portuguese literary sequence (401-402, 403)
- A three-semester sequence of an approved Latin American Studies sequence, consisting of 12 semester hours
- An approved Spanish or Portuguese literature course
- An approved Spanish or Portuguese language course

In addition to the core courses, the General Studies track will consist of 12 hours selected from courses offered by three different participating departments. The Brazilian Studies track will include 12 semester hours of approved courses in the Brazilian Studies Program, as chosen by the student in consultation with the chairperson of the Comparative Literature Program.

A minor in Latin American Studies consists of 18 semester hours of approved courses in the Latin American Studies Program, as chosen by the student in consultation with the chairperson of the Comparative Literature Program.
URBAN STUDIES

Chair: James A. Spencer (Graduate School of Planning)

Urban Studies is a valuable major concentration for students who plan to work in such areas as housing, real estate, development, neighborhood organization, and environmental design.

A major concentration in Urban Studies consists of a minimum of 30 semester hours, including Urban Studies 250, 350, 450, 460, and at least 15 additional semester hours from the Urban Studies curriculum.

A minor consists of 18 semester hours, including Urban Studies 250 and 350 plus additional semester hours from the Urban Studies curriculum. Cumulative planning should be done with an advisor in Urban Studies. For more information, contact the chairperson of the Urban Studies Committee.

Approved Courses in other departments:
Geography 358 Geography of Appalachia; Russian 363 The City; 462 Population; and Transportation Principles and Policies.

WOMEN'S STUDIES

Chair: Dr. Martha L. Osborne (Philosophy)

Women's Studies encourages inquiry into the full range of the human experience by raising new questions and opening new areas of research concerning women. The discipline enforces the traditional liberal arts curriculum by adding new perspectives on women's lives and accomplishments. Women's Studies can broaden the educational experience for all students by helping them to understand the limitations placed on both sexes by narrow definitions of sex roles. Wherever there is a need to understand women and an interest in the role they are playing in society, Women's Studies can enhance a student's career preparation and options.

The Women's Studies Program offers a wide variety of courses in interdisciplinary in nature and aims in supporting departments in the College. Courses may be taken as electives, they may be used to satisfy requirements in other colleges, or they may serve as a concentration in one of the lines of Women in Literature courses (either 210 or 215); Women in Society (220); Emergence of the Modern American Woman (231); at least three courses from the Women's Literature series (301-302); Women and additional hours in courses numbered 301-302 and Russian Culture 371-372.

ITALIAN

See Romance Languages.

JAPANESE

See Interdisciplinary Programs (Asian Studies).

LATIN

See Classics.

LATIN AMERICAN STUDIES

See Interdisciplinary Programs.

LINGUISTICS

See Interdisciplinary Programs.

MATHEMATICS


Instructor: C.G. Doss, M.A. Tennessee.

All entering freshman and all other students who have not completed a college level mathematics course, except students who have received AP calculus credit, must take the UT Knoxville mathematics placement exam before enrolling in a mathematics course. Placement in the appropriate course will be determined by the score on the exam. Ordinarily a student will not be allowed to enroll in a course at a level above that determined by his or her placement exam score. In exceptional circumstances, students will have the right to appeal their placement to the Mathematics Department. The exam will be administered during summer orientation and at designated times during the Fall, Spring, and Summer registration.

B.S. Major: Mathematics 141-142 (or the Honors version, 147-148) is a prerequisite for the B.S. in Mathematics. Majors must also have computer programming skills sufficient to take 371: students without other computing experience should take Computer Science 102.

The courses required for the major are: 212 Discrete Mathematics I (3); 215 Differential Equations I (3); 341 Analysis I (3); 351 Algebra I (3); 371 Numerical Algorithms I (3); and nine additional hours selected from Mathematics 434, 439 and Mathematics courses numbered 421-472.

Honors B.S. Major: Candidates for an honors degree in Mathematics must fulfill all of the requirements for the B.S. degree in Mathematics, but take 12 (rather than 9) hours in Mathematics 439 and Mathematics courses numbered 321 through 472. The grade point average computed on the 24 hours of Mathematics courses consisting of 321, 341, 351, and 371, plus the aforementioned 12 hours, will determine the honors category. GPA at least 3.4: Honors; GPA at least 3.6: High Honors; GPA at least 3.8: Highest Honors.

Students will receive more than 12 hours in Mathematics 439 and Mathematics courses numbered 321 through 472. Students may designate the 12 hours to be included in the above average. Honors in Mathematics 141-142 (or 147-148) is prerequisite to a minor in Mathematics. A minor in Mathematics consists of (1) 241 and 251; (2) 251 and 253; and (3) nine additional hours in Mathematics courses numbered 300 or higher. The grade in each of the above courses must be at least C.

MEDIEVAL STUDIES

See Interdisciplinary Programs.
The Department of Medical Biology of The University of Tennessee College of Medicine-Knoxville was formed from the faculty of the University Memorial Research Center and Hospital in 1978. The Research Center was established in 1956. The faculty has research, education, and service interests in cancer, blood diseases, metabolism, neuroscience, birth defects, cytopathology, and clinical genetics. Courses in these areas are offered to students at the graduate and undergraduate levels. Elective courses are also available to students in the College of Medicine.

The faculty with the College of Veterinary Medicine participates in the graduate program leading to M.S. and Ph.D. degrees, in Comparative and Experimental Medicine. Other advanced degree students can do thesis research in the department by arrangement with other life science departments at the University.

**MICROBIOLOGY**

Professors: Dewey A. Cavanaugh (Head); Ph.D. California (Syracuse); R.W. Beck (Emeritus); Ph.D. Wisconsin; J.M. Becker; Ph.D. Cincinnati; D.A. Brier; Ph.D. D.V.M. Michigan State; T.C. Francis; Ph.D. Maryland; W.J. Riggsby; Ph.D. Yale; B.T. Rouse; Ph.D. D.V.M. Cornell;

Associate Professor: B.V.Sc., Bristol (England); G.S. Sayler, Ph.D.; D.J. Stanney, Ph.D. Texas (Austin); D.C. White (Distinguished Scientist), M.D. Tufts, Yale; B.T. Rouse; B.S. Cornell; Y. Rouse; Ph.D. Guelph (Canada), C.J. Wust, Ph.D. Indiana; R. Bemis, Ph.D. Cornell; R.N. Moore, Ph.D. Rockefeller; J.M. Woodward (Emeritus), Ph.D. Washington (Berkeley); R.W. Beck (Emeritus), Ph.D. New York.

Assistant Professors: D. Berms; Ph.D. Cornell; R.N. Moore, Ph.D. Texas (Austin).


**B.S. Major:** Prerequisites in Biology are 150 or 110-120. Chemistry 110-120, and mathematics. Two years of a foreign language are required. The Biology 220-225 or 231-232. The major consists of Biology 350-360-349. Biochemistry 410. Microbiology 310, 319, 320, 329, 12 additional hours of 400-level microbiology courses.

Honors B.S. Major: An honors major is offered to selected students who have achieved junior standing and have completed the required 300-level microbiology courses with a minimum grade point average of 3.5 in microbiology courses and 3.2 for all courses. In addition to these 300-level courses, an honors major requires successful completion of 15 additional hours of 400-level microbiology courses, including 401 and 402.

**MEDICAL TECHNOLOGY**

Courses in this major are open only to qualified students who have completed the first three years of the Science-Medical Technology curriculum, described in the College of Liberal Arts curricular section of this catalog, and who have been approved by the Medical Technology Admissions Committee.

**MUSIC**

Professors: Kenneth A. Koeling, Sr. (Head), D.M.A. Catholic University; C. Hat, Ph.D. Peabody; G.C. Bizas, M.M. Conservatory; J.P. Beck, M.M. Indiana; W.J. Carter (Emeritus), D.M.A.


Music, music education, and ear training are open only to qualified students who have completed the required 300-level courses in music, and music education should be directed to the Department of Music.

Bachelor of Music Degree: The Depart- ment of Music offers courses leading to the Bachelor of Music degree with concentrations in music theory, composition, electronic music, music history and literature, and applied music: voice, piano, organ; sacred music; organ performance and literature; strings, woodwinds, brass, and percussion; strings, woodwinds; brass, and percussion students must meet the requirements in music theory, composition, music history, and literature, and in aural skills and voice. The Bachelor of Music degree is designed for students who wish to pursue advanced study in music in further academic programs outside the University. The Bachelor of Music degree may be granted to the student who has completed the requirements for the major and who has earned a minimum of 120 semester hours of college work, including at least 40 semester hours in Music.

**Applied Music**

Applied study is classified as Principal or Secondary.

Students studying their principal (major) in music education and music education, and music education major may elect courses in the program, 2-4 credit hours; students studying a second music concentration may elect each credit. Students at the principal level selects receives one hour of private instruction per week for the first year's credit lesson plus a half-hour private lesson. Determination of the mode of instruction less the department. Study at the second year selects one-half hour of private instruction per week or equivalent in class instruction. Applied music courses do not permit non-credit registration or may not be selected for non-credit. All music majors are required to register for credit appropriate to their program for courses to be attended scheduled classes, concert, master classes, recitals, and other class, and to perform at least once each semester as part of full-time applied music credit requirement.

The Department of Medical Biology of The University of Tennessee College of Medicine-Knoxville was formed from the faculty of the University Memorial Research Center and Hospital in 1978. The Research Center was established in 1956. The faculty has research, education, and service interests in cancer, blood diseases, metabolism, neuroscience, birth defects, cytopathology, and clinical genetics. Courses in these areas are offered to students at the graduate and undergraduate levels. Elective courses are also available to students in the College of Medicine. The faculty with the College of Veterinary Medicine participates in the graduate program leading to M.S. and Ph.D. degrees, in Comparative and Experimental Medicine. Other advanced degree students can do thesis research in the department by arrangement with other life science departments at the University.
Music History
Music Education
Music Ensemble ........................................................2
Foreign Language ....................................................6
Music Theory
English Composition
Freshman
Instrumental Emphasis
B.M. Curriculum in Music Education-
and two semesters of applied music study at
requisites are Music General 100 or equivalent
courses, and 5 hours in music electives. Pre-
above, distributed as follows: Music History and Literature—con-
trary (Majors); Music History 460 (3); Music General 411 (4). Total of 43-45 hours.
Music, designed for those students who have a
strong interest in music, but desire a com-pre-
his major and minor in Music, designed for those students who have a
strong interest in music, but desire a compre-
several semesters and the first day of the sum-
.
 correlates, with creditors as a registrant.
Music, designed for those students who have a
strong interest in music, but desire a compre-
several semesters and the first day of the sum-
marks: Music Theory 110, 120 (6); Music Theory 130, 140 (2); Music Performance 120 (4); Music History 200 (3); Music History 210, 220 (6); Music History 300, 380, 390. Music Electives (2-3 hours) assisted from: Music History 460 (3); Music General 301 (0); Music Theory 430 (0); Music General 401 (0). Total of 35-38 hours.
Music Education
Music Education
Music Education
Music Education
Music General 200 -4 semester minimum (0); Music History 210, 220 (6); Music History 200 (3); Music History 210, 220 (6); Music History 300, 380, 390. Music Electives (2-3 hours) assisted from: Music History 460 (3); Music General 301 (0); Music Theory 430 (0); Music General 401 (0). Total of 35-38 hours.
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strong interest in music, but desire a compre-
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marks: Music Theory 110, 120 (6); Music Theory 130, 140 (2); Music Performance 120 (4); Music History 200 (3); Music History 210, 220 (6); Music History 300, 380, 390. Music Electives (2-3 hours) assisted from: Music History 460 (3); Music General 301 (0); Music Theory 430 (0); Music General 401 (0). Total of 35-38 hours.
## B.M. Curriculum in Organ

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition 101, 102</td>
<td>3</td>
</tr>
<tr>
<td>Music Theory 110, 120</td>
<td>6</td>
</tr>
<tr>
<td>Music History 200</td>
<td>3</td>
</tr>
<tr>
<td>Music Keyboard 210, 220</td>
<td>6</td>
</tr>
<tr>
<td>Music Keyboard 230</td>
<td>2</td>
</tr>
<tr>
<td>Music Perf. 210</td>
<td>8</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total: 128 hours</strong></td>
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</tr>
</tbody>
</table>

*Must be chosen from French, German, or Italian.*

## B.M. Curriculum in Piano and Literature

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Credit</th>
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<tbody>
<tr>
<td>English Composition 101, 102</td>
<td>3</td>
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<tr>
<td>Music Theory 110, 120</td>
<td>6</td>
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<tr>
<td>Music History 200</td>
<td>3</td>
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<tr>
<td>Music Keyboard 210, 220</td>
<td>6</td>
</tr>
<tr>
<td>Music Keyboard 230</td>
<td>2</td>
</tr>
<tr>
<td>Music Perf. 210</td>
<td>8</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total: 120 hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Must be chosen from French, German, or Italian.*

## B.M. Curriculum in Sacred Music (Organ or Voice)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition 101, 102</td>
<td>3</td>
</tr>
<tr>
<td>Music Theory 110, 120</td>
<td>6</td>
</tr>
<tr>
<td>Music History 200</td>
<td>3</td>
</tr>
<tr>
<td>Music Keyboard 210, 220</td>
<td>6</td>
</tr>
<tr>
<td>Music Keyboard 230</td>
<td>2</td>
</tr>
<tr>
<td>Music Perf. 210</td>
<td>8</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total: 120 hours</strong></td>
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</tr>
</tbody>
</table>

*Must be chosen from French, German, or Italian.*

## B.M. Curriculum in Strings

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>English 101, 102</td>
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<tr>
<td>Music Theory 110, 120</td>
<td>6</td>
</tr>
<tr>
<td>Music Theory 210, 220</td>
<td>6</td>
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<td>Music History 200</td>
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<tr>
<td>Music Keyboard 210, 220</td>
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</tr>
<tr>
<td>Music Keyboard 230</td>
<td>2</td>
</tr>
<tr>
<td>Music Perf. 210</td>
<td>8</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total: 120 hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Must be chosen from French, German, or Italian.*
B.M. Curriculum in Studio Music and Jazz

Freshmen

<table>
<thead>
<tr>
<th>English Composition 1, 102</th>
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</thead>
<tbody>
<tr>
<td>Music Theory 112, 110</td>
<td>6</td>
</tr>
<tr>
<td>Music Theory 130, 140</td>
<td>6</td>
</tr>
<tr>
<td>Music History 200</td>
<td>6</td>
</tr>
<tr>
<td>Music History 363</td>
<td>6</td>
</tr>
<tr>
<td>Music Jazz 112</td>
<td>3</td>
</tr>
<tr>
<td>Music Performance (100 level)</td>
<td>6</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td>2</td>
</tr>
<tr>
<td>Music General 200</td>
<td>2</td>
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<tr>
<td>Sophomore</td>
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</tr>
<tr>
<td>Music Theory 210, 220</td>
<td>6</td>
</tr>
<tr>
<td>Music Theory 230, 240</td>
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<tr>
<td>Music History 210, 220</td>
<td>6</td>
</tr>
<tr>
<td>Music Jazz 112, 200</td>
<td>4</td>
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<tr>
<td>Music Performance (200 level)</td>
<td>6</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td>2</td>
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<tr>
<td>Music General 200</td>
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<tr>
<td>Natural Science Electives</td>
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<tr>
<td>Juniors</td>
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<tr>
<td>Music Theory 310</td>
<td>3</td>
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<td>Music Theory 320</td>
<td>3</td>
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<tr>
<td>Music Jazz 310</td>
<td>3</td>
</tr>
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<td>Music Jazz 320</td>
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<td>Music History 380</td>
<td>6</td>
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<tr>
<td>Music Performance (300 level)</td>
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<td>Music Ensemble</td>
<td>2</td>
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<tr>
<td>Music General 200</td>
<td>0</td>
</tr>
<tr>
<td>Total: 131 hours</td>
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</tr>
</tbody>
</table>

"Must be chosen from French, German, or Italian.

B.M. Curriculum in Theory/Composition

Hours Credit

Freshmen

<table>
<thead>
<tr>
<th>English Composition 1, 102</th>
<th>6</th>
</tr>
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<tbody>
<tr>
<td>Music Theory 112, 110</td>
<td>6</td>
</tr>
<tr>
<td>Music Theory 130, 140</td>
<td>6</td>
</tr>
<tr>
<td>Music History 200</td>
<td>6</td>
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<tr>
<td>Music History 363</td>
<td>6</td>
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<tr>
<td>Music Jazz 112</td>
<td>3</td>
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<tr>
<td>Music Performance (100 level)</td>
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<td>Music General 200</td>
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<tr>
<td>Foreign Language</td>
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<td>Music Jazz 410</td>
<td>3</td>
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<tr>
<td>Music Theory 290</td>
<td>1</td>
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<tr>
<td>Music Performance (400 level)</td>
<td>6</td>
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<tr>
<td>Music Ensemble</td>
<td>2</td>
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<tr>
<td>Music General 200</td>
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<tr>
<td>Music General 441</td>
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<tr>
<td>Humanities, Electives</td>
<td>11</td>
</tr>
<tr>
<td>Total: 133 hours</td>
<td></td>
</tr>
</tbody>
</table>

"Must be chosen from French, German, or Italian.

B.M. Curriculum in Voice

Freshmen

<table>
<thead>
<tr>
<th>English Composition 1, 102</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Theory 112, 110</td>
<td>6</td>
</tr>
<tr>
<td>Music Theory 130, 140</td>
<td>6</td>
</tr>
<tr>
<td>Music History 200</td>
<td>6</td>
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<tr>
<td>Music History 363</td>
<td>6</td>
</tr>
<tr>
<td>Music Jazz 112</td>
<td>3</td>
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<tr>
<td>Music Performance (100 level)</td>
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<tr>
<td>Music Ensemble</td>
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<tr>
<td>Music General 200</td>
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<tr>
<td>Music General 301</td>
<td>0</td>
</tr>
<tr>
<td>Total: 131 hours</td>
<td></td>
</tr>
</tbody>
</table>

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CSU Professor: G.K. Benett (Head), Ph. D. Michigan, R.E. Aquila, Ph.D. Northwestern, L. B. Cott, Ph.D. F. S. D. Ford, Ph.D. Ohio State, J. B. D. E. Faculty, Ph.D. Yale, D. Van de Vate, Ph.D. Yale.


Major Prerequisite: Three hours of logic, normally 130 or 135. Requirements: 24 hours of courses numbered 200 or above, including three hours of ethics, normally 240 or 440, and six hours in the history of philosophy, three in ancient, normally 320, and three in modern,
Research Assistant Professors: L. Davis (UTS), Ph.D.; A. C. Auckland; H. Faddis, Ph.D., Tennessee.
Instructors: R. C. Fairman, B.A. Earlham College; T. Rediger, M.S. Vanderbilt.

PHYSICS

B.D. Major: The undergraduate physics major provides a thorough introduction to all of the core disciplines of physics so that students are prepared to pursue related specialties at a later point in their career. Students with special in-
terests are encouraged to pursue three inter-
et projects through research and/or independ-
ent study under the direction of members of
the physics faculty through Physics 493.

The honors concentration consists of:
Physics 131-132; Mathematics 141-142.

The major consists of Physics 231-232; Mathematics 231 and 241; Physics 311 (stu-
dents intending to pursue graduate studies in Physics should also take 312 and 411 as elec-
tives); Physics 321; Physics 431-432; Physics 411-412 (340 and 341 or 345 are substi-
tuted for students who do not intend to pursue graduate study), Physics 361. Physics 461. Physics 431 is recommended. Major totaling: 12 credits.

Prerequisites to the major concentration are:
Physics 131-132; Mathematics 141-142.

The honors concentration consists of:
Physics 340; Mathematics 231 and 241; Phys-
ics 311-312; students intending to pursue graduate studies in Physics should also take 421 as an elective); Physics 321; Physics 431-
432, Physics 411-412. Physics 361, Physics 461. Physics 431 is recommended. Total hon-
sors concentration major hours: 41.

Minor in physics: A minor in Physics shall consist of Physics 131-132, 231-232 and 10 hours from physics and astronomy courses numbered 300 and above. The honors concentration shall consist of Physics 131-132, Physics 340 and 12 hours from physics courses numbered 300 and above.

The major consists of: Physics 231-232; Mathematics 231 and 241; Physics 311-312, students intending to pursue graduate studies in Physics should also take 312 and 411 as electives; Physics 321; Physics 431-432, Physics 411-412 (340 and 341 or 345 are substituted for students who do not intend to pursue graduate study), Physics 361. Physics 461 is recommended. Total honors concentration major hours: 41.

Minor: A minor in physics shall consist of Physics 131-132, 231-232 and 10 hours from physics and astronomy courses numbered 300 and above. The honors concentration shall consist of Physics 131-132, Physics 340 and 12 hours from physics courses numbered 300 and above.

To graduate with Honors in Physics, a student must
1. be a member of the Physics faculty through Physics 493.
2. complete the major requirements for the major concentration.
3. complete the honors concentration.
4. obtain an average grade point of 3.5 or better in the major.
5. obtain an average grade point of 3.5 or better in the honors concentration.
6. submit a thesis to the physics faculty.
7. be recommended by the physics faculty.

The Senior Thesis
The Senior Thesis is normally a two-year program. Physical Sci-
cence and Engineering majors are encouraged to pursu-
e the honors concentration through research projects and/or indepen-
dent study. Students with special in-
terests are encouraged to pursue three inter-
et projects through research and/or independ-
ent study under the direction of members of
the physics faculty through Physics 493.
One course from Psychology 410, from Psychology 300, 310, 320, 330, 360 and one semester of 396. Two courses from Psychology 300 (or Child and Family Studies), 370, (4) Two elective courses from Psychology 300 (or Family Studies or Counseling Psychology 431), 360 (or Educational & Counseling Psychology 440, 445, and 470; Psychology 496. (6) One semester of 395, 491, or 492; and (7) Psychology 496. (6) One semester at the 300 or 400 level.

Completion in the Academic Concentration requires a maintenance of 2.35 GPA. At any time a student drops below this level, he or she will be transferred to the General Concentration, and must apply for readmission upon achieving a 2.25 or better GPA. Re-admission is not automatic, and a review of the student's total program will be undertaken, before a decision is made as to readmission to the Academic Concentration.

Minor: Consists of 9 or 12 hours, requiring (1) one course in at least two different academic disciplines, (2) one course in at least a third discipline, and (3) one course in at least a fourth discipline.

REQUIREMENTS FOR MAJORS

Psychology 110, 210, 350, 425, 450, and 461; (5) One course from Psychology 110, 210, 350, 425, 450, and 461; (6) One course from Psychology 110, 210, 350, 425, 450, and 461; (7) Psychology 496. (6) One semester at the 300 or 400 level.

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REQUIREMENTS FOR MAJORS

Psychotherapy majors are best served by taking a year of calculus and a year of statistics, and are in the first six core courses of study.

The General Concentration requires a maintenance of 2.25 GPA. At any time a student drops below this level, he or she will be transferred to the General Concentration, and must apply for readmission upon achieving a 2.25 or better GPA. Re-admission is not automatic, and a review of the student's total program will be undertaken, before a decision is made as to readmission to the Academic Concentration.

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Minor: Consists of 9 or 12 hours, requiring (1) one course in at least two different academic disciplines, (2) one course in at least a third discipline, and (3) one course in at least a fourth discipline.
Associate Professors: M.L. Benson (Head) Ph.D. Illinois; S. Cabiv, Ph.D. Pennsylvania State; J.P. Gaventa, Ph.D. Oxford (England); S. Kurth, Ph.D. Illinois (Chicago); R.G. Perrin, Ph.D. British Columbia.

Assistant Professor: A. Jalali, Ph.D. SUNY-Binghamton.

Instructor: D.K. Harris, M.A. Tennessee.

Assistant Professor, In European Studies: M.L. Benson (Head) Ph.D. Illinois; S. Cabiv, Ph.D. Pennsylvania State; J.P. Gaventa, Ph.D. Oxford (England); S. Kurth, Ph.D. Illinois (Chicago); R.G. Perrin, Ph.D. British Columbia.

Assistant Professor: A. Jalali, Ph.D. SUNY-Binghamton.

Instructor: D.K. Harris, M.A. Tennessee.

Major: Prerequisites to the major are six lower-division hours in sociology which must include either 100 or 110, followed by 200. The major consists of 24 upper-division hours in sociology and must include 321 and 331. Students should complete these two courses by the end of their junior year.

Minor: The minor consists of 12 upper-division hours in sociology and must include 321 and 331. Prerequisites to the minor are six lower-division hours in sociology which must include 200.

Concentration in Criminology: All prerequisites and upper-division courses required for general majors are required for this concentration. In addition, the concentration consists of 18 hours of upper-division sociology courses as follows: 325, 351, 451, either 455, 459, or 461, and 492, and two courses selected in consultation with advisor.

Concentration in Environment and Society: Prerequisites and upper-division courses required for general majors are required for this concentration. In addition, the concentration consists of 18 hours of upper-division sociology courses as follows: 344 or 345, 365, 442, or 446, and two courses selected in consultation with advisor.

Minor with Concentration in Environment and Society: Prerequisites to the minor in Sociology 101 or 110. The minor consists of 200, 327, 331, 360 and a choice from 347, 345, 442, 446 and 484.

COLLEGE SCHOLARS HONORS

Director: Dr. Harry J. Jacobsen

College Scholars is a major with selective admission. For details, contact the director. All Scholars must enroll in one of the College Scholars Seminars 317-318 each term. They are encouraged to complete work in College Scholars Honors 491-492-493. Each student must complete a substantial work of research or service scholarship or creative imagination. College Scholars 491 is the appropriate course to use to receive credit for this work.

SPANISH

See Romance Languages.

SOCIOLoGY

See Interdisciplinary Programs.

RUSSIAN AND EAST EUROPEAN STUDIES

See Interdisciplinary Programs.

Professors: W. Wetl, Ph.D. Michigan State; J.A. Black, Ph.D. Iowa; D. Celander, Ph.D. Michigan State; D.W. Heflin, Ph.D. Massachusetts; T.C. Hoog, Ph.D. Duke; D.R. Pisch, Ph.D. North Carolina; N.E. Shever, Ph.D. Illinois (Urban); S.E. Wallace, Ph.D. Minnesota.
Major: Speech Communication 100 and one course in quantitative analysis (e.g., Statistics 245, Math 115; Statistics 201-202 are prerequisites to a major which consists of 310, 390, 399, and one course from each of the following categories: (1) 210, 270, or 290; (2) 300, 320, or 330. An additional 12 hours in Speech Communication courses are required, six of which must be at the 400 level, and not more than three at the 200 level. No more than three hours from Speech Communication 445, 492, 493, 495 may be counted toward the major. Students should consult the Department Office for information and recommended advisement.

Minor: Speech Communication 100 is prerequisite to a minor which consists of 18 additional hours of Speech Communication courses at least 12 of which must be at the 300 level and above. No more than 3 hours from Speech Communication 445, 492, 493, 495 may be counted toward the minor.

STATISTICS

See faculty list in the College of Business Administration.

Liberal Arts students may major or minor in statistics under the supervision of the faculty of the Statistics Department in the College of Business Administration. The major is designed to prepare students for graduate studies in statistics or for professional work in various applications of statistical methods, including applications in the natural and social sciences, business and industry. Contact the Statistics Department for further information. Students should consult a faculty advisor to select courses to take. It is highly recommended that students wishing to pursue graduate studies have a minor in an area of application.

Major: (a) Required courses consist of 26 hours from Mathematics 241, 251; Statistics 201, 251; Statistics 471 or Mathematics 333; (b) Statistics elective consists of 3 hours from upper-division statistics courses not listed in part (a); and (c) Electives consist of 6 hours to be selected from two of the following groups: Computer Science 111, 112, 401, 402, 403, 404; Industrial Engineering 301, 402; 406; Management 481; Mathematics 371, 421, 431, 423, 425, 426 (other quantitative coursework may be substituted for Electives with the faculty advisor's approval).

Minor: (a) Required courses consist of 15 hours from Mathematics 241, 251; Statistics 251, 252, 256; and (b) Statistics electives consist of 3 hours from upper-division statistics courses not in part (a) of the minor.

THEATRE

Professors: T.P. Cooke, Ph. D. Florida State; R.M. Gathen, Jr.; M. M. Gather, M. A. Wisconsin; R.C. Fed; M.A. Mjers (Ohio); P. Garvey, M.A. Cambridge; A.J. Harris, Ed. D. Tennessee; R.R. Marshburn, Ph.D. D. Florida; S. Foster; P.S. Loper (Emeritus); D. Cornhill.

Associate Professor: W.R. Blazek, M.F.A. Illinois.

Assistant Professors: L.L. Dugan, M.F.A. Theatre; B.K. Good, M.F.A. Catholic; M.J. Mariani, M.F.A. Brandeis; T. Webster, M.F.A. Arizona.

Major: Theatre 100 and 220 are prerequisites to a concentration which consists of (1) Theatre 211, 215, 245, 260, 301, 311, 430; (2) three chosen from the following: 481, 482, 493, 494, 495; (3) 3 additional hours of Theatre courses numbered 200 or above, 4 of which may be in cognate areas approved by the department; (4) at least onehalf of the hours in the major must be at the 300 level or above.

Minor: Theatre 100 and 220 are prerequisites to a minor which consists of 403 and 16 additional hours of Theatre courses numbered 300 or above, 6 of which must be in history and criticism. General requirements for the major and minor are given in the Graduate Catalog.

BUILD STUDIES

See Interdisciplinary Programs.

WOMEN'S STUDIES

See Interdisciplinary Programs.

ZOLOGY


Associate Professors: K.D. Burnham (Emeritus), Ph.D. Iowa; J. Drake, Ph.D. Purdue; D.J. Fox, Ph.D. Johns Hopkins; R. Ganguly, Ph.D. Nebraska; N.B. Greenberg, Ph.D. Rutgers; B.D. McKee, Ph.D. Michigan State; M.L. Pan, Ph.D. Pennsylvania; N. A. Hand, Ph.D. Illinois; L.J. DeCuir, M.F.A. Tulane; B.K. Gould, M.F.A. Delaware; M.F.A. Alabama; M. F. A. Tuscaloosa; M.A. Miami (Ohio); P. Garvie, M.A. Cambridge; W.R. Black, M.F.A. Illinois; S.E. Riechert, Ph.D. Wisconsin; L.E. Roth, Ph.D. Michigan State; G.C. Shirlaw, Ph.D. Virginia; H.G. Welch, Ph.D. Delaware; J.K. Norwood (Emeritus), Ph.D. Florida; G.L. Whitson, Ph.D. (Emeritus).

Assistant Professors: C.Baikia, Ph.D. Cornell; J.L. Gittlen, Ph.D. (Emeritus); J.N. Liles (Emeritus); J.C. Hall, Ph.D. Illinois.

Research Associate Professor: R. N. Tindal, Ph.D. Pennsylvania State.

Prerequisites to upper division courses: Biology 110-120 or Zoology 117-118. Note: Prerequisites are in effect for all upper division Zoology courses with the exception of 480. Additional prerequisites are included with course descriptions.

Major: Prerequisites to the major are Biology 110-120 or Zoology 117-118 and Chemistry 101-130. Requirements are Mathematics 121-122 or 151-152 or 141-142 and a year sequence in physics (except 141-142). Physics 221-222 are recommended and are required for admission to some professional schools.

The major consists of Biology 210-220-230, 16 hours of upper division Zoology courses and two semesters of chemistry or biochemistry at the 200 level or above. (Acceptable second year chemistry sequences include: Chemistry 350-360-369; Chemistry 330 and 310-319; Chemistry 350 and Nutrition 300; Chemistry 350, 430 and Biochemistry 310; Chemistry 310-319 and Biochemistry 310). All Zoology majors are required to take at least one course from three of the following four areas: (1) Cellular and Developmental Biology (330, 420); (2) Physiology (440, 445); (3) Animal Diversity (350, 359); and (4) Evolution and Behavior (460, 462).

Minor: Prerequisites to the minor are Biology 110-120 or Zoology 117-118 and Chemistry 120-130 or 100-115. The minor consists of Biology 210-220-230 and 9 hours of upper division Zoology. Honors in Zoology: An Honors major in Zoology must fulfill all of the requirements for the B.S. degree in Zoology, and take 302 and 409 during the junior and senior years, and a senior thesis (401) the last semester of the senior year. All prospective juniors who are declared Zoology majors with a minimum overall GPA of 3.2 in the major and prerequisite and corequisite courses are invited to apply. To remain in the program, the student must maintain a GPA of 3.2 in the major. Students interested in the major degrees in Zoology and Animal Science should consult with the department's Honors Coordinator.

Note: Zoology major and minor courses require organic chemistry or other prerequisites; consult the catalog description for each course.

Major courses in this department are offered only in specific semesters. Students should plan in advance the proper sequence. Information on the semesters a course is to be offered is available in the department office.
College of Nursing

Joan E. Uhl, Dean
Joanne N. Melzner, Associate Dean for Undergraduate Programs
Beth Barret, Director of Student Services

Professors:
J.E. Uhl (Dean), Ph.D. Utah; M.A. Alligood, Ph.D. New York; D.H. Goodfellow, Ph.D. Peabody; J.H. Mozingo, Ph.D. Wisdom; S.P. Thomas, Ph.D. Tennessee.

Associate Professors:

Assistant Professors:
S.M. Bowden, Ph.D. Tennessee; J. Branson, M.S.N. Vanderbilt; K.P. Cotton, M.S.N. SUNY Buffalo; K.L. Davie, M.S.N. North Carolina-Chapel Hill; G.W. Evans, M.S.N. Tennessee; M. Evans, M.S.N. Tennessee; S.M. Heron, M.S.N. Tennessee; Texas Woman's; S.M. Hudson-Fitgerald, M.S. Tennessee; M. Kohler, Ph.D. Tennessee; M.A. Manczak, M.S.N. Tennessee; J.H. Rico, M.N. Emory; D.L. Will, M.S.N. Tennessee; C.K. Witherington, Ph.D. Tennessee.

Instructors:
L.S. Blackburn, M.S.N. Vanderbilt; N. Gaylord, M.S.N. Colorado; P.J. Oster, M.S.N. West Virginia; P.A. Miller, M.S.N. Tennessee; Memphis; M.A. Nafaa, M.S.N. Texas-San Antonio; P. Tremble, M.S.N. Tennessee; M. Wilkinson, M.S.N. Vanderbilt.

The College of Nursing at The University of Tennessee, Knoxville, was established in July 1971 in response to a long-recognized and well-established need for nurses prepared at the collegiate level. The undergraduate program combines the unique resources of the UT-Knoxville campus with those of the University's comprehensive teaching hospital and several other cooperating health care agencies in a manner that enables both faculty and students to participate fully in all facets of the health care delivery system. The program is accredited by the National League for Nursing and has full approval status from the Tennessee Board of Nursing.

The baccalaureate nursing program has as its central focus and frame of reference human beings, society, and health. It is based on the belief that nursing has equal concern for the prevention of illness, the promotion of health, and the care of the sick. General education courses, nursing courses, and electives are organized in a manner designed to promote and develop creative thinking and other cognitive, affective, and psychomotor processes that are essential for effective nursing practice and for full and meaningful involvement as a contributing member of society.

A broad base of general education, a thorough study of human behavior, emphasis on health maintenance, health promotion and health restoration, and a strong family and community orientation are essential components of baccalaureate education in nursing. By maintaining a high quality, relevant program that is responsive to the increasing complexity of health care delivery, the ever changing health needs of society, and the changing and expanding role of the nurse, graduates of the program are able to: (1) assume beginning leadership positions in nursing in a variety of settings; (2) work collaboratively with other health professionals; (3) function as socially conscious and contributing citizens; and (4) pursue advanced education on either a formal or an informal basis.

GENERAL REQUIREMENTS

In order to obtain a Bachelor of Science in Nursing degree students are required to successfully complete eighteen semester or more than 50% of the lower division component of the program at any regionally accredited college or university. One-hundred twenty-two semester hours are required for graduation. The program is designed to accommodate high school grad-

uates, transfer students from within or external to UT, Knoxville, and registered nurses who hold associate degrees in nursing or who are graduates of diploma nursing programs.

PROGRESSION POLICIES AND PROCEDURES

(1) During the spring semester of the year the student expects to meet all lower division course requirements, s/he must complete a Petition for Progression form and submit it to the college's Student Services Office no later than the second Friday of UT-Knoxville's spring semester. If the number of petitions exceeds the number of students that can be accommodated students will be selected on the basis of: (a) cumulative GPA for courses completed; (b) grades in required courses; (c) number of course withdrawals and repetitions; (d) grade improvement over time; and (e) probability of completing all lower division requirements prior to the following fall.

(2) If a student is selected for progression to upper division nursing courses but then fails to successfully complete all lower division requirements prior to the fall semester, the student will not be permitted to enroll in nursing courses and must submit another petition the following year.

(3) All lower division courses must be completed prior to beginning upper division nursing courses except for humanities electives and multicultural or integrative studies. Preference will be given to those students who have completed all lower division courses but students may be selected to progress if they meet all requirements except for humanities and multicultural courses.

(4) Registered nurses must also complete all lower division courses but, at the discretion of the faculty RN advisor, they may enroll in Nursing 301 on the day they meet the requirements. Nursing 301, 304, 305 and 306 must be successfully completed before RN's may challenge or take Nursing 315 or 325. Nursing 316 and 325 are pre- or co-requisite to Nursing 315. All junior level courses are pre-requisite to the senior year.
GRADING AND CONTINUATION POLICIES

(1) The minimum acceptable grade for all courses in the curriculum is a "C"). The satisfactory credit grading option is not available for nursing courses.

(2) No nursing course may be repeated more than once. If a "D" or "F" grade is earned on the second attempt, the student will be required to withdraw from the program even if the previous course for which "D" or "F" was awarded has been repeated with a grade of "C" or higher.

(3) Any student who receives a grade of "D" or "F" for more than one nursing course will be required to withdraw from the program even if the previous course for which "D" or "F" was awarded has been repeated with a grade of "C" or higher.

(4) If a student receives an incomplete "I" in a nursing course, the "I" must be removed prior to enrolling in any course for which the incomplete course is a prerequisite.

(5) A student's clinical performance for any nursing course is found to be unsatisfactory, the grade for that course will be an "F" regardless of any other grades earned in other components of the course. If the unsatisfactory clinical performance is characterized by unethical, unprofessional, or unsafe behavior, behavior that actually or potentially places the client in jeopardy, the student will be required to withdraw from the program.

(6) Requirements for competence or certification in cardiopulmonary resuscitation are included in the Undergraduate Student Handbook.

HEALTH AND INSURANCE REQUIREMENTS

Students must meet specific physical examination and immunization requirements as specified by state law and by the rules and regulations set forth by the various clinical agencies. All non-nurse students must participate in the college's group malpractice and liability insurance program. All registered nurses must provide proof that they have appropriate malpractice-liability insurance coverage. Specific information concerning these requirements will be provided to the students at appropriate times by the nursing faculty and/or the Director of Student Services.

COURSE LOAD

The maximum credit hours per semester for which a nursing student may register without special permission is 18.

THE BACHELOR OF SCIENCE IN NURSING CURRICULUM

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 101, 102</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Mathematics 110, 115</td>
<td>6</td>
<td></td>
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<tr>
<td>Humanities</td>
<td>6</td>
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<tr>
<td>Psychology 110</td>
<td>3</td>
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<tr>
<td>Sociology or Anthropology</td>
<td>3</td>
<td></td>
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<tr>
<td>Zoology 240</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Zoology 255</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Microbiology 210</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Nutrition 300</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Child and Family Studies 210</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sociology or Anthropology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Multicultural or Integrative Studies</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philosophy 345</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Nursing 301, 302, 304, 306, 313, 316, 324</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multicultural or Integrative Studies</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Nursing 401, 403, 405, 409, 411</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

Total: 122 hours

Registered nurses may earn up to eleven semester hours of upper-division nursing credits by means of validation examinations that are designed to measure prior learning. More information about the examinations may be obtained from the Student Services Office or from the faculty advisor for registered nurses.

The following courses are open to all university students: 202, 214, 301, 317.

GRADUATE

General requirements for the Master of Science in Nursing degree are given in the Graduate Catalog.
The possibility of up to one year’s standing graduates a competitive advantage in many and welfare agencies. The degree provides nursing homes, courts, mental health centers, youth programs, family service agencies, work careers in such diverse areas as schools, both individual and career development. To provide an education which fosters growth in work practice. It is the purpose of the College to prepare students for beginning social opportunities in reaching their potentials. The primary focus is on providing skilled intervention in the prevention and amelioration of individual and societal problems. It is a challenging and rewarding field that involves the application of knowledge, skills, and professional values to assist individuals, families, groups, and communities in reaching their potentials. The primary objective of the undergraduate social work program is to prepare students for beginning social work practice. It is the purpose of the College to provide an education which fosters growth in both individual and career development. The program prepares students for social work careers in such diverse areas as schools, youth programs, family service agencies, nursing homes, courts, mental health centers, and welfare agencies. The degree provides graduates a competitive advantage in many jobs. The possibility of up to one year’s standing in some master’s degree programs in social work and the potential to be licensed in a number of states throughout the nation. The social work curriculum builds on a strong liberal arts base. The humanities and the social and behavioral sciences are emphasized to help students understand human diversity and the transitions between people and their environment. The curriculum combines classroom experience and agency-based field placements. Courses provide a knowledge base in social work practice theory, human behavior, social welfare policy, and research. Educationally directed field placements, which consist of over 600 clock hours of supervised field instruction in agency settings throughout greater Knoxville, provide extensive and challenging opportunities for students to apply the lessons of the classroom to the problems of society. The program is accredited by the Council on Social Work Education. The undergraduate social work program (BSSW) started in 1982 in the College of Liberal Arts. It was granted initial accreditation by the Council on Social Work Education in January 1983, and reaffirmation was given in 1992. The program was transferred to the College of Social Work in September 1985. The three programs, BSSW, MSSW, and Ph.D., in the College represent the full continuum of social work education.

The College of Social Work is housed in Henson Hall, located on the corner of Cumberland Avenue and Volunteer Boulevard on the UT, Knoxville campus. This building houses the administrative and faculty offices, along with classrooms for the BSSW, MSSW and Ph.D. programs. Video and computer resources are available to facilitate instruction.

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Graduate Program

The College of Social Work offers a fully accredited two-year graduate professional degree at the master's level (MSSW). The College also offers a graduate program leading to a Doctor of Philosophy in Social Work (Ph.D.). Information concerning graduate programs is given in the College of Social Work Bulletin and also in the Graduate Catalog. Masters Degree Programs are offered on the campus in Knoxville and in Nashville and Memphis. The Ph.D. Program is offered in Knoxville.

Grading Policy

The satisfactory/no credit option is not permitted in the major. The minimum acceptable grade for all social work courses is C. Courses, other than field, in which a D or F is achieved may be repeated once. Field courses must be completed with a C or better, and may not be repeated.

A student receiving an incomplete (I) in any social work course must remove the incomplete before enrollment in subsequent field practice.

Course Load

The maximum credit hours per semester allowed for any student is 18. Special permission must be obtained for any overload.

Progression Requirements

Students admitted to the University may request a faculty advisor from the College of Social Work. Students in the College must move through Initial and Full Progression. The following factors identify progression criteria for all social work students.

Initial Progression

1. Successful completion of Social Work 200 and 250 with a grade of C or better.
2. Cumulative grade point average of 2.0 or above.
3. Successful completion of a minimum of 60 semester hours. Initial progression must be completed prior to enrollment in any 300-level social work courses.
4. Favorable review of the student's application for entry into the junior level social work courses by the faculty admissions committee.

The application requires an essay discussing...
The student's interest in and preliminary understanding of the profession.

**FULL PROGRESSION**

1. Successful completion of junior-level social work courses with a grade of C or better.
2. Cumulative grade point average of 2.0 or above.
3. Successful completion of a minimum of 90 semester hours. Full progression must be completed prior to enrollment in 400-level social work courses.
4. Favorable approval by the BSW faculty prior to entry into senior-level classes. This process will include a review of the student's performance in junior field practice.

Full progression is based on the recognition that social work has an intensive field component in which students demonstrate aptitude and ability to work with other people. While review is ongoing, full progression provides an additional opportunity to review the students' potential for entry-level practice.

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**CURRICULUM**

<table>
<thead>
<tr>
<th>Year</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>English 101, 102</td>
</tr>
<tr>
<td></td>
<td>Foreign Language (Intermediate Level)</td>
</tr>
<tr>
<td></td>
<td>Mathematics 110</td>
</tr>
<tr>
<td></td>
<td>History 151-152 or 161-162</td>
</tr>
<tr>
<td></td>
<td><em>Physiology or Biology Sequence with lab</em></td>
</tr>
<tr>
<td></td>
<td>Women's Studies 220</td>
</tr>
</tbody>
</table>

| Sophomore | Zoology 215, 295                                                         |
|           | Anthropology 130                                                        |
|           | Humanities (Literature Package)                                          |
|           | Humanities (Philosophy)                                                 |
|           | Psychology 220                                                          |
|           | Social Work 200, 250                                                    |
|           | Economics 201                                                           |
|           | Social Work 312, 313, 314                                                |
|           | United States Studies                                                   |
|           | Foreign Studies                                                         |
|           | Political Science 101                                                   |
|           | Sociology 320 or Math 115                                                |
|           | Social Work 310, 340                                                    |
|           | Child and Family Studies (20)                                            |
| Senior    | Social Work 412, 416                                                    |
|           | Social Work 460                                                         |
|           | Social Work 460                                                         |
|           | Anthropology 312                                                        |
|           | Electives                                                               |

Total: 124 hours
University Honors

Bruce Wheeler, Director
Dorothy Hendrick, Associate Director

University Honors programs have been carefully designed to give academically outstanding students a special undergraduate honors experience comprising special courses, seminars, mentoring programs, senior research projects and other features. Students are invited to become University Honors students prior to enrolling at the University. Already-enrolled students are ineligible. Prospective University Honors students are selected on the basis of previous academic performance, demonstration of an eagerness to be active learners and leaders, and extracurricular activities. The University Honors Office administers three separate programs: the Tennessee Scholars Program, the Whittle Scholars Program, and the Chancellor’s Scholars Program.

The Tennessee Scholars and Chancellor’s Scholars programs are administered by the University Honors Committee which includes faculty representatives from each of the ten baccalaureate colleges and schools and students elected by the Tennessee Scholars and Chancellor’s Scholars. The Whittle Scholars Program is administered by the Whittle Scholars Committee which includes faculty appointed by the Chancellor, representatives of the University Administration, alumni, and representatives of Whittle Communications.

TENNESSEE SCHOLARS PROGRAM

Each year, twenty-five outstanding high school students will be selected by the University Honors Committee for a four-year program of honors work. These students may have any major in any college offering the Bachelor’s degree. In addition to required work in their respective colleges, Tennessee Scholars are required to complete a minimum of four lower division honors courses, complete a one credit hour semester each term in residence, maintain a cumulative grade point average of 3.25, attend monthly meetings of the Whittle Scholars, and complete a senior research project of merit and originality. In order to graduate in the program, students must enroll in and successfully complete at least three credit hours of University Honors 493 while doing their senior projects. Failure to meet the above requirements can result in removal from the program.

WHITTLE SCHOLARS PROGRAM

The Whittle Scholars Program is made possible through a substantial endowment given by the University by Chris Whittle, Chairman of Whittle Communications and a 1969 UT, Knoxville alumnus.

Each year, twenty outstanding high school students will be invited to become Whittle Scholars. These students may have any major in any college offering the Bachelor’s degree. In addition to required work in their respective colleges, Whittle Scholars are required to complete a one credit hour seminar each term of their first year (one on contemporary issues and one on aspects of leadership); complete at least one University Honors courses during their second year; complete a one-year seminar preparatory to international travel/study/work; complete a one-year international experience; develop positive relationships with a faculty mentor and a non-faculty career mentor; have an extensive conference with a member of the Chancellor, representatives of the University Administration, alumni, and representatives of Whittle Communications.

Retention In Tennessee Scholars Program, Chancellor’s Scholars Program, and Whittle Scholars Program

Tennessee Scholars are selected on the basis of past academic performance and potential for academic excellence. As Tennessee Scholars, they are expected to adhere to the written policies and requirements of the Tennessee Scholars Program. Each year, students who meet enrollment criteria are invited to become Tennessee Scholars. In addition to required work in their respective colleges, Tennessee Scholars are required to complete a minimum of four lower division honors courses; complete a one credit hour seminar each term in residence; develop positive relationships with a faculty mentor; have an extensive conference with a member of the Chancellor, representatives of the University Administration, alumni, and representatives of Whittle Communications. Students who meet the above requirements can result in removal from the program.

Whittle Scholars may have to supplement the scholarship during their year abroad.

CHANCELLOR’S SCHOLARS PROGRAM

Each year the University awards Roddy, Bonham, Neyland, Holt, and Reeder-Siler scholarships to outstanding high school students. Roddy, Bonham, Neyland, Holt, and Reeder-Siler Scholars are selected by the General University Scholarship Committee, composed of faculty and University personnel. Holt Scholars are selected by a committee of alumni. Criteria for selection include academic performance and academic and professional promise.

All recipients of the Roddy, Bonham, Neyland, Holt, and Reeder-Siler scholarships are invited to become Chancellor’s Scholars. In addition to required work in their respective colleges, Chancellor’s Scholars are required to complete a minimum of four lower division honors courses; complete a one credit hour seminar each term in residence; develop positive relationships with a faculty mentor; have an extensive conference with a member of the University Administration, and complete a senior research project of merit and originality. In order to graduate in the program, students must enroll in and successfully complete at least three credit hours of University Honors 493 while doing their senior projects. Failure to meet the above requirements can result in removal from the program.
performance and promise, and extracurricular activities. As Whittle Scholars, they are expected to adhere to the written policies and requirements of the Whittle Scholars Program and are encouraged to enroll in courses that will stimulate and challenge them as well as broaden their horizons. All Whittle Scholars are reviewed annually by the Whittle Scholars Committee as to their academic performance and progress, the planning and execution of their international experiences and their senior projects. Whittle Scholars are expected to maintain a cumulative grade point average of 3.25. A student in the Tennessee Scholars Program or Whittle Scholars Program whose cumulative GPA falls below 3.25 will be allowed to continue in the Program and receive its benefits so long as he or she earns a 3.25 GPA or better every semester, thus eventually raising the cumulative GPA to the required 3.25. If, while the cumulative GPA is less than 3.25, a student fails to earn a 3.25 or better in any semester, he or she will be removed from the program and lose all its benefits, unless the student can demonstrate extenuating circumstances to the University Honors Committee or the Whittle Scholars Committee.

Senior Project Deadlines in Tennessee Scholars Program, Chancellor's Scholars Program, and Whittle Scholars Program

The following is a list of mandatory deadlines for the senior research project in all University Honors programs:

1. No later than the end of the second year in residence, a student must have chosen a UT Knoxville faculty member to serve as mentor for the senior research project, and that faculty member must have agreed in writing to serve as the student's mentor.

2. No later than the end of the third year in residence, a student, together with the faculty mentor, will choose two other faculty members who, together with the faculty mentor, will serve as the student's research project committee. The purpose of this committee is to aid students in formulating, designing and executing their projects and to evaluate the projects when completed. Similarly, by the end of the third year in residence, a student must submit a written abstract or proposal for the senior research project to his/her faculty committee for suggestions and approval.

3. No later than the end of the first semester of a student's senior year, a first draft of the senior research project must be submitted to the faculty mentor, and the faculty mentor must report that draft to the University Honors Director.

4. Within four weeks of the end of a student's final semester, he or she will be expected to present the completed project to the student's committee, the student's peers, and invited guests. Upon the conclusion of the presentation, the student's faculty mentor will submit a letter to the Director of the University Honors Program certifying that the research project has been completed and has been approved by the committee. One copy of the research project must be filed in the University Honors Office and additional copies should be given to the student's committee.

Failure to meet these guidelines will result in the delay of a student's graduation.

UNIVERSITY HONORS COURSES

Seminars and colloquia focused on various topics, issues, and problems, and limited in size to 25 students. These are taught by faculty from all ten undergraduate colleges and schools, and may be repeated. University Honors courses are open to all undergraduate students on the basis of high school GPA, ACT/SAT scores, UT, Knoxville GPA of 3.25 or better, or by strong professorial recommendation.

University Honors courses are open to all undergraduate students on the basis of high school GPA, ACT/SAT scores, UT, Knoxville GPA of 3.25 or better, or by strong professorial recommendation.

1 April 10 for students graduating in the Spring semester, and November 15 for students graduating in the Fall semester. Students graduating in August (at the end of summer school) are required to complete their projects by the April 10 deadline, although, in special cases and with the written consent of the faculty mentor, exceptions to this rule may be made.

2 There may be types of projects that do not lend themselves to a formal public defense. Hence the decision whether or not to have a public defense should be decided by the research committee and the Director of the University Honors Program.
University Libraries

Paula T. Kaufman, Dean
Audrey H. Mitchell, Associate Dean for Access Services
Diane E. Pennekamp, Associate Dean for Collection Services

Professors:
Bayne, Pauline S., M.S.L.S., North Carolina
Crawford, Mary Frances, M.S., M.S.L.S., Kentucky
Kaufman, Paula T., M.D., M.S., Columbia
LeClercq, Anne W., J.D., M.L.S., Emory

Associate Professors:
Baker, Gayle D., M.S., M.L.S., Alabama

Assistant Professors:
Bayne, Anne E., M.A., M.S.L.S., Rhode Island
Berkeley, Allan J., M.L.S., Cincinnati

The University of Tennessee, Knoxville Libraries' online catalog which can be searched from home and office computers. Interlibrary Services provides research assistance and access to commercially available databases. In the reference room, users may also search a number of CD-ROM databases at no charge. Interlibrary Services borrows monographs and obtains copies of other materials from libraries around the world. Library holdings are accessible via a sophisticated on-line catalog which can be searched in the Hodges Library; the branch libraries, and from home and office computers. The services and facilities of the University Libraries are accessible to persons with disabilities. Adaptive equipment such as a Kurzweil Personal Reader and TDD are available at the Hodges Library. The Agriculture-Veterinary Medicine Library (Room A-113, Veterinary Teaching Hospital) has a strong collection in agriculture; veterinary; comparative and human medicine; and related biological sciences. It has a wide-ranging audiovisual collection and an extensive reference collection. The Cartographic Information Center (Room 15, basement of the Hodges Library, Cumberland Avenue & 15th Street) contains a worldwide collection of over 300,000 maps covering all subjects. Maps are received from the U.S. Geological Survey, Defense Mapping Agency, and the National Ocean Survey. Maps, atlases, globes, and books relating to cartography may be borrowed for reference, research, and teaching. The Music Library (301 Music Building) has a comprehensive collection of music and music literature, including books, scores, audio and video recordings, current periodicals, and microforms. All materials in the Library of Congress "M" classification are located here. The Special Collections Library (2nd floor, west wing, of the Hodges Library) is a repository of regional and local materials. Tennesseeans, and other specialties, including legislative papers and memorabilia of many Tennessee political figures. Special Collections materials are of particular interest to scholars in the fields of history, political science, social sciences, biological sciences, and the arts. The University Archives (Room 2, Hoskins Library) contains official records of the University; items published officially and unofficially by its units, departments, and agencies; and other materials that document University of Tennessee life. The Social Work Library (1720 West End Avenue) serves College of Social Work students in field practice across the state. The Library has a working collection of materials on social work and related disciplines. The Law Library on the Knoxville campus and the Libraries located on the campuses in Chattanooga, Martin, Memphis, and Tullahoma are individually administered. Each Library at The University of Tennessee is accessible to all students and faculty in the system.

Notes:
1. Data excludes Law Library faculty and statistics.
The University Studies Program has three general objectives: (1) to foster interdisciplinary teaching and scholarship, especially across college boundaries; (2) to promote active, integrative, and personal learning; and (3) to nurture the personal and intellectual development of faculty and students.

In pursuit of these objectives, University Studies sponsors two main types of activities: FACULTY COLLOQUIES, which are ongoing, structured, interdisciplinary conversations on a topic or nexus of topics; and INTERDISCIPLINARY COURSES, often team-taught, many stemming from the colloquy discussions.

Faculty Colloquies explore important contemporary issues which are sufficiently fundamental to involve the attention of faculty and students from all colleges. Current colloquies are: Technology, Society and the Common Good; Aging and Society; Land and People (Tennessee Appalachian Forum); Interdisciplinary Rhetoric Group; Psychoanalysis and the Humanities; Critical Theory Group; Forum on International Development; and Appalachian Studies.

For further information, contact:
Dr. Alvin G. Burstein, Chair
312C Austin Peay
PHONE: 974-3348.
Reserve Officers Training

DEPARTMENT OF MILITARY SCIENCE

ARMY ROTC

LTC David A. Jones, Professor of Military Science
M.E. North Georgia College

The military program at The University of Tennessee predates that of any other state university in the country, having been introduced in 1864. In that year, Professor Albert Miller Luse, a West Point graduate, organized an infantry company. With the outbreak of the Mexican War, the entire company, as well as thousands of other Tennesseans, volunteered for service in the war. Thus, Tennessee became known as the "Volunteer State".

When The University of Tennessee reopened after the Civil War, a system of military discipline was adopted. A Code of Military Regulations was drawn up and a copy was provided each student when he matriculated. The whole institution was put under regular West Point discipline. The student body was organized into a battalion of cadets, which consisted of four companies fully officered, armed and equipped under the command of the commandant and his staff of cadet officers. The University of Tennessee remained as a Military Garrison for a period of six years, until 1877. Military Science continued to be taught, since the University of Tennessee was a Land Grant Institution and instruction in Military Science was required by the 1862 Act of Congress. The National Defense Act of 1916 changed the old military organization into a ROTC unit. For the first time, the Federal Government began to pay a part of the uniform cost for basic course students; uniforms and other equipment were provided by the Government for Juniors and Seniors, and a monthly subsistence allowance was provided to advanced course students.

From 1928-1930, Major (later Brigadier General) Robert H. Neyland was the Professor of Military Science and football coach at The University of Tennessee. Today, Neyland Stadium stands in tribute to his great accomplishments. The purpose of Army ROTC is to provide professional education which will prepare students for appointment as commissioned officers in the Regular Army or the United States Army Reserve components.

Objectives of the program are to provide students with an understanding of the fundamental concepts and principles of military art and science; to develop a basic understanding of associated professional knowledge, a strong sense of personal integrity, honor, and individual responsibility, and an appreciation of the requirements for national security; and to establish a sound basis for the students' future professional development.

ROTC draws young men and women for training from all geographical, economic, and social strata of our society as well as from the many educational disciplines required for the modern Army. The program ensures that men and women educated in a liberal and broad spectrum of American institutions of higher learning are commissioned annually into the officer corps.

SATISFACTORY/NO CREDIT COURSES

Since Military Science is not a major course of study that leads to a degree in a specific academic discipline, the number of satisfactory/no credit courses is decided by the college of the student's academic major. All ROTC courses are offered on a letter grade basis only.

COURSE LOAD

No more than one Military Science course may be taken during any given semester, unless an exception to policy is approved by the Professor of Military Science on a case-by-case basis. Students enrolled in the advanced program (upper division Military Science 300 and 400 level courses) and ROTC scholarship cadets are required to be full-time students, taking at least 12 hours each semester.

COURSE SUBSTITUTION

On the basis of previous honorable active military service in any branch of the Armed Services, or participation in a Junior ROTC Program at a Secondary School, a student may request exemption from portions of the Basic Course (Military Science 100 and 200 level courses). Placement credit may also be authorized for completion of basic training and advanced individual training. Exemption allowed will be determined by the Professor of Military Science. Military Science courses taken at other colleges or universities are transferable as approved by the Professor of Military Science.

REQUIREMENTS FOR ENROLLMENT AND CONTINUANCE

The general requirements for enrollment and continuance in the Army ROTC program are:

1. Basic Military Studies
   a. Be a citizen of the United States.
   b. Be physically qualified.
   c. Freshman and Sophomore standing. Student with higher standing requires consent of instructor.

2. Advanced Military Studies Cadets applying for enrollment in the Advanced ROTC program who seek a Commission must:
   a. Have successfully completed Military Science 110, 120, 210, 220 or have accomplished one of the following: Prior Military Service, ROTC Basic Military Studies - Practicum (MS 205), 3-Year High School ROTC Basic Course.
   b. Have two years remaining at the University (either undergraduate, graduate or in pursuit of additional course work).
   c. Have completed a minimum of 85 semester hours.
   d. Be under 30 years old at time of commissioning (waivable).
   e. Be enrolled as a full-time student, either at The University of Tennessee or at a nearby institution in a cooperative program.
   f. Meet military screening and physical requirements.
   g. Maintain a 2.0 G.P.A.
   h. Maintain B average in Military Science Courses as a scholarship student.

NOTE: Regularly enrolled students who meet the academic prerequisites may take indi-
other privately financed scholarships and applicant should contact the Professor of scholarship. Two and three-year scholarship of their senior year to apply for the four-year Military Science for further information. Certain high school seniors should contact their guidance counselors early in August or September of their senior year to apply for the four-year scholarship. Two and three-year scholarship applicants should contact the Professor of Military Science for further information. Certain other privately financed scholarships and grants are available as ROTC cadets.

Simultaneous Membership Program The "SMP" option combines the Army ROTC living allowance ($100/month) with membership in the Army Reserve or Army National Guard and allows the student to receive pay from both programs. ROTC cadets serve as "officer- trainees" in line leadership positions. SMP cadets participate in the reserve forces one weekend per month and two weeks each summer.

Branch Selection The curriculum of the Army ROTC Program is designed to qualify the cadet for appointment as an officer. Selection for assignment to the various branches of the Army is based on the personal interests of the cadet; the major course of study; academic accomplishments; leadership potential; and the needs of the Service. Under this system a cadet may be commissioned in any branch for which he or she is qualified and in which a need for officers exists. After graduation and commissioning, the officer will attend a service school for further specialized military training which will qualify him or her for the branch to which he or she is assigned.

Extra Curricular Activities Numerous military-related activities are available to cadets throughout the school year. These include the Terrainsse Rampage, Sandbody and Blud, U.S. Color Guard, and Sponsor Corps. These organizations provide both student to student and a valuable opportunity to acquire military skills. Additionally, each term, a number of Field Training Exercises are conducted allowing such military skills as Small Unit Tactics.

Physical Fitness Training The Cadet Battalion conducts physical fitness training Monday-Wednesday-Friday from 8:15 a.m. to 7:15 p.m. This program is optional for noncontracted cadets. The exercises focus on flexibility, muscular strength, and cardiorespiratory endurance. Any student may take the entrance examination registering for Army Conditioning Program 130.

SPECIAL PROGRAMS

Military Science 310, 320..........................................8
Military Science 210, 220..........................................5
Junior
Military Science 310, 320..........................................8
Military Science 400..................................................4
Senior
Military Science 410, 420..........................................8

Total: 30 hours

Basic Military Studies - Practicum

Summer
Military Science 320..............................................4
Senior
Military Science 410, 420..........................................8

Total: 24 hours

Advanced Placement

Junior
Military Science 310 - 320..........................................8

TOTAL 52 hours

Variations to these sequences of study may be approved by the Professor of Military Science on a case-by-case basis. Total Military Science hours offered is 34. Maximum total Military Science hours applicable for commissioning is 30. Minimum total Military Science hours applicable for commissioning is 20. Lower division credit hours granted by the University for military service are dependent upon time spent in service and service schools attended.

DEPARTMENT OF AIR FORCE

AIR FORCE ROTC PROGRAM

Professor of Air Force Aerospace Studies: Colonel Tom Trotta (Head), M.A. Webster University.

Assistant Professors: Major Ben Barker, M.A., Central Michigan University; Captain Kevin Kilpatrick, M.S., University of Dayton.

Purpose

The Air Force Reserve Officers Training Corps (AFROTC) is an educational program designed to provide eligible college students with the opportunity to earn an Air Force commission as a Second Lieutenant while completing the University requirements for a bachelor's degree. The program provides education and training that will develop the skills and attributes vital to the professional Air Force officer. Upon successful completion of the program and graduation from the University, students are commissioned as Second Lieutenants and enter active duty.

The Programs

The Four-Year Program: Students entering the Four-Year Program may register for the program at the same time and in the same manner as they enroll in their other college courses and there is NO MILITARY OBLIGA- TION. During their freshmen and sophomore years, students enroll in the General Military Course (GMC). They then may compete for entry into the Professional Officer Course.

The University curriculums are required and recommended courses in the required areas of concentration. Courses in the first designated fields of study are required of students seeking a commission in the United States Army.

a. One course in written communications.
b. One course in human behavior.
c. One course in military history.
d. One course in a foreign language (scholarship students only).
e. One course in Math Reasoning.
f. One course in Computer Literacy.

Courses in management and national security studies are strongly recommended but are not required.

Military Science Curriculum

Normal Course Hours Credit

FBRN
Military Science 110, 120...........................................5
Military Science 210, 220...........................................5
Junior
Military Science 310, 320..........................................8
Summer
Military Science 310, 320..........................................8
Summer
Military Science 410, 420..........................................8
Senior
Military Science 410, 420..........................................8

Total: 30 hours

Basic Military Studies - Practicum

Summer
Military Science 320..............................................4
Senior
Military Science 410, 420..........................................8

Total: 24 hours

Advanced Placement

Senior
Military Science 310 - 320..........................................8
The Reserve Officers Training Women in AFROTC (POC) which is normally taken during the last two years of college. Selection into the POC is highly competitive and is based on being medically qualified; physically fit; term and cumulative grade point averages; scores achieved on the Air Force Officer Qualifying Test (AFOQT); successful completion of a four-week field training course at an Air Force base; and the recommendation of the Professor of Aerospace Studies.

The Two-Year Program: The Two-Year Program consists of the Professional Officer Course (POC), the last two years of the Four-Year Program. It is designed to provide greater flexibility to meet the needs of students desiring Air Force opportunities. The basic requirement is that applicants have two academic years remaining at either the undergraduate or graduate levels, or a combination of both. After being nominated by the Professor of Aerospace Studies, applicants seeking enrollment in the Two-Year Program are evaluated using the same criteria used for the four-year program except the length of the field training course is six weeks. Additionally, every POC applicant must agree to take and successfully complete a course in mathematical reasoning or its equivalent before graduation and commissioning. Courses previously completed may be used to satisfy this requirement.

Since the processing procedure must be completed several months in advance of intended enrollment, interested students must apply early. Applications should be made in person to the Department of Aerospace Studies.

AFROTC develops students under the "whole person" concept. Cadets must maintain academic standards while taking on the additional responsibilities of AFROTC. These responsibilities include being physically fit, of good moral character, acting responsibly and with integrity. Cadets normally organize about two hours per week of physical activity outside of class requirements.

WOMEN IN AFROTC

AFROTC at The University of Tennessee has been coeducational since 1970. Women complete the same courses as men and have the same opportunities. Upon successful completion of the AFROTC program and degree requirements, women are commissioned in the Air Force as Second Lieutenants. Pay and job opportunities are equal for women and men. Virtually all career fields in the Air Force are open to women, including pilot and navigator positions.

SCHOLARSHIP PROGRAM

Air Force ROTC Scholarships are available to qualified applicants in both the Four- and Two-Year Programs. Each scholarship provides full tuition, laboratory and incidental fees, and book fees. In addition, scholarship cadets receive a non-taxable $100 stipend each month during the school year while on scholarship status.

High School Students: Competitive four-year scholarships are available to high school male and female students who enroll in certain scientific and engineering career fields. Some scholarships are also available to male and female students who enroll in certain non-technical majors. Four-year scholarship opportunities are contained in the Air Force ROTC Four-Year College Scholarship Program Application Booklet. Booklets may be obtained directly from Air Force ROTC Public Affairs, Maxwell, AFB, AL 36112.

College students: Other scholarship opportunities exist for students already in college. Three- and two-year scholarships are available on a competitive basis and the student must have at least four, three, or two undergraduate or graduate years of study remaining in order to compete. Applications for these scholarships should be made directly to the Department of Aerospace Studies.

PAY AND ENTITLEMENTS

All cadets enrolled in AFROTC are furnished texts and uniforms. Professional Officer Course cadets receive a subsistence allowance of $100 per month during the academic year. In addition they are paid mileage to and from field training, plus pay commensurate with active duty rates while at field training.

ACTIVE DUTY COMMITMENTS

Commissioned graduates going into non-flying duties will be required to serve four years of active duty. Those graduates going into pilot assignments will be required to serve eight years active duty after completion of pilot training. These graduates going into navigator assignments will be required to serve six years active duty after completion of navigator training.
Advanced Studies

THE COLLEGE OF LAW
Richard S. Wirtz, Dean
Mary Jo Hoover, Associate Dean
H. Lawrence Hessom, Associate Dean

The College of Law has, since 1890, continuously sought to provide high quality legal education in a University community. The college offers a professional curriculum leading to the degree of Doctor of Jurisprudence. Two dual degree programs are available in conjunc-

Information regarding admission, financial aid, academic policies, extracurricular activities, and student services is available in the "College of Law Bulletin." A copy may be obtained from the Admissions Office, The University of Ten-

The College of Veterinary Medicine, established in 1974, offers a Doctor of Veterinary Medicine (D.V.M.) with a major in Comparative and Experimental Medicine. Residency training programs in the various clinical specialties are also offered. The Graduate Catalog contains complete information concerning the programs in the college. Forms and instructions for making application for admission may be obtained from 201 Student Services Building, The University of Tennessee, Knoxville, Tennessee 37996-1800. Applications must be received by January 15 of the year of requested admission.

COLLEGE OF VETERINARY MEDICINE
Michael Shires, Dean
James J. Brace, Assistant Dean

The University of Tennessee is the official land-grant institution for the State of Tennessee with its main campus in Knoxville. It is a comprehensive research-oriented institution offering a wide range of graduate programs leading to the Master's and doctoral degrees. The University offers Master's programs in 86 fields of specialization and doctoral work in 52. Approximately 6,500 graduate students are enrolled, both on and off campus. The Graduate School administration develops policies to implement the policies formulated by the Graduate Council, and has primary responsibility for Graduate School admissions and records. Much of the day-to-day administration of graduate study is conducted by department heads or faculty advisors and committees responsible for particular programs. In addition to departmental units, numerous interdisciplinary programs, institutes and centers have been developed on campus and in loca-

The Graduate School brings together faculty and graduate students as a community of scholars with a common interest in creative work and advanced study. Graduate programs are available to students desiring full-time study toward the Master's and doctoral degrees or professional certification, those interested in continuing education for updating and broaden-

THE GRADUATE SCHOOL
C.W. Miniel, Associate Vice Chancellor for Deans and Dean of The Graduate School
Linda R. Peiter, Associate Dean of The Graduate School
Michael W. Sington, Assistant Dean of The Graduate School
Diana Lopez, Director, Graduate Admissions and Records
S. Kay Reed, Graduate Recruitment Coordinator

The University of Tennessee is in Knoxville, Tennessee 37996-1800. Complete application should be received before February 1 of the year of requested admission.

GRADUATE SCHOOL OF BIOMEDICAL SCIENCES
Raymond A. Popp, Director

FULL-TIME FACULTY
Professor:
D.E. Olins, Ph.D. (Rockefeller). Research Professor:
A.L. Olins, Ph.D. (New York). Research Assistant Professor:
Robert S. Foulke, Ph.D. (Duke). Ubbachscher, Ph.D. (Pennsylvania). The Graduate School of Biomedical Sciences offers programs leading to the Master of Science and Doctor of Philosophy degrees. The School publishes supplementary informa-

The University of Tennessee, Knoxville, Tennessee 37996-0200 or call (615) 974-3251.

GRADUATE SCHOOL OF BIORENEWABLE SCIENCES
Raymond A. Popp, Director

FULL-TIME FACULTY
Professor:
D.E. Olins, Ph.D. (Rockefeller). Research Professor:
A.L. Olins, Ph.D. (New York). Research Associate Professor:
Lan-Young Chang, Ph.D. (Yale). Research Assistant Professor:
Robert S. Foulke, Ph.D. (Duke). Ubbachscher, Ph.D. (Pennsylvania). The Graduate School of Biorenewable Sciences offers programs leading to the Master of Science and Doctor of Philosophy degrees. The School publishes supplementary informa-

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The University of Tennessee, Knoxville, Tennessee 37996-0200 or call (615) 974-3251.
COMPARATIVE AND EXPERIMENTAL MEDICINE JOINT GRADUATE PROGRAM

L.N.D. Piguet, Director

Coordinating Committee: J.E. Fuhr; J.E. Lawler; C. Lozzio; L.N.D. Piguet; M. H. Sims.

The Comparative and Experimental Medicine degree program (M.S. and Ph.D.) is jointly administered by the College of Veterinary Medicine, the College of Medicine/Knoxville Unit, and the University of Tennessee, Knoxville. The Graduate Program is intended to prepare students for teaching and/or research careers in the health sciences, emphasizing the comparative approach to the study of pathology, immunopathology, hematology, infectious diseases; aberrant metabolism, and genetic disorders. For complete information, refer to the Graduate Catalog.

ENERGY, ENVIRONMENT, AND RESOURCES CENTER

Jack N. Barkerbus, Acting Director

The Energy, Environment, and Resources Center, 329 South Student Union Corps, was created in 1973 to encourage interdisciplinary research directed at problems related to energy and the environment. The Center involves faculty and students in research and public service projects; manages research and development projects that involve several disciplines; and assists government and industry in specific problems related to energy, environmental, resource, and technology policy issues. The Center has a close working relationship with Oak Ridge National Laboratory and the Tennessee Valley Authority. Sponsors include federal and state agencies, industries, and foundations.

GRADUATE SCHOOL OF LIBRARY AND INFORMATION SCIENCE

Jose-Marie Griffiths, Director

Professors: G.E. Elass, M.L.S.; Kent State; Jose-Marie Griffiths, Ph.D. London (UK); G.R. Pursell, Ph.D. Case Western Reserve; R. Wilson (Emeritus); Ph.D. Michigan.

Associate Professors: M.H. Karnabrock, Ed.D. Georgia; J.M. Jolley; Ph.D. Illinois; G.M. Sinkankas, Ph.D. Pittsburgh.

Assistant Professors: R.A. Palmquist, Ph.D. Syracuse; R. Pollard, Ph.D. Brunel (UK).

The Graduate School of Library and Information Science provides a program leading to the preparation of librarians and information scientists for work in any type of libraries and information centers.

THE UNDERGRADUATE PROGRAM

The undergraduate library education program leads to a minor in the College of Education or the College of Liberal Arts. Students in other colleges may elect a minor in library and information science with the approval of their faculty advisors. The undergraduate minor is planned for the following groups of people: (1) students preparing for positions as school librarians in elementary and secondary schools; (2) teachers who wish to become better acquainted with books and other instructional materials; (3) school administrators who wish to explore the place of the library in the instructional program; (4) prospective candidates for the graduate program in library education; (5) persons seeking a position at the level of Library Associate as described in the job description in the professional area of the American Library Association.

The minimum requirements for a full-time position as school librarian in the state of Tennessee (both elementary and secondary) can be met through fulfilling the requirements for teacher certification and completion of the following library courses: 330, 340, 475, 510, 530, 551, 564, and 574.

THE GRADUATE PROGRAM

The goal of the program is to prepare graduates to function effectively in libraries and information centers. For further information, write for a Graduate Catalog.

LIFE SCIENCES

Coordinating Council: H. L. Sharer (Chair); Physiology: G. Vaughan; Biotechnology: D.K. Deatle; Cellular, Molecular and Developmental Biology: W. Backer; Environmental Toxicology: W.R. Farkas; Ethology: R.S. Sosders; Plant Pathology and Genetics: O.J. Schwarz.

The programs leading to the M.S. and Ph.D. degrees in Life Sciences are interdisciplinary and integrate students from various disciplines to form the core of a program designed for individuals interested in research. The Graduate Program in Life Sciences supports studies and research in the following concentrations: physiology/biotechnology (M.S. only); cellular, molecular and development biology; ethology; environmental toxicology; and plant physiology and genetics. Students interested in any of these areas should contact the chair of Life Sciences or the Director of the area of interest. For complete information, refer to the Graduate Catalog.

SPACE INSTITUTE

Jost W. Muehlauser, Interim Vice President K.C. Reddy, Dean for Academic Affairs

The Space Institute is a graduate education and research institution established in 1964 on a 365-acre lakeshore campus in Middle Tennessee. UT/Space Institute has evolved into an internationally recognized institution for graduate study and research in aeronautics, astronautics, astrophysics, computer science, and other areas of aerospace and space flight. The Institute has a joint program in astronautics with the Air Force Arnold Engineering Development Center. The faculty, research, and research facilities are available at Arnold Center through appropriate Clearances. Information about the Institute may be obtained from the Dean or from the University of Tennessee Space Institute, Tullahoma, Tennessee 37388.
The Center, 357 South Stadium Hall, is a University-level organization administratively positioned within the Office of The Associate Vice Chancellor for Research at UT, Knoxville. The Center’s staff is presently organized into four research divisions: Logistics and Systems Analysis; Infrastructure and Environment; Safety and Traffic Operations; and Mobility Services and Policy.

The Center has three goals. The first is to conduct a program of research in transportation that is recognized for its excellence, comprehensiveness, innovation, productivity, and national leadership. The second is to develop and sustain the technical expertise for high quality transportation research by the faculty and students within the various departments and colleges of UT. The third goal is to serve the transportation research, service, and training needs of state and local government, business, and industry in Tennessee, the southeast region, and the nation.

WATER RESOURCES RESEARCH CENTER

Bruce A. Tschantz, Acting Director

The Water Resources Research Center, 428 South Stadium Hall, is a federally designated institute for the conduct of water research for the state. The purposes of the Center are: (1) to assist and support all the academic institutions of the state, public and private, in pursuing water resources research which addresses a wide range of problems of interest to the state, region, and nation; (2) to provide information, dissemination and technology transfer services to state and local government bodies, academic institutions, professional groups, environmental organizations, and others, including the general public, who have an interest in water resources matters; and (3) to promote education in fields related to water resources and to encourage the entry of promising students into careers in these fields.
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<th>College of Agriculture</th>
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<tr>
<td>Agricultural and Extension Education</td>
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<td>Agriculture Economics</td>
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<td>Agricultural Engineering</td>
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<td>Agriculture Engineering Technology</td>
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<td>Animal Science</td>
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<td>Entomology and Plant Pathology</td>
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<td>Food Science and Technology</td>
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<td>Forestry</td>
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<td>Ornamental Horticulture and Landscape Design</td>
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<td>Wildlife and Fisheries Science</td>
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<td>Management Science</td>
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<td>Statistics</td>
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<td>Economics</td>
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<tr>
<td>Management Science</td>
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<td>Statistics</td>
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<td>College Student Personnel</td>
<td>M.S., Ed.D., Ed.D.</td>
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<td>Curriculum and Instruction</td>
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<td>Education</td>
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<td>Educational Administration and Supervision</td>
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<td>Human Performance and Sport Studies</td>
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<td>Public Health</td>
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<td>Recreation &amp; Leisure Studies</td>
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<td>Rehabilitation Counseling</td>
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<td>Safety Education &amp; Survival</td>
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<td>Technological &amp; Adult Education</td>
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<td>Polymer Engineering</td>
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<td>Feeding and Lodging Administration</td>
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<td>Interior Design</td>
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<td>Nutrition</td>
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<td>Textiles, Retailing and Consumer Sciences</td>
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<td>Aviation System (UTSI only)</td>
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<tr>
<td>Computer and Experimental Medicine</td>
<td>M.S., Ph.D.</td>
</tr>
<tr>
<td>Ecology</td>
<td>M.S., Ph.D.</td>
</tr>
<tr>
<td>Industrial and Organizational Psychology</td>
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<td>Life Sciences</td>
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<td>Management Science</td>
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<th>College of Liberal Arts</th>
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<td>比較文学</td>
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<td>Social Work</td>
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<td>(Memphis, Nashville, and Knoxville)</td>
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<td>Biomedical Sciences</td>
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Continuing Education and Public Service

Associate Vice Chancellor and Dean of Continuing Education and Public Service: LaVerne B. Lindsey, Ed.D. Mississippi State University

Associate Dean of Credit Programs: Sam G. Bink, Ed.D. Tennessee

Associate Dean of Non-Credit Programs: Norvel L. Burkett, Ed.D. Mississippi State University

Director of Administrative Systems: Robert H. Jackson, M.B.A. Tennessee

Continuing Education and Public Service is the administrative unit of UT, Knoxville that extends academic courses, educational services, and other programs to the non-traditional student. While most people who participate in the programs are adults, persons of all ages and academic levels can be counted among the people who enroll in the credit and non-credit offerings of the Division.

Programs and courses are based upon student needs and desires, whether for self-motivated learning, for leisure and recreational programs, or for professional promotion, certification, licensure, reclassification, or mid-career changes. The Division provides these educational opportunities through program coordination and development of the five departments: Department of Conferences, Department of Independent Study, English Language Institute, Non-Credit Programs, and the University Evening School. Specific programs and services of each department are described on the following pages.

The Administrative Services office provides centralized and technical support services to the Division, its academic associates and clients. Areas of support include Information Management, Marketing and Public Relations, and Telecommunications and Media.

DEPARTMENT OF CONFERENCES

Director: Norval Burkett, Ed.D. Mississippi State University

Assistant Director: Robert Gibbs, B.S. Tennessee

Program Managers:
- J.R. Keener, B.A. Temple University
- Glenn Trantham, B.S. Tennessee

Conference Services Supervisor: M. Puddy

UT Conferences, housed in the Conference Center in downtown Knoxville, provides management services to individuals or groups who desire to hold a high quality convention, conference or meeting anywhere in the state of Tennessee or across the United States.

Utilizing the new Conference Center, statewide University system facilities, major hotels and convention centers across Tennessee and the U.S., the department assists University organizations and outside groups in designing programs to meet the needs of clients. The staff provides professional guidance and management for small group meetings as well as for major conventions of several thousand delegates. Consulting and support services range from planning and budgeting to lodging, food services, speakers, promotional materials, meeting rooms and all details to assure a successful event.

Programs which meet appropriate criteria qualify for Continuing Education Credits, which become a permanent record maintained by the Division. Transcripts are available upon written request. The department cooperates with UT CTV to provide teleconferencing services for the University and community. Professional groups and interested individuals may arrange interactive videoconferencing to locations worldwide. Arrangements may also be made to receive (downlink) and to transmit (uplink) programming via satellite capabilities.

Additional information may be obtained from UT Conferences, P.O. Box 2648, Knoxville, TN 37901, or by calling (615) 974-0250, FAX (615) 974-0264.

ENGLISH LANGUAGE INSTITUTE

Director: Dale A. Myers, Ph.D., Florida

Assistant Director: Jan G. Hill, M.S., Tennessee

Instructors:
- Anwar F. Alazw, M.Ed., Tennessee
- Mostafa Rahbar, M.Ed., Tennessee

The English Language Institute (ELI) is a non-credit language-study program of The University of Tennessee, Knoxville. It is designed to assist students in their pursuit of career goals or educational objectives in the United States.

The ELI offers intensive courses for the improvement of student skills in the English language. International students, visitors, and professionals have successfully learned English through study in the ELI. The courses emphasize the development of communicative ability in listening, speaking, reading, and writing. Faculty members are trained in teaching English to speakers of other languages with differing national backgrounds and varying proficiency in English.

The curriculum consists of eight proficiency levels: 101-106, Introductory through Pre-Academic. Each level meets 4-5 periods each day with classes from the following:

- English Structure (Grammar)
- Listening Comprehension
- Writing/Composition (Rhetoric)
- Conversation Practice for Communicative Purposes
- Reading and Vocabulary

In addition, classes also assist students in pronunciation, test-taking strategies, U.S. culture orientation, and university study skills. Additional information may be obtained at 907 Mountcastle Street; telephone (615) 974-3404, FAX (615) 974-2027.
NON-CREDIT PROGRAMS

Director: Cheryl LeBarge, M.A. Momenorial University, New Newfoundland, Canada

Coordinator: N. Dahlin-Brown, M.S., Tennessee

NON-Credit Programs provides a comprehensive array of courses and seminars designed to serve the needs of individuals and businesses in Knoxville and surrounding communities. Most courses are offered on a quarterly basis at the University campus and at selected off-campus locations. Courses are taught by University faculty and consultants who have gained a reputation for certain competencies or technical skills. Courses also are designed to meet the needs of each individual group.

Courses range from computer literacy and management development to gardening, exercise and music. There are also courses which meet requirements of the state or other agencies for certification in fields such as real estate, aviation, CEGE (Certified Employee Benefits Specialist), and CCA (Certified Credit Specialist), and CCA (Certified Credit Administrator). The department co-sponsors the Smoky Mountain Field School with the Great Smoky Mountains National Park. Continuing Education Units (CEUs) are awarded to students satisfactorily completing selected courses and seminars offered by the department.

For further information or to register, contact Non-Credit Programs, 600 Henrey Street, Suite 105, Knoxville, TN 37902 or telephone (615) 974-0150 or 1-800-294-8885.

UNIVERSITY EVENING SCHOOL

Director: S.C. Bits, Ed.D., Tennessee

Associate Directors: J.R. England, Ph.D., Tennessee
M.K. Warden, Ed.D., Tennessee

Assistant Directors: L.J. Jurand, M.S., Tennessee
D.E. Ransbottom, M.S., Tennessee

Assistant Professor: C.B. Mamantov, Ed.D., Tennessee

Director, Oak Ridge Resident Graduate Program: S.C. Bits, Ed.D., Tennessee

Assistant Director, Oak Ridge Resident Graduate Program: J. HOWELL, M.S., Tennessee

The University Evening School, in conjunction with academic colleges and departments, administers credit programs for those students attending classes on and off campus in a variety of traditional formats. Support services are provided to assist students in their educational pursuits.

On Campus Evening Program: Classes are offered during late afternoon and evening hours for those students who work or have other commitments during the day. The following undergraduate degrees are available:

- College of Business Administration - Bachelor of Science in Business with majors in Accounting, General Business, Economics, Finance, Public Administration, Management, and Marketing.
- College of Liberal Arts - Bachelor of Arts with majors in Economics, Mathematics, Political Science, Psychology, Public Administration or Sociology.
- College of Education - Bachelor of Science with majors in Human Services and Technological and Adult Education with a concentration in Industrial Training.

Some departments within the Colleges of Business Administration, Education, and Engineering offer all courses required for an advanced degree during the evening. The College of Education offers an M.S. in Technological Education with concentrations in Adult Education, Business and Marketing Education, Industrial Education, Industrial Training, and Vocational Technical Education. The College of Communications offers the M.S. which can be completed in the evening.

Mini-Term: The University Evening School offers a Mini-Term during May. Students may enroll in one concentrated credit course during the Mini-Term period.

Courses and instructors listed for the Mini-Term are carefully selected to reflect a broad academic base of utilized offerings suited to an intensive program of study.

Off-Campus Programs: The Evening School conducts undergraduate and graduate courses in many locations away from the Knoxville campus. The courses are scheduled in response to requests and identifiable needs of adult part-time students who live some distance from the UT, Knoxville location. All course offerings and instructors are approved by the appropriate academic departments, and the credit awarded is resident credit.

The College of Education (Off-Campus) offers a Bachelor of Science in Education with a major in Industrial Education (Industrial Training). The following graduate degrees programs are available: Doctor of Education with a major in Educational Administration and Supervision (Chattanooga); Master of Science in Education with a major in Technological and Adult Education (Statesville); Master of Science in Library and Information Science (Memphis).

The Evening School administers an off-campus center at Oak Ridge where courses leading to advanced degrees in psychology and engineering are offered. At Oak Ridge, Graduate Study Programs in Chemistry, Chemical, Electrical and Industrial Engineering with a concentration in Engineering Management are offered. Courses are offered in Nuclear Engineering with a concentration in radiation protection, Environmental Engineering with a concentration in hazardous waste management, Computer Science, Mathematics, Physics, Chemistry, Public Health and Mechanical Engineering, Distance Education. The Evening School in concert with several academic departments at UTV, offers interactive telecourses which allow students at distant locations to see and participate with the UT campus in Knoxville. Graduate courses in various disciplines are transmitted to several sites through use of the advanced technology. Offerings are expected to increase through the 1990s.

Virtual courses in Engineering and other fields are sent to a variety of sites in Tennessee and elsewhere to accommodate UT students pursuing advanced degrees at distant locations.

Workshops: Credit workshops are coordinated through various academic departments of the University and provide students the opportunity to participate in short periods of intensive study. As a result, students may earn college credit within a shorter time frame than through the traditional semester system.

Workshops offer flexibility of timing, location, and content. Summer workshops are particularly popular with teachers and school administrators. Although most workshops are held on the UT, Knoxville campus, geography is not a limiting factor.

Student Services: A comprehensive program of services is provided by the University Evening School for both on- and off-campus students.

Registration: Registration by mail, phone, or in person is afforded a convenience to former Evening School students. Secondary registration at both on- and off-campus locations is also available.

Advising: An advising counseling program is available for the benefit of all evening students who need assistance with academic or related matters. The program can accommodate students during regular daytime hours (8:00-5:00) and in the evenings by appointment, as well as at various centralized campus locations.

The College of Liberal Arts, Business, Education, and Engineering also cooperates with the Evening School in providing extended hours several times a week to advise students.

Financial Aid: Evening School students who encounter difficulty in pursuing academic goals because of financial restrictions may be eligible for assistance through the Pell Grant in the Evening School Office.

ELDERLY AND DISABLED PERSONS

Legislation gives Tennessee citizens who are 60 years of age or older, or those who are totally disabled the opportunity to attend courses at the University at no charge on an audit, space available basis. Legal verification of either of these conditions is required for enrollment. Students who are 65 or over, or who are totally disabled, and who desire to receive UT credit for their courses, may pay a reduced charge of $7.50 per credit hour up to a maximum of $75 for a full-time load. Registration for day and evening classes must be completed by the Evening School.

The University Evening School Office is located at 411 Communications and University Extension Building on the UT, Knoxville campus and may be reached by calling (615) 974-5831 or DOE 3-5831. All inquiries concerning these programs are welcome.

DEPARTMENT OF INDEPENDENT STUDY

Director: David F. Holden, Ph.D., Kansa

Assistant Director: Dorothy J. Miller, Tennessee State University, New York (Stony Brook)

The UT, Knoxville Department of Independent Study administers the program of Independent Study for correspondence for all campuses of the University. The program includes college
Credit courses, high school courses (for credit or for college entrance requirements), and non-credit courses. College credit correspondence courses are based on regular UT campus courses, and the credit is recorded on the student's UT transcript. High school courses are based on the curriculum frameworks of the Tennessee Department of Education. Non-credit courses can be taken to meet personal or professional education goals. The courses utilize videotapes, audiotapes as well as traditional print materials. Through this program, the University of Tennessee is able to overcome geographic limitations in performing its services as Tennessee's land-grant institution of higher education. The program is open to UT students and to anyone who has the educational preparation required for a particular course. UT students must have the approval of their college advising center before they enroll in college credit courses. With the cooperation of a UT instructor, independent study through directed readings may also be arranged through this department for courses not listed in the Independent Study catalog.

The Department of Independent Study also serves as the Tennessee state office for Elderhostel, an education and travel program for people over 60. One-week, non-credit Elderhostel programs are available throughout Tennessee, the U.S., and many countries overseas. For information and enrollment forms for correspondence courses or Elderhostel, contact the Department of Independent Study/Continuing Education and Public Service, 420 Communications Bldg., The University of Tennessee, Knoxville, TN 37996. Telephone: (615) 974-5134.

The following correspondence courses are offered through the Department of Independent Study. For full course descriptions refer to the listings in the Undergraduate Catalog. For more information and enrollment forms, contact the Department of Independent Study.


Anthropology 110 Human Origins; 130 Cultural Anthropology;

Child and Family Studies 110 Introduction to Early Childhood Education; 240 Human Sexuality;

Electrical and Computer Engineering 201K Circuits I;

English 101 English Composition I; 102 English Composition II; 201 British Literature I; Beowulf through John Keats; 202 British Literature II: Worldworth to the Present; 231 American Literature I: Colonial Era to the Civil War; 232 American Literature II: Civil War to Present; 305 Introduction to Shakespeare;

Forestry, Wildlife and Fisheries 211K Introduction to Forestry, Wildlife and Fisheries;

French 111 Elementary French, First Semester; 112 Elementary French, Second Semester; 211 Intermediate French, First Semester; 212 Intermediate French, Second Semester; 301 Elements of French for Upper Division and Graduate Students, First Semester; 302 Elements of French for Upper Division and Graduate Students, Second Semester;

Geography 101 World Geography, First Semester;

Health 110 Personal Health and Wellness; 400 Consumer Health; 405 Death, Dying, and Bereavement;

History 151 Development of Western Civilization; 152 Development of Western Civilization; 251 History of the United States; 252 History of the United States; 449 History of Tennessee;

Mathematics 115 Statistical Reasoning; 119 Precalculus A; 121 Calculus A; 122 Calculus B; 130 Precalculus I; 141K Calculus I; 142K Calculus II; 201 Structure of the Number System; 202 Probability, Statistics and Elementary Geometry; 231 Differential Equations I; 241 Calculus III;

Philosophy 345 Medical Ethics;

Political Science 101 United States Government and Politics;

Psychology 110 General Psychology; 210 Biological Basis of Behavior; 220 Behavior and Experience; 330 Child Psychology; 331 Learning and Thinking; 332 Abnormal Psychology; 333 Social Psychology; 351 Research Methods in Psychology; 352 Research Methods in Psychology; 358 Social Psychology; 359 Research Methods in Psychology;

Religious Studies 326 Images of Jesus; 345 Medical Ethics;

Sociology 100 General Sociology; 110 Social Problems and Social Change; 300 Criminology; 351 Juvenile Delinquency; 353 The City; 415 Sociology of Aging; 451 Criminal Justice;

Spanish 111 Elementary Spanish, First Semester; 112 Elementary Spanish, Second Semester; 211 Intermediate Spanish, First Semester; 212 Intermediate Spanish, Second Semester;
ACCOUNTING (009)

201 Principles of Financial Accounting (3) Introduction to financial accounting theory and practice with emphasis on preparation and reporting of financial information. Prerequisite to all other courses in accounting. Prereq: Mathematics 110 or 121.

202 Principles of Managerial Accounting (3) Introduction to managerial and cost accounting concepts with emphasis on use of accounting data by managers in planning operations, controlling activities, and decision making. Prereq: 201. E

311-312 Intermediate Financial Accounting (3,3) The analysis and use of financial statements. Emphasis is on the recording and measurement of business transactions and financial processes. Topics include cost behavior, cost prediction, budgeting, financial statement analysis, and responsibility accounting. Prereq: 202 or 311; and with a grade of C or better and management 330 or 332. E

313 Cost and Managerial Accounting (3) Analysis of costing methods, dual costing, marginal costing, and absorption costing. Techniques include cost behavior, cost prediction, budgeting, and responsibility accounting. Prereq. 302. Prereq: Core. Management 303. B

341 Accounting Information Systems (3) Developments and use of accounting information systems for collection, organization, and distribution of economic information about organizations for internal and external users. Emphasis on analysis of internal control system, information processing, and accounting control. Major exam may be given during the last class meeting. F, Sp

400 Special Topics (1) Critical consideration of selected current topics. May be selected from managerial cost, financial, systems in auditing. May include written reports and cases. Prereq: 312, 321, and 341 and consent of instructor.

411 Auditing (3) Role of auditing in society, operational auditing, professional auditing standards, auditor's legal responsibilities, audit evidence and reporting, role of internal control and statistical sampling in auditing, application to specific transaction cycles. Prereq: 312 with a grade of C or better. F, Sp

414 Advanced Auditing (3) Issues and alternatives in advanced theory and problem areas involving financial accounting theory, partnership accounting, business combinations, consolidated financial statements, and non-profit accounting. Major writing requirement. Prereq: 312 with a grade of C or better. E

416 Federal Income Taxation (3) Problem-solving techniques for taxation of corporations and partnerships. Topics include capital gain loss, excess credits, and tax planning. Prerequisites: 202 and a grade of C or better. Consent of instructor.

480 Advertising Issues (3) Examination of the Role of advertising in society and its impact on the economy, social, cultural and ethical aspects of advertising. Emphasizes an in-depth and in-depth examination of different viewpoints. Prereq: 340. F, Sp

480 Special Topics (3) Detailed study of a specialized area in advertising. Topics vary by semester and instructor. Consent of instructor.

490 Special Topics (3) Detailed study of a specialized area in advertising. Topics vary by semester and instructor. Consent of instructor.

492 Advertising Practicum (1) Experience in a functional area of advertising. Hours arranged with advertising manager. Prereq: 340 with a grade of C or better.

492 Advertising Practicum (3) Experience in a functional area of advertising. Hours arranged with advertising manager. Prereq: 340 with a grade of C or better.

494 Independent Study (1-4) Individual study in a specialized area under the supervision of a faculty member. Prereq: Consent of instructor.

AFRICAN AND AFRICAN-AMERICAN STUDIES (022)

201 Introduction to African-American Studies (3) Multidisciplinary approach to the African-American experience through the Civil War period which examines such issues as traditional African societies, the institution of slavery, the rise of free African American life, and the events that led to the boundary of African-American protest traditions, and the Civil War and Reconstruction.

202 Introduction to African-American Studies (3) Multidisciplinary approach to the African-American experience from the Civil War through the Civil Rights era with emphasis on such topics as African-American history, sociology, and urban sociology, the African-American church and education, and African-American intellectual and political movements.

310 Introduction to African-American Music (3) (Same as Music History 310.)

314 Peoples and Cultures of Africa (3) (Same as Anthropology 314.)

315 African-American Anthropology (3) (Same as Anthropology 315.)

316 Caribbean Cultures and Societies (3) (Same as Anthropology 319 and Latin American Studies 319.)

322 Minority Group Politics in the United States (3) (Same as Political Science 322.)

340 Race and Ethnicity (3) (Same as Sociology 340.)

360 History of Jazz (3) (Same as Music History 360.)

362 African-American Religion in United States (3) (Same as Religious Studies 362.)

363 Topics in African-American Religion (3) (Same as Religious Studies 363.)

364 Contemporary Issues in African-American Education (3) (Same as Anthropology 353.)

365 Black English/Standard English controversy. Writing- 420 Families: Race, Class and Culture (3) (Same as Child and Family Studies 420.)
Agriculture Courses of Instruction

421 Comparative Studies in African and African-American Societies (3) Comparative studies of African and African-American societies in such areas as education, religion, and social stratification. Includes the re-
spected view African Americans and others have of each other and the concept of African American identity. Writing emphasis course. (See Social 421.)

422 History and Philosophy of African-American Education (3) Focuses on attempts by African-Ameri-
cans to secure an education for themselves and their children from the wire of slavery to the Supreme Court decision in 1854. Examines black perceptions of the importance of education and special obstacles confronting black who seek education on the primary, secondary, college, or professional level. Writing emphasis course.

431 Research Seminar in African-American Studies (3) Teaches basic approaches to the research process and development of research skills. Students design and implement a research project of their choice in the field of African-American Studies. Prereq: 202-202 and senior standing. Writing emphasis course.

432 Comparative Poverty and Development (3) (Same as Sociology 442.)

445 The African-American Experience From the Co-

19th Century to the Present (3) (Same as History 445.)

450 Issues and Topics in African-American Studies (3) Topics vary. May include research projects, issues, and individuals from the fields of African-American Studies. May be repeated. Maximum 6 hours.

452 African Political Studies (3) (Same as Political Sci-
ence 452.)

461 African Prehistory (3) (Same as Anthropology 461.)

473 Black Male in American Society (3) Examines historical images, myths and stereotypes which have developed concerning black men in American society. Includes the impact of such critical factors as Black women, violence, concepts. and ideals in the life of the white, working white female, homophobia, national-

480 Black Communities in Urban America (3) (Eval-
uate and discuss the challenges of Black urban communi-
dies, emphasizing the major institutions: the church, the family, the school system. This course examines the political, economic, and social factors of the United States and includes the influence of Black in the development of American institutions and mechanisms, ethi-

490 African-American Women in American Society (3) (Focus on historical and contemporary socio-

dies. Factors include sex roles, the way different cultures view African-American women, place, and historical events. (Requires permission of instructor). Prereq: Economics 201 and Junior standing. Writing emphasis course.

492 Agricultural and Extension Education Intern-
ships (3) Directed work experience in approved off-campus agencies, agricultural business, or agricultural related agencies. (Prerequisite: 210 or consent of instructor.) F, Sp.

492 Off-Campus Internship (1-3) Supervised experi-
ence in off-campus agencies or the marketing of agricultural products. (Prerequisite: 210 or consent of instructor.) F.

493 Independent Study (1-3) Individualized study of a spe-
cific problem. (Prerequisite: 210 or consent of instructor.) F, Sp.

AGRICULTURE AND EXTENSION EDUCATION (404)

201 Field Experience in Agricultural Education (3) Field experience in public school programs in agricul-
tural and related disciplines. (Prerequisite: 201-201 and consent of instructor.) F, Sp.

204 Agricultural Experience, Leadership and Adult Programs (3) Developing an extended personal experi-
ence programs, including leadership development activities in a team and group environment. Prereq: 201-201 and methods for adult education in agriculture. F

303 Transport Processes in Biological Systems (3) Analysis of biophysical systems with emphasis on heat, mass and energy transfer. Thermodynamics, conduction and convection/hybrid, plus mass transfer. F.

334 Processing Food and Biological Materials (3) Preparation and handling of biological materials for physical properties, moisture and water content, evaporation, preservation and handling, fermentation and storage, protein structure and nutritional significance. Prereq: 311-311 and 312-312. F.

336 Student Teaching in Agricultural Education (8) Full-time teaching practice in an approved high school. On the basis of successful teaching performance, students are allowed to select a field of specialization; required training for non-farm sectors; models and tools for analyzing rural resource; equipment; financial and environmental quality; alternative public works; methods for influencing undecided rural residents in improving their environmental quality. Prereq: 210 or consent of instructor. F.

337 Off-Campus Internship (1-3) Supervised exper-
ience in off-campus agencies or the marketing of agricultural products. (Prerequisite: 210 or consent of instructor.) F.

363 Independent Study (1-3) Directed individual or group study. F

410 Seminar in Agricultural Economics and Busi-
nescapes in the field of specialization; required training for non-farm sectors; models and tools for analyzing rural resource; equipment; financial and environmental quality; alternative public works; methods for influencing undecided rural residents in improving their environmental quality. Prereq: 210 or consent of instructor. F.

413 International Agricultural Trade and Marketing (3) Discusses the international trade relations between agricul-
tural and forest-related products. (Prerequisite: 311-311 and 312-312.) F.

440 Agricultural and Trade Policy (3) Values, goals, and policy processes; historical development and current characterizations of commodity, credit, food, and trade policy relationship between domestic and international agricultural policy. Prereq: 210-210 and 311-311. F.

450 Agricultural Price Analysis (3) (Same as Economics 311.)

452 African-American Women in American Society (3) (Focus on historical and contemporary socio-
dies. Factors include sex roles, the way different cultures view African-American women, place, and historical events. (Requires permission of instructor). Prereq: Economics 201 and Junior standing. Writing emphasis course.

455 Independent Study (1-3) Individualized study of a spe-
cific problem. (Prerequisite: 210 or consent of instructor.) F, Sp.

461 African Prehistory (3) (Same as Anthropology 461.)

473 Black Male in American Society (3) Examines historical images, myths and stereotypes which have developed concerning black men in American society. Includes the impact of such critical factors as Black women, violence, concepts. and ideals in the life of the white, working white female, homophobia, national-

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493 Independent Study (1-3) Individualized study of a spe-
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AGRICULTURE AND EXTENSION EDUCATION (404)

201 Field Experience in Agricultural Education (3) Field experience in public school programs in agricul-
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204 Agricultural Experience, Leadership and Adult Programs (3) Developing an extended personal experi-
ence programs, including leadership development activities in a team and group environment. Prereq: 201-201 and methods for adult education in agriculture. F

303 Transport Processes in Biological Systems (3) Analysis of biophysical systems with emphasis on heat, mass and energy transfer. Thermodynamics, conduction and convection/hybrid, plus mass transfer. F.

334 Processing Food and Biological Materials (3) Preparation and handling of biological materials for physical properties, moisture and water content, evaporation, preservation and handling, fermentation and storage, protein structure and nutritional significance. Prereq: 311-311 and 312-312. F.

336 Student Teaching in Agricultural Education (8) Full-time teaching practice in an approved high school. On the basis of successful teaching performance, students are allowed to select a field of specialization; required training for non-farm sectors; models and tools for analyzing rural resource; equipment; financial and environmental quality; alternative public works; methods for influencing undecided rural residents in improving their environmental quality. Prereq: 210 or consent of instructor. F.

337 Off-Campus Internship (1-3) Supervised exper-
ience in off-campus agencies or the marketing of agricultural products. (Prerequisite: 210 or consent of instructor.) F.

363 Independent Study (1-3) Directed individual or group study. F

410 Seminar in Agricultural Economics and Busi-
nescapes in the field of specialization; required training for non-farm sectors; models and tools for analyzing rural resource; equipment; financial and environmental quality; alternative public works; methods for influencing undecided rural residents in improving their environmental quality. Prereq: 210 or consent of instructor. F.

413 International Agricultural Trade and Marketing (3) Discusses the international trade relations between agricul-
tural and forest-related products. (Prerequisite: 311-311 and 312-312.) F.

440 Agricultural and Trade Policy (3) Values, goals, and policy processes; historical development and current characterizations of commodity, credit, food, and trade policy relationship between domestic and international agricultural policy. Prereq: 210-210 and 311-311. F.

450 Agricultural Price Analysis (3) (Same as Economics 311.)

452 African-American Women in American Society (3) (Focus on historical and contemporary socio-
dies. Factors include sex roles, the way different cultures view African-American women, place, and historical events. (Requires permission of instructor). Prereq: Economics 201 and Junior standing. Writing emphasis course.

455 Independent Study (1-3) Individualized study of a spe-
cific problem. (Prerequisite: 210 or consent of instructor.) F, Sp.

Agricultural Engineering/Courses of Instruction

331 Power Units and Machinery (3) Internal combus-
tion engines and off-road vehicle power transmission
systems, Ergonomics and operator environment. Func-
tional and structural analysis and performance charac-
teristics of machinery. Pre-req: Mechanical Engineering 331 and Engineering Science 321, 2 hours and 1 lab.

348 Soil and Water Conservation (2) Hydrological, agronomic and environmental principles for ag-
ricultural management problems including flooding and ero-

341 Soil and Water Engineering Laboratory (1) Labo-
atory on topics selected in 348. Coreq: 341. Pre-req: Engineering Science and Mechanics 341, S.

348D Professional Development (1) Engineering effi-
cacy: professional recognition; opportunities for innova-
tion and leadership. Pre-req: Senior standing. 1 hour.

349D Engineering Design Fundamentals (2) Nature of design, functional analysis, creativity, analy-
ses and synthesis; geometric and kinematic requirements; plane mechanisms, force, stress, design; finite analysis applied to design project. Pre-req: Senior Standing. Dis-
cussion: 3 hours. 1 lab and 2 hours.

353 Component Design and Machine Synthesis (3) Synthesis of design: structural, kinematic, power, control system development; preparation of design draw-
ings, specifications, model of device; written and oral report on project. Design content: 3 hours. Pre-req: 403. 1 hour and 2 labs. Sp.

357M Hydraulics and Power Systems Design (2) Fun-
tional and operational characteristics of mobile hydraul-
ic system components including pumps, valves and actuators; analysis and synthesis of power transmission and control systems. Pre-req: Engineering Science and Mechanics 311. 1 hour and 1 lab. A.

350D Air Force Aerospace Engineering System Design (2) System design for processing, handling, and storage of fuels and air for aerospace vehicles. Pre-req: design, consideration. Design content: 3 hours. Pre-req: 311. 1 hour and 2 labs. F.


470 Special Problems in Agricultural Engineering (1-18) Topics from current trends and problems in agricul-
tural engineering. May be repeated. E.

AGRICULTURAL ENGINEERING TECHNOLOGY (067)

246 Impromptu Speaking (2) Properties of mate-
rials including wood, metal, concrete, plastics and laminates; drafting and plan reading; fabrication tech-
techniques and processes involving hand tools, power equip-
ment, and air-powered and electric tools. Discussion: 3 hours. Pre-req: 201-202. 1 lab. 1 hour and 2 labs.

212 Surveying (1) Measurement of distances, angles, and elevations and plotting and profiling; topographic mapping, surveying and mapping aerial processing. Pre-req: Math 101. 1 hour and 2 labs.

262 Food Processing and Food Engineering Technology (3) Agriculture foods and materials: starch, pro-
solution and food processing. Food handling, drying, storage and processing; freezing, dehydration, refrigeration and freezing, microbial systems, and materials handling. Pre-req: Phys-
ics 121 and 122. 1 lab. 3 hours.

322 Agricultural Machinery and Tractors (5) Agricul-
tural machinery and tractor units; adaptation to agricul-
tural practices; management considerations; field effi-
cient, capability; adjustment and servicing. Pre-req: Mathematics 121, 2 hours and 1 lab. F.

442 Agricultural Waste Management and Pollution Control (3) Theories, concepts and mechanisms of waste and contami-
nation treatment, incineration, composting, landfills, treatment, adjust-
ment, troubleshooting and repair of single-cylinder en-
gines. Pre-req: Physics 121 or consent of instructor. 2 hours and 1 lab. S.

443 Agricultural Chemical Application Technology (2) Equipment for application of liquid, solid, and gas-
es, operation of pumps and safety considerations. Pre-req: Physics 121 or consent of instructor. 2 hours and 1 lab. Sp.

Agriculture (088)

101 Perspectives in Agriculture and Associated Natural Resources (3) Historical development, current national and international issues, and trends for the future. 3 hours.

250 Microcomputers in Agriculture and Natural Re-
sources (1) Microcomputer technology as related to agricul-
tural applications. Topics include: microcomputer terminology, architecture, computer peripherals, oper-
ating systems, and an overview of application software. Pre-req: Senior standing. 1 hour and 2 labs. F.

270 Microcomputer Applications in Agriculture and Natural Resources (2) Advanced topics in microcom-
puters as a tool in agriculture. Coreq: 250. 1 hour and 2 labs. F.

404 Agricultural Chemistry (3) Organic and inorganic chem-
ical analysis of plant, animal, and environmental materials. Pre-req: 212. 3 hours and 1 lab. Sp.

406 Soil and Water Engineering Laboratory (1) Labo-
atory on topics covered in 340. Coreq: 340. Pre-req: senior standing. Dis-
cussion: 3 hours. Pre-req: 341 and 381. 1 hour and 2 labs. Sp.

411-423 Air Force Aerospace Studies (3) Role of the Air Force as a profession; the environment in which the Air Force operates, and how the Air Force works with the Army and Navy, providing briefing student for study of the Armed Forces and the Air Force.

101-102 Leadership Laboratory (1) Interpersonal leadership experiences and orientation to active duty. Instruction in the leader's role, development of leadership concepts. Pre-
req: 101 and 102. Satisfactory/No Credit only.

201-202 Air Force Aerospace Studies (3) Introduction to study of air power from a historical perspective covering the Wright brothers and continuing into the 1960s.


203-202 Air Force Aerospace Studies (3) Introduction to study of air power from a historical perspective covering the Wright brothers and continuing into the 1960s.


205 Field Training (Academic Program) (1-4) Role of United States military forces in contemporary world, with particular attention to United States Air Force. As organi-
mation and mission, various component troop of U.S. military power, organization of America's defense struc-
ture, policies of major powers, and elements and pro-
blems in making defense policy. Conceived of as a year's program, divided into two year-to-year program apps.

201-302 Air Force Aerospace Studies (5) Air Force leadership at prior officer level, including theoretical, professional, and legal aspects, with attention to com-
mon sense, military management, handling, prin-
ciples of command and staff organization, and responsi-
bility for the personal conduct of officers and the duty own to their subordinates. Open only to two year program apps.

301-302 Air Force Aerospace Studies (5) Air Force leadership at prior officer level, including theoretical, professional, and legal aspects, with attention to com-
mon sense, military management, handling, prin-
ciples of command and staff organization, and responsi-
bility for the personal conduct of officers and the duty own to their subordinates. Open only to two year program apps.

401-402 Air Force Aerospace Studies (3) Role and function of professional officer in a democracy society, socialization processes, public attitudes, and value orienta-


361 Introduction to Agriculture (3) Dynamics and nature of the culture(s) of the United States through interdisciplinary study and interpretation. Considers both "mainstream" and "minority" cultures. Writing emphasis course.

331 Popular Culture and American Politics (2) Coreq: 334 and English 334.)

334 Film and American Culture (2) (Same as Cinema Studies 334 and English 334.)

334 Film and American Culture (2) Coreq: 334 and English 334.)

345 Collective Behavior and Social Movements (3)

395 Religion and Culture in the United States (3) Content may vary. May be repeated.

395 Religion and Culture in the United States (3) Content may vary. May be repeated.

402 Political Attitudes and Opinions (3) (Same as Political Science 402)


402 Political Attitudes and Opinions (3) (Same as Political Science 402)


402 Political Attitudes and Opinions (3) (Same as Political Science 402)

481 Beef Cattle Production and Management (3) Integration of principles of nutrition, breeding, physiology, and marketing into complete production and management programs. Structure of industry, enterprise establishment, systems of production, production planning and improvement programs. Evaluation of production responses and economic returns. Prerequisites: Completion of Animal Sciences sophomore and junior core courses or consent of instructor. 2 hours and 1 lab. Sp.

482 Dairy Cattle Production and Management (3) Integration of principles of nutrition, breeding, physiology, and marketing into complete production and management programs. Structure of industry, enterprise establishment, systems of production, production planning and improvement programs. Evaluation of production responses and economic returns. Prerequisites: Completion of Animal Sciences sophomore and junior core courses or consent of instructor. 2 hours and 1 lab. Sp.

483 Lamb and Wool Production and Management (3) Integration of principles of nutrition, breeding, physiology, and marketing into complete production and management programs. Evaluation of production responses and economic returns. Prerequisites: Completion of Animal Sciences sophomore and junior core courses or consent of instructor. 2 hours and 1 lab. Sp.

486 Lamb and Wool Production and Management (3) Integration of principles of nutrition, breeding, physiology, and marketing into complete production and management programs. Evaluation of production responses and economic returns. Prerequisites: Completion of Animal Sciences sophomore and junior core courses or consent of instructor. 2 hours and 1 lab. Sp.

494 Animal Science Teaching Assistant (1) Assist the primary instructor in laboratory instruction and demonstrations. Prerequisites: Senior standing and consent of the instructor. S/NC. E.

495 Veterinary Medical Technology I (3) For Animal Science and/or Animal Science Pre-Veterinary Medicine majors only. Course load consists of lecture and laboratory work. Students will observe and record in detail in the College of Veterinary Medicine classes. Prerequisite: 1 hour and 1 lab. Fall.

ANTHROPOLOGY (122)

110 Human Origins (3) Survey of humanity's background, fossil primates, fossil human remains, and living races of mankind. Prerequisite: Consent of instructor. Fall.

202 Prehistoric Anthropology (3) Introduction to meth-ods of research and the role of the scientist in the field. Emphasis on the application of knowledge to the solution of problems. Prerequisite: Consent of instructor. Fall.

310 North American Indians (3) Comparative overview of Indian cultures of North America. Topical cover-ages range from prehistory and aboriginal lifeways to problems resulting from contact and acculturation. Writing emphasis course. Prerequisite: Consent of instructor. Fall.

311 Southern Indian Tribes (3) Survey of Southern Indian Tribes and their time of European contact. Emphasis on Cherokee culture and the social, economic, and political organization of the eastern Iroquois and Algonquian tribes. This course may not be repeated for credit. Prerequisite: Consent of instructor. Fall.

312 Appalachian Culture (3) Traditional Southern Appalachian cultures and patterns, economy, social organization, beliefs and values, folklore and customs. Prerequisite: Consent of instructor. Fall.

314 Peoples and Cultures of Africa (3) Ethnographic survey of peoples of sub-Saharan Africa, focusing on the cultural, historical, and contemporary issues of the continent. This course may not be repeated for credit. Prerequisite: Consent of instructor. Fall.

315 African-American Anthropology (3) An introduction to the history, culture, and politics of African-American peoples and communities. This course may not be repeated for credit. Prerequisite: Consent of instructor. Fall.

316 Alcohol, Health and Culture (3) Socio-cultural impact of industrialization and modernization. Prerequisites: Consent of instructor. Fall.

318 Cultural Anthropology (3) An introduction to the major concepts and methods in the study of cultural diversity. Lectures and field trips introduce students to the major theories of cultural and social evolution. Prerequisites: Consent of instructor. Spring.

401 Prehistory of Tennessee (3) History of archaeo-logical work in Tennessee and surveys of prehistoric and prehistoric human occupation of the state to European contact. Prerequisite: Consent of instructor. Spring.

402 Archaeology of Religion (3) Same as Religions Studies 302.)

406 Genetics and Society (3) Same as Sociology 305.)

410 Appalachian Culture (3) Traditional Southern Appalachian cultures and patterns, economy, social organization, beliefs and values, folklore and customs. Prerequisite: Consent of instructor. Fall.

411 Peoples and Cultures of Mesoamerica (3) Pred-ominantly language and cultural aspects of peoples of Mesoamerica, including the Aztecs, Mayans, Toltec, Olmec and other cultures. This course may not be repeated for credit. Prerequisite: Consent of instructor. Spring.

412 Peoples and Cultures of Africa (4) Ethnographic survey of peoples of sub-Saharan Africa, focusing on the cultural, historical, and contemporary issues of the continent. This course may not be repeated for credit. Prerequisite: Consent of instructor. Fall.

414 Anthropology of Religion (3) Same as Religion Studies 302.)

420 Prehistory of Tennessee (3) History of archaeological research in Tennessee and surveys of prehistoric Indian cultures from initial occupation of the state to European contact. Prerequisite: Consent of instructor. Spring.
411 Historical Archaeology (3) Historical archaeology of Euro-American, African-American, and Asian-American cultures in the United States from 15th to 20th centuries. Prerequisite: 120 or consent of instructor.

431 Ethnographic Research (3) Conceptual and practical exploration of methods and techniques cultural anthropologists use in fieldwork. Prerequisite: 130 or consent of instructor. May be repeated. Maximum 6 hours.

459 Selected Topics in Anthropology (3) Theoretical and practical experiences in anthropology for undergraduate students. Topics may include practical experience or laboratory study of anthropological materials. May be repeated. Maximum 6 hours. Prerequisite: Either 110, 120, 130 or consent of instructor.

461 African Prehistory (3) African cultural history from the earliest evidence of human activity to the time of European contact. Emphasis on the stone age of Africa. Prerequisite: 120 or consent of instructor. May be repeated. Maximum 6 hours.

462 Early European Prehistory (3) Origins and evolution of human culture in Europe through the beginnings of settled life. Special topics in Paleolithic/Mesolithic, Neolithic, and Metal Ages in Africa, Europe, and Asia. Prerequisites: 120 or consent of instructor. May be repeated. Maximum 6 hours.

485 Urban Archaeology (3) Field archaeology and interpretation of archaeological remains on historic urban sites in the United States. Course content will vary from semester to semester and will focus on urban sites in East Tennessee. Prerequisite: 360 recommended.

490 Primate Evolution (3) Living and fossil primate families and cranial and postcranial morphology. Prerequisite: 110. 3 credit hours.

493 Independent Study (1-15) Self-directed study. May be repeated. Maximum 15 hours. Prerequisite: consent of instructor.

494 Primate Behavior (3) Social organization and behavior of nonhuman primates, including taxonomic classification, size and structure, patterns of mating, and social behavior. Prerequisite: 120. 3 credit hours.

495 Human Paleontology (4) Introduction to human skeleton. Prerequisite: 110 or consent of instructor. 3 credit hours.

499 Human Response to Environmental Stress (3) The physiological perception of stress from the internal environment and the physical environment and the physiological, anatomical, and behavioral response to these stimuli. Prerequisite: 282. 3 credit hours.

111 Architecture and the Built Environment (3) An introduction to architecture and the built environment for non-architecture majors. Significance of our surrounding forms that create them. Creative aspects of design. Survey of examples from local to global. Strategies for individual and collective involvement. (1 credit hour seminar and 3 credit hour studio).

171 Design Fundamentals (3) Design, ideas, and processes of design. Sketch design methods and freehand drawing. Introduction to design techniques and graphic presentation of design ideas. Prerequisite: 101.

172 Design Fundamentals (6) Design principles and techniques in two and three dimension design exercises. Corequisite: 120. Prerequisite: 171. 6 credit hours.

181 Introduction to Graphic Skills (3) Introduction to freehand drawing and photographic techniques with an emphasis on visualization and visual analysis. The work will be in the seminar format and developed in the studio (1 credit hour seminar and 5 credit hour studio).

182 Introduction to Basic Design (3) Introduction to basic design principles in both two and three dimensions. The work will be presented in a seminar format and developed in the studio (1 credit hour seminar and 5 credit hour studio).

203 Seminar I (2) Theory and practice in architecture. Selected readings in history, theory, and design methodology with emphasis on historical contexts and architectural principles. Corequisite: 281. 2 credit hours.

204 Seminar II (2) Selected readings in history, theory, and design methodology with emphasis on analysis of architectural examples. Prerequisite: 203. Corequisite: 282. 2 credit hours.

212 History of Architecture II (3) Historical and critical study of buildings and community form. English Renaissance, Italian Renaissance, French Renaissance, and English Renaissance. Prerequisite: 211. 3 credit hours.

223 History and Theory of Contemporary Architecture (3) An introduction to concepts in architecture and design and critical exploration of the twenty-first century. Examples of contemporary works and historical forms. Prerequisite: 281 and 120 or consent of instructor. 3 credit hours.

231 Computer Applications in Architecture (3) Survey of the role of the computer in architecture. Use of the computer in design practice and design presentations with specific applications and demonstrations. Prerequisite: 120. 3 credit hours.

232 Introduction to Architectural Technology (3) Basic concepts and principles for the application of structural, building materials and systems to architectural design. Prerequisite: 120. 3 credit hours.

236 Architectural Design I (3) Fundamentals of architectural design. Introduction to historical and theoretical concepts and principles of style and layout. Prerequisite: 281. 3 credit hours.

237 Architectural Design II (3) Fundamentals of architectural design. Introduction to historical and theoretical concepts and principles of style and layout. Prerequisite: 281. 3 credit hours.

261 Design I (3) Principles of architectural design emphasizing approaches to site planning and design of buildings in relation to their functions and context. Emphasis on freehand drawing and utilization of computer-aided drawing. Prerequisite: 282 or equivalent. 3 credit hours.

262 Design II (3) Principles of architectural design emphasizing building structure and form. Design of simplified buildings which explore formal possibilities of site, form, and use. Corequisites: 204, 281, 3 credit hours.

312 Materials and Methods of Construction (3) Properties and applications of building materials, particularly relating to construction methods and building materials. Prerequisite: 211. 3 credit hours.

313 Architectural Design III (3) Introduction to preparation of design projects and computer applications in architecture with special emphasis on spatial composition. Prerequisite: 220. 3 credit hours.

314 Architectural Design and Computer Graphics (3) Corequisites in architecture, focusing on the AutoCad environment. Prerequisite: 282. 3 credit hours.

315 Structural Architectural Designs (3) Structural systems for building materials under loading and stress. Mechanics of buildings and structures of cross-sections of structur...
24.5 Steel Sculpture

(3)

Problem to introduce steel as a sculptural medium. Successful completion required prior registration for junior and senior courses. Prereq: Consent of instructor. May be repeated. Maximum 8 hours.

24.4 Wood Sculpture

(3)

Wood as sculptural medium. Successful completion required prior registration for junior and senior courses. Prereq: Consent of instructor. May be repeated. Maximum 8 hours.

24.1 Life Sculpture

(3)

Modeling techniques begun in 244. Prereq: 244 and 340 or consent of instructor.

24.9 Special Topics in Sculpture

(3)

Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.

21.1 Drawing I: Life Drawing

(3)

Development of drawing and observational skills with special emphasis on the structure and dynamics of the human figure along with an introduction to creative techniques. Prereq: Registration for junior and senior courses. Prereq: Consent of instructor. May be repeated. Maximum 8 hours.

21.1 Drawing II: Life Drawing

(3)

Development of drawing and observational skills with special emphasis on the structure and dynamics of the human figure along with an introduction to creative techniques. Prereq: Registration for junior and senior courses. Prereq: Consent of instructor. May be repeated. Maximum 8 hours.

21.5 Watercolor I

(3)

Introduction to watercolor. Prereq: 101, 103 for art majors; 101-103 for non-art majors. May be repeated. Maximum 8 hours.

21.6 Watercolor II

(3)

Introduction to watercolor. Prereq: 101, 103 for art majors; 101-103 for non-art majors. May be repeated. Maximum 8 hours.

21.4 Painting I

(3)

Techniques of expression in oil and acrylics. Prereq: 213 for art majors; 101-Painting for non-art majors. May be repeated. Maximum 8 hours.

21.3 Painting II

(3)

Techniques of transparent watercolor. Prereq: 101, 103 for art majors; Art 121- Watercolor for non-art majors. May be repeated. Maximum 8 hours.

21.2 Special Topics in Painting/Painting

(3)

Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.

21.1 Ceramics I: Handbuilding

(3)

An introduction to the nature and function of clay; introduction to preparation, firing, small and large scale pieces. Ce- ntral focus on handbuilding techniques. Prereq: Registration for junior and senior courses. Prereq: Consent of department. Satisfactory/No credit only.

22.2 Ceramics II: Throwing

(3)

Thrown ceramic forms with emphasis on traditional and contemporary techniques, glazing and firing methods. Prereq: 221 for art majors, 122- Ceramics for non-art majors. May be repeated. Maximum 8 hours.

22.1 Special Topics in Ceramics

(3)

Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.

22.1 Special Topics in Photography (3)

Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 8 hours.

23.1 Photography I

(3)

Study of black and white photography. Prereq: Registration for junior and senior courses. Prereq: Consent of instructor. May be repeated. Maximum 8 hours.

23.2 Photography II

(3)

Introduction to color photography applying traditional and contemporary techniques of etching, lithography, and photoetching. Prereq: 231. May be repeated. Maximum 8 hours.

23.3 Three-Dimensional Fiber

(3)


29.2 Film Design

(3)


29.1 Intermediate Media Design and Color

(3)

Further exploration of two-dimensional design, with emphasis on color theory and technique. Prereq: 29.1. May be repeated. Maximum 12 hours.

29.4 Special Topics in Photography (3)

Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 8 hours.

29.5 Special Topics in Photography (3)

Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 8 hours.

30.2 Three-Dimensional Fabric

(3)

Emphasis on fabric as a sculptural medium. May include use of hand and power tools, cutting, and decoration techniques for individual topic. May be repeated. Maximum 12 hours.

30.2 Metal Sculpture

(3)

Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 8 hours.

30.1 Special Topics in Sculpture

(3)

Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.

4.3 Intro-advanced Graphic Design

(3)

Review of prior work in graphic design. Successful completion required prior registration for junior and senior courses. Prereq: Consent of instructor. May be repeated. Maximum 6 hours.

4.2 Wood Sculpture

(3)


3.3 Intermedia Portfolio Review

(3)

Review of prior work in sculpture. Successful completion required prior registration for junior and senior courses. Prereq: Consent of instructor. May be repeated. Maximum 8 hours.
454 Advanced Computer Enhanced Design (3) Prereq: 453 or consent of instructor. May be repeated. Maximum 6 hours.

459 Special Topics in Fiber/Fabric (3) Student or instructor-initiated course offered at discretion of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.

461 Intaglio 111 (3-6) Individual development of personal project through advanced color printing methods and combinations with other print media. Prereq: 362 or consent of instructor. May be repeated. Maximum 12 hours.

462 Intaglio 111 (3-6) Exploration of individual projects through advanced color printing methods and combinations with other print media. Prereq: 362 or consent of instructor. May be repeated. Maximum 12 hours.

463 Special Topics in Printmaking (3) Student or instructor-initiated course offered at discretion of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.

471 History of North American Art (3) Survey of landscapes in painting, architecture, sculpture, and design from 1915 to 1925.

472 History of 20th Century American Art (2) Development of mural painting, design, and decoration from 1900 to 1915.

473 19th Century American Painting (3) From West and Copley to emergence of a national art.

474 History of Modern Architecture in Europe and America (3) Development of modern architecture in Europe and America from 1900 to 1975.

475 Architectural Form and Space (3) Examination of the relationship between architectural form and space.

476 History of 20th-Century Painting and Sculpture in Europe (3) Emphasis on the development of modernist art in Europe from 1900 to 1975.

481 Museology 1: Museums, Purpose and Function (3) Purposes, functions and development of museums in the history and culture of society.

482 Museology 2: Exhibition Planning and Installation (3) Emphasis on museum exhibits and the development of modernist art in Europe from 1900 to 1975.

484 Special Topics in Fiber/Fabric (3) Student or instructor-initiated course offered at discretion of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.

485 Special Topics in Graphic Design/Illustration (3) Student or instructor-initiated course offered at discretion of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.

486 Artof Indian Asia (3) History of Indian art with consideration of the art of Central Asia and Southeast Asia. Understanding the cultural and historical context of Indian art.


304 Concepts of Printmaking, Graphic Design and Lettering (3) Processes in teaching printmaking, graphic design and lettering including pertinent literature and research. Prereq: 301 and admission to Teacher Education Program. F, Sp.

311 Islamic Literature in English Translation (3) Interactions from the Koran, classical Arabic and Persian, poetry and classical music. Includes history, philosophy, mythology, and other letters. F.

319 Islamic Literature in English Translation (3) Islamic literature in English translation. F, Sp.


350 Field Experience (1) Tasks related to teaching and varied student teaching experiences. Must be taken in threedays with instructor and twodays with native informant in classroom, literature, and formal situations. Meetseveryday, three days with instructor and twodays with native informant. Prereq: 301-122 or consent of instructor. Must be taken in sequence.

414-142 Intermediate Modern Hebrew I,II (4, 4) Taped language program. Prereq: 411-122 or equivalent or consent of instructor. May be repeated. Maximum 12 hours.

415-152 Introductory Astronomy (4, 4) Survey of the composition, structure, and dynamics of the universe. Historical and modern astrophysics and particle physics. Components of the solar system including the planets and comets, a brief history of astronomy and the development of modern science, introduction to the solar system, the Milky Way, the origin of the universe, the nature of space and time, and the evolution of physical and astronomical theories. F, Sp.

421-222 Elementary Persian I,II (4, 4) Taped language program. Prereq: 121-122 or equivalent or consent of instructor. Must be taken in sequence. F, Sp.


473 Special Topics (3) May be repeated. Maximum 6 hours.

481 Internship I: Grades K-12 (4-12) Test of materials and theories of learning. Internship is completed in public schools. Application for internship should be made upon admission to Teacher Education Program. Prereq: 480 Internship Program. Satisfactory/No Credit only. F, Sp.

482 Internship II: Grades K-12 (4-12) Demonstration of professional competence in planning, instruction and classroom management. Internship is completed in public schools. Prereq: 481 Internship Program. Satisfactory/No Credit only. F, Sp.

483 Internship III: Grades K-12 (4-12) Demonstration of professional competence in planning, instruction and classroom management. Internship is completed in public schools. Prereq: 482 Internship Program. Satisfactory/No Credit only. F, Sp.

484 Internship IV: Grades K-12 (4-12) Development of professional competence in planning, instruction and classroom management. Internship is completed in public schools. Prereq: 483 Internship Program. Satisfactory/No Credit only. F, Sp.

485 Internship V: Grades K-12 (4-12) Development of professional competence in planning, instruction and classroom management. Internship is completed in public schools. Prereq: 484 Internship Program. Satisfactory/No Credit only. F, Sp.

489 Special Topics (3) May be repeated. Maximum 9 hours.

ASIAN LANGUAGES (144)


350 Field Experience (1) Tasks related to teaching and varied student teaching experiences. Must be taken in threedays with instructor and twodays with native informant in classroom, literature, and formal situations. Meetseveryday, three days with instructor and twodays with native informant. Prereq: 301-122 or consent of instructor. Must be taken in sequence.

414-142 Intermediate Modern Hebrew I,II (4, 4) Taped language program. Prereq: 411-122 or equivalent or consent of instructor. May be repeated. Maximum 12 hours.

415-152 Introductory Astronomy (4, 4) Survey of the composition, structure, and dynamics of the universe. Historical and modern astrophysics and particle physics. Components of the solar system including the planets and comets, a brief history of astronomy and the development of modern science, introduction to the solar system, the Milky Way, the origin of the universe, the nature of space and time, and the evolution of physical and astronomical theories. F, Sp.

421-222 Elementary Persian I,II (4, 4) Taped language program. Prereq: 121-122 or equivalent or consent of instructor. Must be taken in sequence. F, Sp.


441 Reading in Chinese Literature (3) Prereq: Master's degree or intermediate level of Chinese or consent of instructor. Must be repeated. Maximum 9 hours.

442 Reading in Japanese Literature (3) Prereq: Mastery of intermediate level of Japanese or consent of instructor. Must be repeated. Maximum 9 hours.

451 Readings in Chinese Literature (3) Prereq: Master's degree or intermediate level of Chinese or consent of instructor. Must be repeated. Maximum 9 hours.

452 Readings in Japanese Literature (3) Prereq: Master's degree or intermediate level of Japanese or consent of instructor. Must be repeated. Maximum 9 hours.

461-462 Individual Problems (3) Prereq: Consent of instructor. May be repeated. Maximum 9 hours.

469 Special Topics (3) Student or instructor-initiated course offered at convenience of department. Prereq: Determined by department for individual topic. May be repeated. Maximum 12 hours.