University Curriculum Committee

9 December 2004 Meeting Minutes

Members present:
E. Arnold, C. Estes, T. Hudson, L. Kean, R. Mitchelson, R. Reaves, E. Smith

Guest present:
D. Coltrane

Approved without dissent the minutes of the 11 November 2004 meeting.

2) Professor Steve Cerutti from the Classical Studies program spoke on behalf of a new course, CLAS 3500: Egypt, Cleopatra, and Rome. After discussion, motion tabled.

3) Professor Larry Means and Harriot College Associate Dean Scott Snyder spoke in support of a new sequence in Neuroscience Studies, NEUR 4950,4951: Neuroscience Senior Thesis I, II. After discussion, Estes moved for approve, with a second by Kean. Motion approved without dissent.

4) Professor Jeff Popke from the Department of Geography spoke in favor of two new courses:
   - GEOG 4550: Synoptic Meteorology
   - GEOG 4560: Urban Climatology

They also wish to modify the requirements of their certificate in Atmospheric Science to include these new courses. After discussion, Estes moved for approval, with a second by Smith. Motions both approved without dissent.

5) Professor John Tilley from the Department of History spoke in favor of revisions to their BS in Public History. After discussion, Estes moved for approval, with a second by Arnold. Motion passed without dissent.

6) Professors Wendy Sharer and Richard Taylor from the Department of English spoke in favor of a new course, ENGL 3835: Persuasive Writing. After discussion, Estes moved for approval, with a second by Smith. Motion approved without dissent.

7) Professors William Forsythe and Human Ecology Associate Dean Peter Johnstone spoke in favor of a large package from the Department of Nutrition and Hospitality Management. After lengthy discussion, including suggestions from the committee as well as comments from RCLS Chair Joseph Fridgen and Professor Robert Pfister, motion tabled.

8) After receiving corrections to the catalog copy from the College of Business for their revisions to several courses in the Department of Management, the committee approved their proposal considered at our November 11th meeting without dissent.

9) Meeting adjourned at 3:50 pm.

Minutes submitted by T. D. Hudson

Univereity Curriculum Committee

9 December 2004 Catalog Minutes

Note: The following curricular revisions from the Department of Chemistry were approved by the UCC on 11/11/2004, provided they received Graduate Curriculum Committee approval. They were not approved by the GCC until December 1st, so they appear in these catalog minutes rather than those of our 11/11/2004 meeting.

Insert on pp. 117 – 120 of 2004 – 2005 catalog:
DEPARTMENT OF CHEMISTRY (pages 117-120; pdf pages 127-130)

Chia-yu Li, Chairperson, 300 Science and Technology Building

Admission Requirements

Students enrolled at East Carolina University or transferring from other institutions who have a minimum 2.0 GPA and a minimum grade of C in CHEM 1150, 1151, 1160, 1161 and MATH 1065 may apply for admission as chemistry majors. Students who hold a baccalaureate degree qualify for admission to the chemistry degree program if they have completed comparable courses as described above with a minimum grade of C as part of their first degree.

BA in Chemistry

The BA program provides a flexible major designed to provide the student with a broad education in chemistry appropriate for further study in a wide range of fields, such as business, medicine, pharmacy, and law as well as careers dependent on a basic knowledge in chemistry. The BA in Chemistry, in conjunction with two semesters of laboratory-based biology courses, satisfies the course requirements for application to most US medical schools. It is different than the BS degree in the required chemistry, math, and physics courses. Any of the required major courses or cognates, however, may be replaced by courses that cover the same topics at a more advanced level. For example, CHEM 3950, 3960 may be taken instead of CHEM 3850. It is the student’s responsibility to ensure that the prerequisites for such courses have been met. Minimum degree requirement is 126 s.h. of credit as follows:

1. General education (See Section 4, General Education Requirements for all Baccalaureate Degree Programs), including those listed below................................. 42 s.h.

MATH 1065. College Algebra (3) (F,S,SS) (GE:MA) (P: Appropriate score on mathematics placement test)
PHYS 1250, 1260. General Physics (3,3) (F,S,SS) (GE:SC) (P for 1250: MATH 1065 or 1066; P for 1260: PHYS 1250)
PHYS 1251, 1261. General Physics Laboratory (1,1) (F,S,SS) (GE:SC) (C for 1251: PHYS 1250 or 2350; C for 1261: 1260 or 2360)

2. Foreign language through level 1004.................................................................12 s.h.

3. Core........................................................................................................30 s.h.

CHEM 1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: Chemistry placement test or passing grade in CHEM 0150; P/C: MATH 1065)
CHEM 1160, 1161. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: CHEM 1150, 1151; C for 1160: CHEM 1161; C for 1161: CHEM 1160; RC: MATH 1083 or 1085) CHEM 2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI, WI) (F,S) (P: CHEM 1160, 1161; one organic CHEM course)
CHEM 2750. Organic Chemistry I (3) (F,S,SS) (P: CHEM 1160, 1161; C: CHEM 2753)
CHEM 2753. Organic Chemistry Laboratory I (1) (F,S,SS) (C: CHEM 2750)
CHEM 2760. Organic Chemistry II (3) (F,S,SS) (P: CHEM 2750; C: CHEM 2763)
CHEM 2763. Organic Chemistry Laboratory II (1) (F,S,SS) (P: CHEM 2750, 2753; C: CHEM 2760)
CHEM 3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI, WI) (S) (P: CHEM 2250, 2251)
CHEM 3450. Elementary Inorganic Chemistry (3) (S) (P: CHEM 2250, 2251; C: CHEM 3451)
CHEM 3451. Elementary Inorganic Chemistry Laboratory (1) (WI) (F,S) (P: CHEM 2250, 2251; C: CHEM 3450 or 5550)

CHEM 3850, 3851. Introduction to Physical Chemistry (4,1) (WI, WI) (F) (P: CHEM 1160, 1161; MATH 2122 or 2172; PHYS 1260, 1261)

4. Cognates

MATH 2121. Calculus for the Life Sciences I (3) (F,S,SS) (GE:MA) (P: MATH 1065 or 1077 with a minimum grade of C) and MATH 2122. Calculus for the Life Sciences II (3) (F,S,SS) (P: MATH 2121) or MATH 1083. Introduction to Functions (3) (F,S,SS) (GE:MA) (P: Consent of dept chair) or MATH 1085. Pre-Calculus Mathematics (5) (F,S,SS) (GE:MA) (P: MATH 1065 with a minimum grade of C) and MATH 2171. Calculus I (4) (F,S,SS) (GE:MA) (P: MATH 1083 or 1085 or 2122 with minimum grade of C) and MATH 2172. Calculus II (4) (F,S,SS) (GE:MA) (P: MATH 2122 with a minimum grade of C or MATH 2171)

5. Electives to complete requirements for graduation.

Chemistry Requirements for Students Participating in MD/7 Initiative

Students pursuing a BA in Chemistry who are also participating in the MD/7 Program must meet all the above-specified requirements for their major and the math cognate. In addition, the student will need to fulfill the pre-health concentration by taking BIOL 1100/1101, BIOL 1200/1201, PHYS 1250/1251 and PHYS 1260/1261. If the student is accepted for admission to the Brody School of Medicine under the MD/7 Program, the first year of medical studies will count toward fulfilling the remaining 28 hours of electives as required for graduation.

BS in Chemistry

The BS degree in chemistry is the appropriate program for students considering advanced degree programs in chemistry, biochemistry, and other related fields or a professional career in chemistry. Graduates of this program meet certification requirements of the American Chemical Society. Students are strongly encouraged to pursue undergraduate research with a faculty member. Up to 6 s.h. of undergraduate research may be applied toward degree requirements. Information regarding undergraduate research may be obtained from the Director of Undergraduate Studies. Students completing the BS degree are encouraged to consider some of the following courses as electives: COMM 2410 or COMM 2420; ITEC 3290 or ENGL 3820; MATH 2228, 3256, 4331; CHEM 4515, 4516, 4517; advanced 5000-level courses in chemistry; and BIOL 5800 or 5810.

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education (See Section 4, General Education Requirements for all Baccalaureate Degree Programs), including those listed below.............................. 42 s.h.

MATH 1065. College Algebra (3) (F,S,SS) (GE:MA) (P: Appropriate score on mathematics placement test)

PHYS 1251, 1261. General Physics Laboratory (1,1) (F,S,SS) (GE:SC) (C for 1251: PHYS 1250 or 2350; C for 1261: 1260 or 2360)

PHYS 2350, 2360. University Physics (4,4) (F,S,SS) (GE:SC) (C for 2350: MATH 2121 or 2171; P for 2360: PHYS 2350)

2. Core .......................................................................................................................... 4547 s.h.

CHEM 1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: Chemistry placement test or passing grade in CHEM 0150; P/C: MATH 1065)

CHEM 1160, 1161. General Chemistry and Laboratory II (3,1) (F,S,SS) (GE:SC) (P: CHEM 1150, 1151; C for 1160: CHEM 1161; C for 1161: CHEM 1160; RC: MATH 1083 or 1085)

CHEM 2103. Introduction to Chemical Literature (1) (WI) (F,S) (P: CHEM 2750)

CHEM 2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI, WI) (F,S) (P: CHEM 1160, 1161; one organic CHEM course)

CHEM 2750. Organic Chemistry I (3) (F,S,SS) (P: CHEM 1160, 1161; C: CHEM 2753)
CHEM 2753. Organic Chemistry Laboratory I (1) (F,S,SS) (C: CHEM 2750)
CHEM 2760. Organic Chemistry II (3) (F,S,SS) (P: CHEM 2750; C: CHEM 2763)
CHEM 2763. Organic Chemistry Laboratory II (1) (F,S,SS) (P: CHEM 2750, 2753; C: CHEM 2760)
CHEM 2770. Biological Chemistry (3) (F,S) (GE:SC) (P: CHEM 2650 or 2760)

**CHEM 3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI, WI) (S) (P: CHEM 2250, 2251)**

**CHEM 3451. Elementary Inorganic Chemistry Laboratory (1) (WI) (F,S) (P: CHEM 2250, 2251; C: CHEM 3450 or 5550).**

CHEM 3950, 3951. Physical Chemistry and Laboratory I (4,1) (WI, WI) (S) (P: PHYS 1261, 2360; MATH 2173; CHEM 2250, 2251)
CHEM 3960, 3961. Physical Chemistry and Laboratory II (4,1) (WI, WI) (F) (P: CHEM 3950, 3951)
CHEM 4103. Seminar (1) (F,S) (P: Junior or senior standing; CHEM 2103)
CHEM 5350, 5351. Instrumental Analysis (3,1) (WI, WI) (P: CHEM 3960)

**CHEM 5550. Advanced Inorganic Chemistry (3) (P: CHEM 3450, 3950).**

**CHEM 5550. Advanced Inorganic Chemistry (4) (F) (P: CHEM 3950; C: 3451(for BS chemistry majors only)).**

3. Elective labs (Choose a minimum of 2 s.h. from the following.) ...................... 2 s.h.
BIOL 5821. Principles of Biochemistry Laboratory (1) (F,S) (P/C: BIOL 5800 or 5810)
CHEM 2111. Applications of Molecular Modeling (1) (F,S) (GE:SC) (P/C: CHEM 2750)
CHEM 2301. Teaching Laboratory Chemistry (2,0) (F,S) (P: CHEM 1160, 1161) May count only 1 s.h. toward the 2 s.h. lab requirement
CHEM 2771. Biological Chemistry Laboratory (1) (F,S) (GE:SC) (C: CHEM 2770)
CHEM 3301. Practicum in Teaching (1) (F,S) (P: CHEM 2301 and consent of instructor)
CHEM 4515, 4516, 4517. Research Problems in Chemistry (1,2,3) (F,S,SS) (P: Consent of instructor)
CHEM 5993. Industrial Internship in Chemistry (3) (P: Selection by joint chem dept/industry screening committee; CHEM 2250, 2760, 3950)

4. Cognates ........................................................................................................................................ 17 s.h.

MATH 1085. Pre-Calculus Mathematics (5) (F,S,SS) (GE:MA) (P: MATH 1065 with a minimum grade of C) MATH 2171, 2172, 2173. Calculus I, II, III (4,4,4) (F,S,SS) (GE:MA) (P for 2171: MATH 1083 or 1085 or 2122 with a minimum grade of C; P for 2172: MATH 2122 with a minimum grade of C or MATH 2171; P for 2173: MATH 2172)

5. Electives to complete requirements for graduation.

**Chemistry Minor**

Minimum requirement for the chemistry minor is 25-26 s.h. of credit as follows:

Core ........................................................................................................................................ 25-26 s.h.
CHEM 1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: Chemistry placement test or passing grade in CHEM 0150; P/C: MATH 1065)
CHEM 1160, 1161. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: CHEM 1150, 1151; C for 1160: CHEM 1161; C for 1161: CHEM 1160; RC: MATH 1083 or 1085)
CHEM 2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI, WI) (F,S) (P: CHEM 1160, 1161; 1 organic CHEM course)
CHEM 2750. Organic Chemistry I (3) (F,S,SS) (P: CHEM 1160, 1161; C: CHEM 2753)

https://author.ecu.edu/cs-acad/fsonline/cu/cu12_04.cfm 4/37
CHEM 2753. Organic Chemistry Laboratory I (1) (F,S,SS) (C: CHEM 2750)

CHEM 2760. Organic Chemistry II (3) (F,S,SS) (P: CHEM 2750; C: CHEM 2763)

CHEM 2763. Organic Chemistry Laboratory II (1) (F,S,SS) (P: CHEM 2750, 2753; C: CHEM 2760)

CHEM 3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI, WI) (S) (P: CHEM 2250, 2251) CHEM 3450. Elementary Inorganic Chemistry (3) (S) (P: CHEM 2250, 2251; C: CHEM 3451) and CHEM 3451. Elementary Inorganic Chemistry Laboratory (1) (WI) (F,S) (P: CHEM 2250, 2251; C: CHEM 3450 or 5550) or CHEM 3850, 3851. Introduction to Physical Chemistry (4,1) (WI, WI) (F) (P: CHEM 1160, 1161; MATH 2122 or 2172; PHYS 1260, 1261)

Chemistry Honors Program

The Department of Chemistry Honors Program provides an opportunity for outstanding chemistry majors to do intensive study and research in areas of special interest. A student desiring to enter the honors program must be a junior or senior majoring in chemistry and possess a minimum GPA of 3.2 in all courses taken at East Carolina University as well as in all chemistry and cognate courses. Before participating in the honors program, students must notify the Director of Undergraduate Studies in chemistry and select a project supervisor from the chemistry faculty. Program participants are expected to select a topic of mutual interest to both the student and project supervisor, research the topic through the scientific literature, and then conduct independent research on the topic. Upon completion of the research, the student must submit a detailed written research report and make an oral presentation on the honors project. Course requirements: CHEM 4103; a minimum of 5 s.h. research and/or independent study from: CHEM 4505, 4506, 4507, 4515, 4516, 4517.

Bachelor of Science and Accelerated MS in Chemistry

Students working toward a BS degree in chemistry have the opportunity to earn an MS degree in two or three additional semesters of study. These students are encouraged to begin research projects as undergraduates and take advanced classes that can be used to waive some MS course requirements. As seniors they may be granted early admission to the MS program and would be eligible to receive paid teaching assistantships. To be enrolled in the MS program as a senior, a student must be within 6 s.h. credit of completing all undergraduate degree requirements. Applications to the MS program should be submitted during the first semester of the senior year and must include GRE scores.

CHEM: CHEMISTRY (pages 315-317; pdf pages 322-324)

0150. Preparation for College Chemistry (2) (F,S,SS) 3 lectures per week. May not count toward general education science requirement. C: MATH 1065. Intensive review and study of basic chemical laws and mathematical tools needed for further study in general chemistry.

1020. General Descriptive Chemistry (4) (F,S) (GE:SC) May not count toward general education science requirement for science majors. General chemistry for nonscience majors.

1021. General Descriptive Chemistry Laboratory (1) (F,S) (GE:SC) 3 lab hours per week. Chemistry lab for nonscience majors. P/C: CHEM 1020. Lab experiences illustrate fundamental chemical principles and relevance of chemistry in modern world. Topics include chemical measurements, acids, synthesis and purification of biochemical substances and DNA fingerprinting.

1120. Basic General, Organic, and Biochemistry I (4) (F,S,SS) (GE:SC) May not count toward general education science requirement for science majors. Study of general, organic, and biochemistry and chemical applications in health professions.

1121. Basic General, Organic, and Biochemistry Laboratory I (1) (F,S) (GE:SC) 3 lab hours per week. C: CHEM 1120. Introduction to lab techniques in general, organic, and biochemistry.


1131. Basic General, Organic, and Biochemistry Laboratory II (1) (F,S,SS) (GE:SC) 3 lab hours per week. C: CHEM 1130. Continuation of CHEM 1121.
1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) For science majors. 3 lecture and 3 lab hours per week. P: Chemistry placement test or passing grade in CHEM 0150; P/C: MATH 1065; C for 1150: CHEM 1151; C for 1151: CHEM 1150. Basic principles and laws of chemistry. Topics include measurements, reactions and stoichiometry, thermochemistry, atomic structure, periodicity, bonding and molecular structure, and states of matter.

1160, 1161. General Chemistry and Laboratory II (3,1) (F,S,SS) (GE:SC) 3 lecture and 3 lab hours per week. P: CHEM 1150, 1151; C for 1160: CHEM 1161; C for 1161: CHEM 1160; RC: MATH 1083 or 1085. Continuation of CHEM 1150. Topics include solutions, kinetics, equilibrium, acid-base theory, thermodynamics, electrochemistry, and an introduction to organic, nuclear, and coordination chemistry.

2103. Introduction to Chemical Literature (1) (WI) (F,S) P: CHEM 2750. Introduces methods used to search and access chemical literature. Development of technical writing skills.

2111. Applications of Molecular Modeling (1) (F,S) (GE:SC) P/C: CHEM 2750. Applications of molecular modeling will be utilized to explore relationships between molecular structure and molecular properties.

2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI, WI) (F,S) 3 lecture and 6 lab hours per week. P: CHEM 1160, 1161; 1 semester of organic CHEM; C for 2250: CHEM 2251; C for 2251: CHEM 2250. Theories and techniques of classical quantitative and modern instrumental analysis.

2301. Teaching Laboratory Chemistry (2,0) (F,S) 1 lecture and 3 lab hours per week. P: CHEM 1160, 1161. Instruction and supervised experience in methods and practice of teaching introductory chemistry lab.


2651. Organic Chemistry Lab for the Life Sciences (1) (F) 3 lab hours per week. May not count toward CHEM major or minor. May not substitute as a prerequisite for CHEM 2763. C: CHEM 2650. Organic lab techniques.

2750. Organic Chemistry I (3) (F,S,SS) P: CHEM 1160, 1161; C: CHEM 2753. Classes of compounds and their typical reactions, mechanisms, stereochemistry, and instrumental methods in organic chemistry.

2753. Organic Chemistry Laboratory I (1) (F,S,SS) 3 lab hours per week C: CHEM 2750. Organic lab techniques.

2760. Organic Chemistry II (3) (F,S,SS) P: CHEM 2750; C: CHEM 2763. Continuation of CHEM 2750.

2763. Organic Chemistry Laboratory II (1) (F,S,SS) 3 lab hours per week P: CHEM 2750, 2753; C: CHEM 2760. Continuation of CHEM 2753.


2771. Biological Chemistry Laboratory (1) (F,S) (GE:SC) 3 lab hours per week. C: CHEM 2770. Application of chemical lab techniques to study of proteins, carbohydrates, lipids, and nucleic acids.

3301. Practicum in Teaching (1) (F,S) 3 lab hours per week. May be repeated for credit. May count maximum of 4 s.h. toward CHEM major. P: CHEM 2301 and consent of instructor. Supervised practicum in teaching introductory chemistry lab.

3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI, WI) (S) 3 lecture and 3 lab hours per week. P: CHEM 2250, 2251; C for 3450: CHEM 3451; C for 3451: CHEM 3450. Modern chemical principles, periodic properties, and reactions of elements.

3450. Elementary Inorganic Chemistry (3) (S) P: CHEM 2250,2251; C: CHEM 3451. Survey of fundamental concepts and theories of inorganic chemistry, periodicity, descriptive chemistry of selected main group elements and transition metals, and their role in organometallic, bioinorganic, and industrial chemistry.

3451. Elementary Inorganic Chemistry Laboratory (1) (WI) (F,S) P: CHEM 2250,2251; C: CHEM 3450 or 5550. Inorganic laboratory techniques, physical methods, and the synthesis and characterization of inorganic and organometallic compounds.
3501, 3502, 3503. Special Topics in Chemistry (1,2,3) May be repeated for maximum of 6 s.h. with change of topic. May not count toward general education science credit. P: CHEM 1160; consent of instructor. Selected topics of contemporary interest.

3850, 3851. Introduction to Physical Chemistry (4,1) (WI, WI) (F) 4 lecture and 3 lab hours per week. P: CHEM 1160, 1161; MATH 2122 or 2172; PHYS 1260, 1261; C for 3850: CHEM 3851; C for 3851: CHEM 3850. Physical chemistry for students with a limited mathematical background.

3950, 3951. Physical Chemistry and Laboratory I (4,1) (WI, WI) (S) 4 lecture and 3 lab hours per week. P: PHYS 1261, 2360; MATH 2173; CHEM 2250, 2251; C for 3950: CHEM 3951; C for 3951: CHEM 3950. Theoretical and mathematical treatment of fundamental laws and theories underlying science of chemistry.

3960, 3961. Physical Chemistry and Laboratory II (4,1) (WI, WI) (F) 4 lecture and 3 lab hours per week. P: CHEM 3950, 3951; C for 3960: CHEM 3961; C for 3961: CHEM 3960. Continuation of CHEM 3950, 3951.

4103. Seminar (1) (F,S) P: Junior or senior standing; CHEM 2103. Discussion of contemporary topics in chemistry, instruction on technical presentations, and submission of written and oral reports on approved topics. Requires attendance at selected departmental seminars.

4505, 4506, 4507. Independent Study (1,2,3) (F,S,SS) May be repeated for credit. May count a maximum of 3 s.h. toward CHEM major. P: Consent of instructor and dept chair. Individual study in selected area of chemistry under immediate direction of faculty member.

4515, 4516, 4517. Research Problems in Chemistry (1,2,3) (F,S,SS) May be repeated for credit. May count maximum of 6 s.h. toward CHEM major. P: Consent of instructor. Advanced problems in chemistry pursued under supervision of a faculty member.

5350, 5351. Instrumental Analysis (3,1) (WI, WI) 3 lecture and 3 lab hours per week. P: CHEM 3960; C for 5350: CHEM 5351; C for 5351: CHEM 5350. Theory and practical uses of modern instrumental methods of chemical analysis.

5525, 5526, 5527. Special Topics (1,2,3) May be repeated for credit with change of topic. P: Consent of instructor. Selected topics of current interest in areas of analytical, inorganic, organic, and physical chemistry.

5550. Advanced Inorganic Chemistry (3) P: CHEM 3450, 3950. Study of newer theories, developments, and procedures in inorganic chemistry.

5550. Advanced Inorganic Chemistry (4) (F) P: CHEM 3950; C: CHEM 3451 (for BS chemistry majors only). Advanced treatment of atomic and molecular structure, molecular symmetry, group theory, MO theory, the solid state and ionic bonding, transition metal coordination and organometallic compounds, homogeneous catalysis, and acid-base, redox, and bioinorganic chemistry.

5750. Advanced Organic Chemistry (3) P: CHEM 2760; P/C: CHEM 3960. Physical organic topics, including aromaticity, acid/base chemistry, reactive intermediates, mechanisms of common organic reactions, and relationship between structure and reactivity.

5760. Organic Structure Elucidation (3) P: Consent of instructor. Application of modern instrumental methods to elucidation of structures of organic compounds, with particular regard to elucidation of complex structures from combined application of spectral tools.

5993. Industrial Internship in Chemistry (3) 25-30 lab hours per week. May count maximum of 3 s.h. toward CHEM major. May be repeated. P: Selection by joint Department of Chemistry/industry screening committee; CHEM 2250, 2760, 3950. Professional experience in industrial application of chemistry.

CHEM Banked Courses

1163. Introduction to Computer Techniques in...
5450. Industrial Chemistry (3) Experimental Chemistry (1)
5560. Inorganic Reaction Mechanisms (2)
3860, 3861. Introduction to Instrument-Computer Interfacing (2,1)
5950, 5951. Introduction to Nuclear Chemistry (2,1)
5970. Chemical Thermodynamics (2)
5390. Bioanalytical Chemistry (2)

College of Education
Secondary Education
Academic Concentrations
(page 178; pdf page 187)

UNC-OP has mandated Teacher Education concentrations be reduced from 24 to 18 hours effective with Fall 2004 freshman and transfer students. Consult with your advisor for appropriate courses.

ACADEMIC CONCENTRATIONS

A maximum of 6 s.h. may be counted toward general education.

Anthropology (24 s.h.)

ANTH 2000. Archaeology Around the World (3) (F,S) (GE:SO)
ANTH 2010. Societies Around the World (3) (F,S,SS) (GE:SO)
ANTH 2015. Introduction to Biological Anthropology (3) (WI*) (F,S) (RP: A BIOL course)
Choose 6 s.h. from:
ANTH 3002. Cultures of East Asia (3) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
ANTH 3003. Cultures of Africa (3) (OY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
ANTH 3004. Cultures of the South Pacific (3) (EY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
ANTH 3005. North American Indians (3) (EY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
ANTH 3016. Cultures of the Caribbean (3) (S) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
ANTH 3017. Cultures of Mexico and Guatemala (3) (OY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
ANTH 3018. Cultures of South and Central America (3) (EY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
GEOG 2100. World Geography: Developed Regions (3) (F,S,SS) (GE:SO)
GEOG 2110. World Geography: Less Developed Regions (3) (F,S,SS) (GE:SO)
Choose 9 s.h. ANTH electives of which 6 s.h. must be above 2999

Biology (24 s.h.)

BIOL 1050. General Biology (3) (F,S,SS) (GE:SC)
BIOL 1051. General Biology Laboratory (1) (F,S,SS) (GE:SC)
BIOL 1060. Environmental Biology (4) (F,S,SS) (GE:SC)
BIOL 2130. Survey of Human Physiology and Anatomy (4) (F,S,SS) (P: BIOL 1050, 1051; or 1100, 1101)
BIOL 2131. Survey of Human Physiology and Anatomy Laboratory (1) (F,S,SS) (P/C: BIOL 2130)
BIOL 3230, 3231. Field Botany (4,0) (F,S,SS) (P: 3 s.h. of general BIOL with a lab) or BIOL 3240, 3241. Field Zoology
(4,0) (P: BIOL 1060 or 2250)
Choose 7 s.h. BIOL electives above 2999

Chemistry (44 s.h.)

CHEM 1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: Chemistry placement test or passing grade in CHEM 0150; P/C: MATH 1065)
CHEM 1160, 1161. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: CHEM 1150, 1151; C for 1160: CHEM 1161; C for 1161: CHEM 1160; RC: MATH 1083 or 1085)
CHEM 2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI, WI) (F,S) (P: CHEM 1160, 1161; 1 organic CHEM course)
CHEM 2650. Organic Chemistry for the Life Sciences (4) (F) (P: CHEM 1160, 1161)
CHEM 2651. Organic Chemistry Lab for the Life Sciences (1) (F) (C: CHEM 2650)
CHEM 3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI, WI) (S) (P: CHEM 2250, 2251)
CHEM 3450. Elementary Inorganic Chemistry (3) (S) (P: CHEM 2250, 2251; C: CHEM 3451)
CHEM 3451. Elementary Inorganic Chemistry Laboratory (1) (WI) (F,S) (P: CHEM 2250, 2251; C: CHEM 3450 or 5550).
CHEM 3850, 3851. Introduction to Physical Chemistry (4,1) (WI, WI) (F) (P: CHEM 1160, 1161; MATH 2122 or 2172; PHYS 1260, 1261)
MATH 1065. College Algebra (3) (F,S,SS) (GE:MA) (P: Appropriate score on mathematics placement test)
MATH 2121. Calculus for the Life Sciences I (3) (F,S,SS) (GE:MA) (P: MATH 1065 or 1077 with a minimum grade of C)
MATH 2122. Calculus for the Life Sciences II (3) (F,S,SS) (P: MATH 2121)
PHYS 1250, 1260. General Physics (3,3) (F,S,SS) (GE:SC) (P for 1250: MATH 1065 or 1066; P for 1260: PHYS 1250)

Department of Mathematics and Science Education
BS in Science Education

3. Teaching Area Concentration

(page 199; pdf page 208)

teaching the biological, physical, and earth sciences. Minimum degree requirement is 128 s.h. of credit as follows:

1. General education and special requirements for certification (See Section 4, General Education Requirements for all Baccalaureate Degree programs), including those listed below......................................................................................................................................................... 42 s.h.

BIOL 1100, 1101. Principles of Biology and Laboratory I (3,1) (F,S,SS) (GE:SC) (P/C for 1101: BIOL 1100)
CHEM 1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: Chemistry placement test or passing
grade in CHEM 0150; P/C: MATH 1065)
MATH 1065. College Algebra (3) (F,S,SS) (GE:MA) (P: Appropriate score on mathematics placement test)
PSYC 1000. Introductory Psychology (3) (F,S,SS) (GE:SO)
PSYC 3206. Developmental Psychology (3) (WI*) (F,S,SS) (GE:SO) (P: PSYC 1000 or 1060)
Choose a history course (GE:SO)
Choose a literature course (GE:HU)

2. Common core ........................................................................................................................................... 35-36 s.h.
BIOL 1200, 1201. Principles of Biology and Laboratory II (3,1) (F,S,SS) (GE:SC) (P/C for 1201: BIOL 1200)
CHEM 1160, 1161. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: CHEM 1150, 1151; C for 1160: CHEM 1161;
C for 1161: CHEM 1160; RC: MATH 1083 or 1085)
GEOL 1500. Dynamic Earth (3) (F,S,SS) (GE:SC)
GEOL 1501. Dynamic Earth Laboratory (1) (F,S,SS) (GE:SC) (C: GEOL 1500)
PHYS 1251, 1261. General Physics Laboratory (1,1) (F,S,SS) (GE:SC) (C for 1251: PHYS 1250 or 2350; C for 1261:
PHYS 1260 or 2360)
SCIE 3350, 3351. Descriptive Astronomy (4,0) (S)
SCIE 3360, 3361. Physical Meteorology (4,0) (S) (P: CHEM 1150; MATH 1085; PHYS 1250, 1260)
SCIE 3602. Investigations in Physical and Earth Science (4) (F,S,SS)
SCIE 3604. Investigations in Life and Environmental Science (4) (F,S,SS)
Choose 5-6 s.h. mathematics from one area as follows:

Biology and Earth Science:
MATH 1085. Pre-Calculus Mathematics (5) (F,S,SS) (GE:MA) (P: MATH 1065 with a minimum grade of C)
MATH 2121. Calculus for the Life Sciences I (3) (F,S,SS) (GE:MA) (P: MATH 1065 or 1077 with a minimum grade of C) and MATH 2122. Calculus for the Life Sciences II (3) (F,S,SS) (P: MATH 2121)

Chemistry and Physics:
MATH 2121. Calculus for the Life Sciences I (3) (F,S,SS) (GE:MA) (P: MATH 1065 or 1077 with a minimum grade of C)
MATH 2122. Calculus for the Life Sciences II (3) (F,S,SS) (P: MATH 2121)

3. Teaching area concentration (Choose one from the following.) ............... 20-23 s.h.

Biology (20 s.h.):
BIOL 2110, 2111. Fundamentals of Microbiology (4,0) (F,S) (P: 4 s.h. in BIOL; 8 s.h. in CHEM)
BIOL 2250. Ecology (3) (F,S,SS) (P: BIOL 1100, 1101, 1200, 1201)
BIOL 2251. Ecology Laboratory (1) (F,S,SS) (P: BIOL 1100, 1101, 1200, 1201; C: BIOL 2250)
BIOL 2300. Principles of Genetics (3) (F,S,SS) (P: 2 BIOL courses)
BIOL 3100, 3101. Basic Laboratory Methods for Biotechnology (3,0) (P: BIOL 2300; CHEM 1160, 1161) or BIOL 3520. Biological Evolution (3) (P: BIOL 2300 or consent of instructor)
PHYS 1250, 1260. General Physics (3,3) (F,S,SS) (GE:SC) (P for 1250: MATH 1065 or 1066; P for 1260: PHYS 1250)

Chemistry (23 s.h.):
CHEM 2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI) (F,S) (P: CHEM 1160, 1161; 1 organic CHEM course)
CHEM 2750. Organic Chemistry I (3) (F,S,SS) (P: CHEM 1160, 1161; C: CHEM 2753)
CHEM 3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI) (S) (P: CHEM 2250, 2251)

CHEM 3450. Elementary Inorganic Chemistry (3) (S) (P: CHEM 2250, 2251; C: CHEM 3451)
CHEM 3451. Elementary Inorganic Chemistry Laboratory (1) (WI) (F,S) (P: CHEM 2250, 2251; C: CHEM 3450 or 5550).
CHEM 3850, 3851. Introduction to Physical Chemistry (4,1) (WI) (F) (P: CHEM 1160, 1161; MATH 2122 or 2172; PHYS 1260)
PHYS 1250, 1260. General Physics (3,3) (F,S,SS) (GE:SC) (P for 1250: MATH 1065 or 1066; P for 1260: PHYS 1250)

Earth Science (22 s.h.):
GEOL 1550. Oceanography (4) (S) (GE:SC)
GEOL 1600. Earth and Life Through Time (4) (S) (GE:SC)
GEOL 1700. Environmental Geology (4) (F,S) (GE:SC)
GEOL 3000, 3001. Mineralogy (4,0) (F) (P: A 1000-level GEOL course; P/C: CHEM 1150, 1151)

INSERT ON PAGE 420 OF THE 2004 – 2005 CATALOG:

NEUR: NEUROSCIENCE

3310. Introduction to Neuroscience (3) (F,S,SS) (GE:SO) Same as PSYC 3310 Relationship of neuroanatomy and neurophysiology to behavior.

4200. Literature in Neurosciences (1) (F) 1 lecture hour per week. May not count toward general education science requirement. P: Consent of instructor. Each week one or two original research articles analyzed for impact on understanding of neuron, glial, and brain function at cellular, molecular, and integrative levels. Literature tailored to student and faculty interests.

4201. Laboratory Methods in Cellular and Molecular Neuroscience (2) (S) 6 lab hours per week. May not count toward general education science requirement. Basic lab methods for research in cellular and molecular neuroscience. Principles of measurement of electrical properties of excitable cells, current voltage and patch clamp, electronic instrumentation, biochemical and radiological methodology, molecular radio and fluorescence labeling, microscopy, and cell and tissue culturing.

4900. Cellular and Molecular Neuroscience (3) (F) Formerly NEUR 5000 P: Senior standing and consent of instructor. Introduction to the cellular mechanisms and molecular basis of neuron and glial function and interaction. Topics include membrane trafficking, action potentials, receptors, and signal transduction, gene transcription factors, neuroimmunology, and developmental neuroscience.

4901. Behavioral and Integrative Neuroscience (3) (S) Formerly NEUR 5001 P: Senior standing and consent of instructor. Introduces neural systems and neural basis of behavior. Topics include basic neuroanatomy; computational neuroscience, learning and memory; sensory and motor systems, neural basis of affective behavior, consciousness and cognitive neuroscience, neural plasticity, and brain lateralization and language.
4950, 4951. Neuroscience Senior Thesis I, II (3,3) (F, S, SS) (WI) P: PSYC 2101 or MATH 2228, PSYC 2210, consent of instructor. Research under the direction of a full-time faculty member on a neuroscience project culminating in a senior thesis.

NUHM: NUTRITION AND HOSPITALITY MANAGEMENT

1000. Contemporary Nutrition (3) (F,S,SS) Basic nutrition knowledge necessary to evaluate nutrition issues and make sound lifestyle decisions.

INSERT ON PAGES 131-135

DEPARTMENT OF GEOGRAPHY

Ronald L. Mitchelson, Chairperson, A-227 Brewster Building

BA in Geography

Students must complete a minimum of 21 s.h. in geography above 2999. Minimum degree requirement is 126 s.h. of credit as follows:

1. General education (See Section 4, General Education Requirements for all Baccalaureate Degree Programs) ................................................................. 42 s.h.

2. Foreign language through level 1004 ............................................................................. 12 s.h.

3. Common core ........................................................................................................... 13 s.h.

GEOG 2400. Spatial Data Analysis (3) (F, S)
GEOG 4999. Geography Professional Seminar (1) (P: Consent of instructor)

Choose 9 s.h. electives from:

GEOG 3410. Fundamentals of GIS (3) (F, S)
GEOG 3420. Remote Sensing of the Environment I (3) (F) (P: GEOG 3410 or equivalent)
GEOG 3430. Geographic Information Systems I (3) (F,S) (P: GEOG 3410 or equivalent)
GEOG 3450. Introduction to the Global Positioning System (3) (S) (P: GEOG 3410 or equivalent)
GEOG 3460. GIS Applications Programming (3) (F) (P: GEOG 3410; CSCI 1610 or DSCI 2223 or ASIP 2212 or consent of instructor)
GEOG 4410. Advanced Cartographic Design and Production (3) (F,S) (P: GEOG 3410 or equivalent experience)
GEOG 4420. Remote Sensing II (3) (P: GEOG 3420 or consent of instructor)
GEOG 4430. Geographic Information Systems II (3) (P: GEOG 3430 or consent of instructor)
GEOG 4491, 4492, 4493. Supervised Study in Geographic Techniques (1,2,3) (F,S,SS)
GEOG 4801, 4802, 4803. Geographic Internship (1,2,3) (F,S,SS) (P: Consent of GEOG internship director the semester prior to the internship.)
GEOG 4901. Senior Honors Thesis (3) (F,S) (P: GEOG 4900 with a grade of B or higher)
GEOG 5491, 5492, 5493. Seminar in Geographic Techniques (1,2,3) (P: Consent of instructor)
May choose any GEOG course listed below that is not being counted toward the degree.

4. Concentration area (Choose 15 s.h. in one area, 6 s.h. in the other area.) .......... 21 s.h.

Human:
GEOG 2003. Economic Geography (3) (WI) (F,S) (GE:SO)
GEOG 2019. Geography of Recreation (3) (F) (GE:SO)
GEOG 2100. World Geography: Developed Regions (3) (F, S, SS) (GE:SO)
GEOG 2110. World Geography: Less Developed Regions (3) (F, S, SS) (GE:SO)
GEOG 3001. Historical Geography of the United States (3)
GEOG 3003. Political Geography (3) (WI) (S) (GE:SO)
GEOG 3004. Urban Geography (3) (F)
GEOG 3049. Latin America (3) (WI) (GE:SO)
GEOG 3050. Africa (3) (WI) (S) (GE:SO)
GEOG 3051. Asia (3) (S) (GE:SO)
GEOG 3055. North Carolina (3) (F) (GE:SO)
GEOG 3056. Middle America (3) (GE:SO)
GEOG 4140. Research Methods in Human Geography (3) (S)
GEOG 4310. Geography of Transportation and Trade (3) (S) (P: GEOG 2003)
GEOG 4315. Geographic Images (3) (F) (GE:SO)
GEOG 4320. Gender, Economy, and Development (3) (S)
GEOG 4325. Resources, Population, and Development (3) (WI) (GE:SO) (P: GEOG 2003 or consent of instructor)
GEOG 4330. Agricultural Geography (3) (F) (GE:SO)
GEOG 4335. Geography of Tourism (3) (S) (GE:SO)
GEOG 4340. Introduction to Medical Geography (3) (S) (P: GEOG 3410 or Consent of Instructor)
GEOG 4345. Human Migration and Global Restructuring (3) (F) (GE:SO)
GEOG 4391, 4392, 4393. Supervised Study in Human Geography (1,2,3) (F,S,SS) (P: Consent of instructor)
GEOG 4900. Honors Research (3) (F,S) (P: Admission to GEOG honors program)
GEOG 5391, 5392, 5393. Seminar in Human Geography (1,2,3) (P: Consent of instructor)

Physical: (If concentration area, a minimum of 3 s.h. must be above 3999.)
GEOG 2200. Weather and Climate (3) (F,S)
GEOG 2250. Earth Surface Systems (3) (F)
GEOG 3220. Soil Properties, Surveys, and Applications (3) (F) (P: GEOG 2250)
GEOG 3230. Global Climates (3) (S) (P: GEOG 2200)
GEOG 3250. Environmental Hazards (3) (F) (P: GEOG 2200 or 2250)
GEOG 3510. Physical Meteorology (3) (F) (P: GEOG 2200 or consent of instructor)
GEOG 3520. Dynamic Meteorology (3) (S) (P: GEOG 2200 or consent of instructor)
GEOG 4210. Fluvial and Hydrological Processes (3) (S) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4220. Coastal Geography (3) (WI) (S) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4230. Earth Surface Processes (3) (WI) (F) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4291, 4292, 4293. Supervised Study in Physical Geography (1,2,3) (F,S,SS) (P: Consent of instructor)

GEOG 4510. Meteorological Instruments and Observation (3) (F) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4520. Boundary Layer Meteorology (3) (S) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4530. Micrometeorology (3) (F) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4540. Coastal Storms (3) (F) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4550. Synoptic Meteorology (3) (S) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4560. Urban Climatology (3) (F) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4900. Honors Research (3) (F,S) (P: Admission to GEOG honors program)

GEOG 5220. Physical Geography Field Experience (3) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 5281, 5282, 5283. Selected Topic in Physical Geography (1,2,3) (P: Consent of instructor)

5. Minor and general electives to complete requirements for graduation.

BS in Applied Geography

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education (See Section 4, General Education Requirements for all Baccalaureate Degree Programs), including those listed below................................. 42 s.h.

COMM 2410. Public Speaking (3) (F,S,SS) (GE:FA) or COMM 2420. Business and Professional Communication (3) (F,S,SS) (GE:FA)

MATH 1065. College Algebra (3) (F,S,SS) (GE:MA) (P: Appropriate score on mathematics placement test)

2. Core (Choose a minimum of 27 s.h. in geography above 2999, including a maximum of 3 s.h. of supervised study in each of the categories below.) ................................................. 43 s.h.

ENGL 3820. Scientific Writing (3) (WI) (F,S,SS) (P: ENGL 1200) or ENGL 3860. Introduction to Nonfiction Writing (3) (WI) (F,S) (P: ENGL 1200) or ENGL 3880. Writing for Business and Industry (3) (WI) (F,S,SS) (P: ENGL 1200) or ITEC 3290. Technical Writing (3) (WI) (F,S,SS) (P: ENGL 1200)

GEOG 2400. Spatial Data Analysis (3) (F,S)

GEOG 3410. Fundamentals of GIS (3) (F,S)

GEOG 4801, 4802, 4803. Geography Internship (1,2,3) (F,S,SS) (P: Consent of GEOG internship director semester prior to internship)
GEOG 4999. Geography Professional Seminar (1) (P: Consent of instructor)

**Geographic Information Science (Choose 9 s.h. from the following.):**

GEOG 3420. Remote Sensing of the Environment I (3) (F) (P: GEOG 3410 or equivalent)
GEOG 3430. Geographic Information Systems I (3) (F,S) (P: GEOG 3410 or equivalent)
GEOG 3450. Introduction to the Global Positioning System (3) (S) (P: GEOG 3410 or equivalent)
GEOG 3460. GIS Applications Programming (3) (F) (P: GEOG 3410; ASIP 2212 or CSCI 1610 or DSCI 2223 or consent of instructor)
GEOG 4410. Advanced Cartographic Design and Production (3) (F,S) (P: GEOG 3410 or equivalent experience)
GEOG 4420. Remote Sensing II (3) (S) (P: GEOG 3420 or consent of instructor)
GEOG 4430. Geographic Information Systems II (3) (P: GEOG 3430 or consent of instructor)
GEOG 4491, 4492, 4493. Supervised Study in Geographic Techniques (1,2,3) (F,S,SS)
GEOG 4900. Honors Research (3) (F,S) (P: Admission to GEOG honors program)

**Human (Choose 9 s.h. from the following.):**

GEOG 2003. Economic Geography (3) (WI) (F,S) (GE:SO)
GEOG 2019. Geography of Recreation (3) (F) (GE:SO)
GEOG 2100. World Geography: Developed Regions (3) (F,S,SS) (GE:SO)
GEOG 2110. World Geography: Less Developed Regions (3) (F,S,SS) (GE:SO)
GEOG 3001. Historical Geography of the United States (3) (F)
GEOG 3003. Political Geography (3) (WI) (S) (GE:SO)
GEOG 3004. Urban Geography (3) (S)
GEOG 3049. Latin America (3) (WI) (GE:SO)
GEOG 3050. Africa (3) (WI) (S) (GE:SO)
GEOG 3051. Asia (3) (S) (GE:SO)
GEOG 3055. North Carolina (3) (F) (GE:SO)
GEOG 3056. Middle America (3) (GE:SO)
GEOG 4001. Geography of Transportation and Trade (3) (S) (P: GEOG 2003)
GEOG 4050. Human Migration and Global Restructuring (3) (F) (GE:SO)
GEOG 4140. Research Methods in Human Geography (3) (S)
GEOG 4315. Geographic Images (3) (F) (GE:SO)
GEOG 4320. Gender, Economy, and Development (3) (S)
GEOG 4325. Resources, Population, and Development (3) (WI) (GE:SO) (P: GEOG 2003 or consent of instructor)
GEOG 4330. Agricultural Geography (3) (F) (GE:SO)
GEOG 4335. Geography of Tourism (3) (S) (GE:SO)
GEOG 4340. Introduction to Medical Geography (3) (S) (P: GEOG 3410 or Consent of Instructor)
GEOG 4391, 4392, 4393. Supervised Study in Human Geography (1,2,3) (F,S,SS) (P: Consent of instructor)
GEOG 4900. Honors Research (3) (F,S) (P: Admission to GEOG honors program)
GEOG 5391, 5392, 5393. Seminar in Human Geography (1,2,3) (P: Consent of instructor)

**Physical (Choose 9 s.h. from the following.):**

GEOG 2200. Weather and Climate (3) (F,S)
GEOG 2250. Earth Surface Systems (3) (F)
GEOG 3220. Soil Properties, Surveys, and Applications (3) (F) (P: GEOG 2250)
GEOG 3230. Global Climates (3) (S) (P: GEOG 2200)
GEOG 3250. Environmental Hazards (3) (F) (P: GEOG 2200 or 2250)
GEOG 3510. Physical Meteorology (3) (F) (P: GEOG 2200 or consent of instructor)
GEOG 3520. Dynamic Meteorology (3) (S) (P: GEOG 2200 or consent of instructor)
GEOG 4210. Fluvial and Hydrological Processes (3) (S) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4220. Coastal Geography (3) (WI) (S) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4230. Earth Surface Processes (3) (WI) (F) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4291, 4292, 4293. Supervised Study in Physical Geography (1,2,3) (F,S,SS) (P: Consent of instructor)
GEOG 4510. Meteorological Instruments and Observation (3) (F) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4520. Boundary Layer Meteorology (3) (S) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4530. Micrometeorology (3) (F) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4540. Coastal Storms (3) (F) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4550. Synoptic Meteorology (3) (S) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4560. Urban Climatology (3) (F) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4900. Honors Research (3) (F,S) (P: Admission to GEOG honors program)
GEOG 5220. Physical Geography Field Experience (3) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 5281, 5282, 5283. Selected Topic in Physical Geography (1,2,3) (P: Consent of instructor)

Electives (Choose 3 s.h. from the following):
GEOG 1000. Introduction to Geography (3) (F,S,SS) (GE:SO)
GEOG 1250. The Water Planet (3) (F,S) (GE:SO)
GEOG 4901. Senior Honors Thesis (3) (F,S) (P: GEOG 4900 with a grade of B or higher)

May choose any GEOG course listed that is not being counted toward the degree.

3. Concentration Area (Choose an additional 6 s.h. in either human or physical geography, as listed above. If concentration area is physical geography, a minimum of 3 s.h. must be above 3999)........................................ 6 s.h.

4. Minor
............................................................................................................................................................................. 24 s.h.
Selected from aerospace, biology, business administration, computer science, economics, geology, industrial
technology, information processing, leisure systems studies, military science, planning, public administration,
statistics, or any other appropriate minor with consent of the dept chair.

5. Electives to complete requirements for graduation.

Geography Minor

Minimum requirement for the minor in geography is 24 s.h. of credit as follows:
Minimum of one course from each of the geography categories listed in the BS in applied geography degree, 2.,
above Minimum of 6 s.h. of GEOG electives above 2999
Geography Honors Program

The honors program in geography is designed for outstanding geography majors who wish additional challenge and recognition in pursuing scholarly work in a sub-field of geography. A student wishing to enter the honors program in geography must be a junior majoring in geography, have a minimum cumulative 3.0 GPA, have a minimum 3.3 GPA in geography, and have completed a minimum of 21 s.h. in geography. Exceptions to these requirements may be made at the discretion of the departmental chairperson. A student in the honors program is encouraged to enroll, as part of her/his regular curriculum, in GEOG 4900 during the second semester of the junior year, and GEOG 4901 in the first semester of the senior year. Each honors student will carry out an extensive program of carefully supervised reading and research in one of the areas of geography, leading to the preparation of a senior honors thesis. To receive honors, a student must complete both GEOG 4900 and GEOG 4901 with at least a B. Further details about the honors program are available in the departmental office, Brewster A-229.

Certificate in Atmospheric Science

This course of study for the Atmospheric Science certificate provides theoretical and technological competencies that prepare students to measure, analyze, and predict the atmospheric environment. The program enhances basic and applied research capacity at the undergraduate level. A minimum cumulative 2.5 GPA is required for admission. The student must maintain a B average in the certificate courses to remain in the program and receive the Atmospheric Science certificate. The certificate requires a minimum of 15 s.h. of credit as follows:

1. Core .................................................................................................................................................. 12 s.h.

It is recommended that GEOG 3510 be taken prior to GEOG 3520 or GEOG 4550.

GEOG 2200. Weather and Climate (3) (F,S)
GEOG 3510. Physical Meteorology (3) (F) (P: GEOG 2200 or consent of instructor)
GEOG 3520. Dynamic Meteorology (3) (S) (P: GEOG 2200 or consent of instructor)
GEOG 4510. Meteorological Instruments and Observations (3) (F) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4550. Synoptic Meteorology (3) (S) (P: GEOG 2200, 2250; or consent of instructor)

2. Electives .................................................................................................................................................. 3 s.h.

GEOG 3230. Global Climates (3) (S) (P: GEOG 2200)
GEOG 3250. Environmental Hazards (3) (F) (P: GEOG 2200 or 2250)
GEOG 4210. Fluvial and Hydrological Processes (3) (S) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4520. Boundary Layer Meteorology (3) (S) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4530. Micrometeorology (3) (S) (P: GEOG 2200, 2250; or consent of instructor)
GEOG 4540. Coastal Storms (3) (F) (P: GEOG 2200, 2250; or consent of instructor)

GEOG 4560. Urban Climatology (3) (F) (P: GEOG 2200, 2250; or consent of instructor)
EHST 3600. Air Pollution (3) (F) (P: EHST 2110 or consent of instructor)
Certificate in Geographic Information Science

The course of study for the geographic information science (GIS) certificate provides theoretical and technological competencies that prepare students to develop and manage geographic information projects and to interpret and implement GIS as a decision support system. The program enhances basic and applied research capacity at the undergraduate level. A minimum cumulative 2.5 GPA is required for admission. The student must maintain a B average in the certificate courses to remain in the program and receive the GIS certificate. The certificate requires a minimum of 15 s.h. as follows:

1. Core ........................................................................................................................................... 12 s.h.
   GEOG 3410. Fundamentals of GIS (3) (F,S)
   GEOG 3420. Remote Sensing of the Environment I (3) (F) (P: GEOG 3410 or equivalent)
   GEOG 3430. Geographic Information Systems I (3) (F,S) (P: GEOG 3410 or equivalent)
   GEOG 3450. Introduction to the Global Positioning System (3) (S) (P: GEOG 3410 or equivalent)

2. Electives (Choose from the following.) ..................................................................................... 3 s.h.
   GEOG 3460. GIS Applications Programming (3) (F) (P: GEOG 3410; ASIP 2212 or CSCI 1610 or DSCI 2223 or consent of instructor)
   GEOG 4410. Advanced Cartographic Design and Production (3) (F,S) (P: GEOG 3410 or equivalent)
   GEOG 4420. Remote Sensing II (3) (S) (P: GEOG 3420 or consent of instructor)
   GEOG 4430. Geographic Information Systems II (3) (S) (P: GEOG 3430 or consent of instructor)
   PLAN 3051. Introduction to GIS in Planning (3) (F,S) (P: GEOG 3410 or consent of instructor)

GEOG: GEOGRAPHY

1000. Introduction to Geography (3) (F,S,SS) (GE:SO) Basic course to field of geography. Major physical and cultural elements of environment and their influence on man’s activity.

1200. Introduction to Physical Geography (3) (F) May not count toward general education social sciences requirement. Fundamental processes that influence weather and climate, land form development, soil formation, water resources, and vegetative regimes with the purpose of better understanding their spatial interrelationships within human physical environment.


2019. Geography of Recreation (3) (F) (GE:SO) Spatial distribution and interaction of selected recreational phenomena. Basic ideas which have emerged over last decade explored for contributions to recreational decision making.

2100. World Geography: Developed Regions (3) (F,S,SS) (GE:SO) Introductory survey of the regions of the US and Canada, Europe, the former Soviet Union, Australia, and Japan. Emphasis on geographic aspects of physical environment, population, economy, resources, and current issues in each region.

2110. World Geography: Less Developed Regions (3) (F,S,SS) (GE:SO) Introductory survey of regions of Latin America, Sub-Saharan Africa, North Africa and the Middle East, South Asia, Southeast Asia, and China.
Emphasis on geographic aspects of physical environment, population, economy, resources, and current issues in each region.


2250. Earth Surface Systems (3) (F) May not count toward general education social sciences requirement. Basic understanding of natural systems operating on earth’s surface that shape the natural environment. Focuses on global distribution of land forms and vegetation. Strong emphasis on hands-on learning.

2300. Geography of Environmental Resources (3) (F) May not count toward general education social sciences requirement. Location and development of environmental resources at world and national levels.

2400. Spatial Data Analysis (3) (F,S) May not count toward general education social sciences requirement. Foundation for data management and analysis in geographic information science. Introduces quantitative expressions common to geographic information science and descriptive and inferential spatial statistics.

2500. Map and Aerial Photo Interpretation (3) (F,S,SS) 4 lecture hours per week. May not count toward general education social sciences requirement. Principles of map reading and aerial photo interpretation as information sources on natural and manmade environment.

3001. Historical Geography of the United States (3) Growth and development of US through analysis of geographic conditions.

3003. Political Geography (3) (WI) (S) (GE:SO) Geographic factors in current national and world problems. Internal and external power, frontiers and boundaries, colonialism and neonationalism, and impact of technology.

3004. Urban Geography (3) (F) Origin and growth of urban areas. Relationship with one another as well as size, function, and tributary territory.

3046. United States and Canada (3) (F) (GE:SO) Intensive study of US and Canada based on analysis and comparison of regions.

3047. Western Europe (3) (S) (GE:SO) Brief geographic survey of Europe and detailed regional study of nations located in western Europe.

3049. Latin America (3) (WI*) (GE:SO) Geographical analysis of political, social, economic and cultural transformations in contemporary Latin America.


3051. Asia (3) (S) (GE:SO) Geographic patterns, economy, population, and role of China, Korea, Japan, India, Pakistan, and Southeast Asia in world affairs.


3056. Middle America (3) (GE:SO) Lands and people of Caribbean, Mexico, and Central America.

3220. Soil Properties, Surveys, and Applications (3) (F) Saturday field trip may be required. P: GEOG 2250. Physical and chemical properties of soil, soil-water relationships, soil-forming factors, county soil reports, and soil applications that involve land management decisions.


3250. Environmental Hazards (3) (F) May not count toward general education social sciences requirement. P: GEOG 2200 or 2250. Various ways people and governments respond to natural and human-induced extreme events, human behavior in threatening or actual hazards, and public policies and programs designed to control or alleviate hazards.

3400. Quantitative Techniques in Geography (3) (F) May not count toward general education social sciences requirement. P: GEOG 2400 or consent of instructor. Introduces quantitative techniques used in solving geographic problems. Emphasis on use of statistical packages on mainframe and microcomputers for analysis of spatial data.

3410. Fundamentals of GIS (3) (F,S) May not count toward general education social sciences requirement. Foundations for understanding and using geographical information systems. Emphasis on creation, visualization,
and analysis of geographically referenced data. Important concepts surveyed and applied through hands-on experience.


**3450. Introduction to the Global Positioning System (3) (S)** May not count toward general education social sciences requirement. P: GEOG 3410 or equivalent. Techniques for spatial referencing via a satellite-based navigation system.

**3460. GIS Applications Programming (3) (F)** May not count toward general education social sciences requirement. P: GEOG 3410; ASIP 2212 or CSCI 1610 or DSCI 2223 or consent of instructor. Introduces GIS applications design, development, and deployment. Focuses on custom mapping user interfaces; programmable solutions for spatial data display, analysis and manipulation; and custom GIS applications development.

**3510. Physical Meteorology (3) (F)** May not count toward general education social sciences requirement. P: GEOG 2200 or consent of instructor. Basic principles of atmospheric hydrostatics, thermodynamics, cloud and precipitation processes, and radiative transfer.

**3520. Dynamic Meteorology (3) (S)** May not count toward general education social science requirement. P: GEOG 2200 or consent of instructor. 3 lecture hours per week. Basic concepts and techniques of mathematics, thermodynamics, mechanics and fluid dynamics in the study of atmospheric motions and weather systems.

**4140. Research Methods in Human Geography (3) (S)** May not count toward general education social sciences requirement. P: GEOG 2300; 15 s.h. in GEOG; or dept consent. Methods and techniques of field research in human geography.

4191, 4192, 4193. Supervised Study in Regional Geography (1,2,3) (F,S,SS) May be repeated for maximum of 6 s.h. May not count toward general education social sciences requirement. P: Consent of instructor. Individualized study of selected aspect of regional geography under direct supervision of faculty member.

**4210. Fluvial and Hydrological Processes (3) (S)** May not count toward general education social sciences requirement. P: GEOG 2200, 2250; or consent of instructor. Comprehensive examination of principles of surface water hydrology and fluvial geomorphology. Application of principles to environmental problems.

**4220. Coastal Geography (3) (WI) (S) Formerly GEOG 3002** May not count toward general education social sciences requirement. P: GEOG 2200, 2250; or consent of instructor. Comprehensive examination of coastal systems, including beaches, dunes, and estuaries. Focuses on processes that form and maintain systems, how landforms respond to those processes, and how human activities affect the system.

**4230. Earth Surface Processes (3) (WI) (F)** May not count toward general education social sciences requirement. P: GEOG 2200, 2250; or consent of instructor. Detailed examination of dominant geomorphic processes and sediment dynamics involved in the creation of landforms. Emphasis on laboratory experimentation experimentation.

4291, 4292, 4293. Supervised Study in Physical Geography (1,2,3) (F,S,SS) May be repeated for maximum of 6 s.h. P: Consent of instructor. Individualized study of selected aspect of physical geography under direct supervision of faculty member.

**4310. Geography of Transportation and Trade (3) (S)** P: GEOG 2003. Forces leading to interaction of people and commodities between places, distribution and characteristics of transport networks, and effects of transportation flows on regions and nations.

**4315. Geographic Images (3) (F) (GE:SO) Formerly GEOG 3300** Social and cultural images of space, place, and environment as produced and consumed through various media at a variety of scales.

**4320. Gender, Economy, and Development (3) (S)** May not count toward general education social sciences requirement. P: Consent of instructor. Role of gender in economic and development processes from geographical perspective.
4325. Resources, Population, and Development (3) (WI) (GE:SO) Formerly GEOG 3000 P: GEOG 2003 or consent of instructor. Demographic issues and population policies in relation to resource use and economic development from a geographical perspective.

4330. Agricultural Geography (3) (GE:SO) Contemporary trends in global restructuring of agro food systems in both industrialized and developing nations.

4335. Geography of Tourism (3) (GE:SO) Traditional and emerging forms of tourism development as they transform economic, social, cultural, and environmental landscapes inside and outside the US.

4340. Introduction to Medical Geography (3) (S) May not count toward general education social sciences requirement. P: GEOG 3410 or consent of instructor. Topics range from geographic patterns and processes of disease to locational aspects of health care delivery systems. GIS used to describe and analyze problems in medical geography.

4345. Human Migration and Global Restructuring (3) (F) Human migration processes associated with political and economic restructuring in different regions of the globe.

4391, 4392, 4393. Supervised Study in Human Geography (1,2,3) (F,S,SS) May be repeated for maximum of 6 s.h. May not count toward general education social sciences requirement. P: Consent of instructor. Individualized study of selected aspect of human geography under direct supervision of faculty member.

4410. Advanced Cartographic Design and Production (3) (F,S) May not count toward general education social sciences requirement. P: GEOG 3410 or equivalent experience. Continuation of GEOG 3410 at advanced level. Advanced mapping techniques such as animation. Internet mapping and production of publication-quality maps.

4420. Remote Sensing II (3) (S) May not count toward general education social sciences requirement. P: GEOG 3420 or consent of instructor. Interpretation of environmental phenomena remotely sensed by sensors on board aircraft and satellites. Emphasis on learning digital image processing from remote sensing perspective.

4430. Geographic Information Systems II (3) (S) P: GEOG 3430 or consent of instructor. Advanced topics. Emphasis on development of GIS projects.

4491, 4492, 4493. Supervised Study in Geographic Techniques (1,2,3) (F,S,SS) May be repeated for maximum of 6 s.h. May not count toward general education social sciences requirement. P: Consent of instructor. Individualized study of selected geographic technique under direct supervision of faculty member.

4510. Meteorological Instruments and Observations (3) (F) May not count toward general education social science requirement. P: GEOG 2200, 2250; or consent of instructor. 2 lecture and 3 lab hours per week. Basic principles of meteorological instruments and measurement techniques; introduction of data logging, processing, and sources of measurement error; hands-on experience in labs and group field projects.

4520. Boundary Layer Meteorology (3) (S) May not count toward general education social science requirement. P: GEOG 2200, 2250; or consent of instructor. Structure of atmospheric boundary layers and turbulence, principles of turbulent transport and diffusion processes, their measurements and modeling.

4530. Micrometeorology (3) (F) May not count toward general education social science requirement. P: GEOG 2200, 2250; or consent of instructor. Atmospheric processes at micro and local scales, including exchange processes of momentum, mass and energy, radiation budget and energy balance near the surface, soil temperature and heat transfer; turbulent transport, biosphere-atmosphere interactions, micrometeorological measurement and modeling techniques.

4540. Coastal Storms (3) (F) May not count toward general education social sciences requirement. P: GEOG 2200, 2250; or consent of instructor. Basic dynamics, analysis, and forecasting of extratropical and tropical storms; history of storms in the Carolinas and current mitigation plans.

4550. Synoptic Meteorology (3) (S) P: GEOG 2200. Analysis and forecasting of mid-latitude weather systems as characterized by large-scale dynamics. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis.

4560. Urban Climatology (3) (F) P: GEOG 2200. The impact of urbanization upon atmospheric processes, including the energetic balance, precipitation, atmospheric circulation, and pollution.

4801, 4802, 4803. Geographic Internship (1,2,3) (F,S,SS) 60 hours of work responsibility for 1 s.h. credit. May be repeated for maximum of 6 s.h. May not count toward general education social sciences requirement. P: Consent of the director of geography internships; consent should be obtained during the semester prior to internship. Application of geographic principles in industrial, governmental, or business setting.

4900. Honors Research (3) (F,S) P: Admission to GEOG honors program. Supervised reading and research in an area of geography that leads to preparation of senior honors thesis proposal.
**4901. Senior Honors Thesis (3) (F,S)** P: GEOG 4900 with a grade of B or higher. Extensive program of supervised research in area of geography that leads to writing of senior honors thesis.

**4999. Geography Professional Seminar (1) (F,S)** P: Consent of instructor. Design and completion of professional portfolio. Examines transition from undergraduate student status to professional life or continued education.

**5220. Physical Geography Field Experience (3)** 10 classroom hours of orientation and organization over a 2-week period followed by 3 weeks (15 working days) in a field location. Undergraduates may not count toward general education social sciences requirement. P: GEOG 2200, 2250; or consent of instructor. Field-based introduction to basic aspects of physical geography research. Development of research questions, field techniques, use of modern instrumentation, and geographic analysis of field data.

**5281, 5282, 5283. Selected Topics in Physical Geography (1,2,3)** May be repeated for up to 6 s.h. Undergraduates may not count toward general education social sciences requirement. P: Consent of instructor. Seminar on selected topic.

**5393. Seminar in Human Geography (3)** May be repeated for up to 6 s.h. Undergraduates may not count toward general education social sciences requirement. P: Consent of instructor. Seminar on selected topic in economic-human geography.


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*Insert on p. 123 of the 2004 – 2005 catalog:*

**ENGL 3830. Introduction to Play Writing (3) (WI) (F) (P: ENGL 1200)**

**ENGL 3835. Persuasive Writing (3) (WI) (S) (P: ENGL 1200)**

**ENGL 3840. Introduction to Poetry Writing (3) (WI) (F,S,SS) (P: ENGL 1200)**

**ENGL 3850. Introduction to Fiction Writing (3) (WI) (F,S,SS) (P: ENGL 1200)**

**ENGL 3860. Introduction to Nonfiction Writing (3) (WI) (F,S) (P: ENGL 1200)**

**ENGL 3870. Introduction to Editing and Abstracting (3) (WI) (F,S) (P: ENGL 1200)**

**ENGL 3880. Writing for Business and Industry (3) (WI) (F,S,SS) (P: ENGL 1200)**

**ENGL 3890. Critical Writing (3) (WI) (S-OY) (GE:HU) (P: ENGL 1200)**

**ENGL 4890. Practicum: Careers in Writing (3) (F,S,SS) (P: Consent of instructor)**

**ENGL 4891. Practicum: Careers in Writing (3) (F,S,SS) (P: Consent of instructor)**

**ENGL 5770. Advanced Editing (3) (WI) (P: ENGL 3870 or consent of instructor)**

**ENGL 5780. Advanced Writing for Business and Industry (3) (WI) (P: ENGL 3880 or consent of instructor)**

**ENGL 5840. Advanced Poetry Writing (3) (WI) (P: ENGL 3840 or consent of instructor)**

**ENGL 5850. Advanced Fiction Writing (3) (WI) (P: ENGL 3850 or consent of instructor)**

**ENGL 5860. Advanced Nonfiction Writing (3) (WI) (P: ENGL 3860 or consent of instructor)**

**ENGL 5890. Advanced Script Writing (3) (P: Acceptance into the creative writing concentration of the MA literature program or ENGL 3830 or consent of instructor)**

Choose an additional 3 s.h. of ENGL electives above 2899. CLAS 3460 may be used to satisfy this requirement. Writing courses or ENGL 4950 may not be used to satisfy this requirement.
5. Senior writing portfolio.

6. Minor and general electives to complete requirements for graduation.

*Recommended Elective for Writing Concentration*: PHIL 1180. Introduction to Critical Reasoning (3) (WI*) (S) (GE:HU) or PHIL 2271. Introduction to Philosophy of Art (3) (WI*) (F,S) (GE:HU)

**English Minor**

Required ENGL courses (exclusive of freshman composition) ................................................................. 24 s.h.

A minimum of 12 s.h. must be selected from courses numbered above 2899. CLAS 3460 may be counted.

ENED 4323 and 4324 may not be counted, nor may both ENGL 2710 and 2730 be counted. Students interested in minoring in English should consult with the director of undergraduate studies in the department to plan their minor programs.

**Department Certificate in Business and Technical Communication**

For licensure, students must register with the department and maintain a minimum average of B.

1. **Core** ............................................................................................................................................. 3 s.h.

ENGL 3880. Writing for Business and Industry (3) (WI) (F,S,SS) (P: ENGL 1200)

2. **Electives** ........................................................................................................................................ 12 s.h.

COMM 2420. Business and Professional Communication (3) (F,S,SS) (GE:FA)

ENGL 2710. English Grammar (3) (F,S,SS) (P: ENGL 1200) or ENGL 2730. Functional Grammar (3) (WI) (F,S,SS) (P: ENGL 1200)

ENGL 3810. Advanced Composition (3) (WI) (F,S,SS) (P: ENGL 1200)

ENGL 3820. Scientific Writing (3) (WI) (F,S,SS) (P: ENGL 1200)

**ENGL 3835. Persuasive Writing (3) (WI) (S) (P: ENGL 1200)**

ENGL 3860. Introduction to Nonfiction Writing (3) (WI) (F,S) (P: ENGL 1200)

ENGL 3870. Introduction to Editing and Abstracting (3) (WI) (F,S) (P: ENGL 1200)

ENGL 3885. Writing and Publications Development/Process (3) (WI) (S) (P: Consent of instructor)

ENGL 3895. Topics in Technical and Professional Writing (3) (WI) (S) (P: Consent of instructor)

ENGL 4890. Practicum: Careers in Writing (3) (F,S,SS) (P: Consent of instructor) or ENGL 4891. Practicum: Careers in Writing (3) (F,S,SS) (P: Consent of instructor)

ENGL 5770. Advanced Editing (3) (WI) (P: ENGL 3870 or consent of instructor)

ENGL 5780. Advanced Writing for Business and Industry (3) (WI) (P: ENGL 3880 or consent of instructor)

ENGL 5860. Advanced Nonfiction Writing (3) (WI) (P: ENGL 3860 or consent of instructor)

With departmental approval, certain other courses may be substituted.
SECTION 8: COURSES

3630. The Bible as Literature (3) (WI) (S) (GE:HU) P: ENGL 1200. Various literary genres in the Bible.


3720. Writing Systems of the World (3) (F) P: ENGL 1200. Writing systems and their relationship to language, literacy, and multicultural communication.

3730. The Structure of English: Phonology and Morphology (3) (F) Formerly ENGL 5501 May not count toward general education humanities requirement. P: ENGL 1200. Contemporary linguistic theory and its practical application to teaching phonological and morphological components of English language.


3750. Introductory Linguistics (3) (S) P: ENGL 1200. Methods and techniques of linguistic analysis. Sample problems on phonological, morphological, syntactic, graphemic, and historic reconstruction levels. Emphasis on non-Indo-European languages.

3760. Linguistic Theory for Speech and Hearing Clinicians (3) (F,S) May not count toward general education humanities requirement. P: ENGL 1200. Linguistic theory for precise formalization of adult language systems on morphophonological, syntactic, and semantic levels. Emphasis on practical applications to clinical speech therapy.


3820. Scientific Writing (3) (WI) (F,S,SS) May not count toward general education humanities requirement. P: ENGL 1200. Practice in assimilation and written presentation of scientific information.

3830. Introduction to Play Writing (3) (WI) (F) May not count toward general education humanities requirement. P: ENGL 1200. Fundamentals of play writing: finding a voice with a point of view, writing dialog, scene construction, characterization, and plot development.


3840. Introduction to Poetry Writing (3) (WI) (F,S,SS) May not count toward general education humanities requirement. P: ENGL 1200. Practice in poetry writing.


3860. Introduction to Nonfiction Writing (3) (WI) (F,S) May not count toward general education humanities requirement. P: ENGL 1200. Techniques of writing, researching, and marketing nonfiction prose. Emphasis on writing skills.

3870. Introduction to Editing and Abstracting (3) (WI) (F,S) May not count toward general education humanities requirement. P: ENGL 1200. Administrative, manuscript, copy, and production editing of nonfiction books, periodicals, and corporate documents.

3880. Writing for Business and Industry (3) (WI) (F,S,SS) May not count toward general education humanities requirement. P: ENGL 1200. Composition with writing practice for students in business and industry.

3885. Writing and Publications Development/Process (3) (WI) (S) May not count toward general education humanities requirement. P: ENGL 1200; consent of instructor. Development and writing processes
(planning, preparing, production) of professional communication documents, such as computer documentation instructions, employee manual, and policy and procedural manuals. Aspects of publication management (scheduling and budgeting).

Insert on pp. 138 – 139 of 2004 – 2005 catalog:

BS in Public History

Minimum degree requirement is **126 s.h.** of credit as follows:

1. **General education (See Section 4, General Education Requirements for all Baccalaureate Degree Programs.)** ............................................................................................................................................................................. **42 s.h.**

2. **Foreign language through level 1004** ............................................................................................................................................................................. **12 s.h.**

2. 3. **Core.............................................................................................................................................................................................................** **36 s.h.**

HIST 1030. World Civilizations to 1500 (3) (WI*) (F,S,SS) (GE:SO)
HIST 1031. World Civilizations Since 1500 (3) (WI*) (F,S,SS) (GE:SO)
HIST 1050. American History to 1877 (3) (WI*) (F,S,SS) (GE:SO)
HIST 1051. American History Since 1877 (3) (WI*) (F,S,SS) (GE:SO)
HIST 4000. Senior Seminar (3)

Choose 15 **a minimum of 21 s.h.** of HIST courses above 2999, including a minimum of one course each in American, European, and other world areas. (See BA degree for course area designations.)

3. **Research Skills..................................................................................................................................................................................................** **3 s.h.**

HIST 5950. Introduction to Quantitative History (2) (P: 20 s.h. of undergraduate history)
HIST 5951. Directed Readings and Research in Quantitative History (1) (P: HIST 5950)

4. **Professional courses ..................................................................................................................................................................................** **24 s.h.**

HIST 3900. Introduction to Public History (3)
HIST 3993. Approaches to Historical Objects (3)
HIST 5910. Introduction to the Administration of Archives and Historical Manuscripts (3)
HIST 5920, 5921. Techniques of Museum and Historic Site Development (3,0)
HIST 5985. Historic Preservation Planning (3)

Choose 18 s.h. from:

HIST 3005. Selected Topics in History (3) (WI*) (GE:SO)
HIST 3130. Problems in American History (3)
HIST 5005. Selected Topics in History (3) (WI*)
HIST 5122. Social and Cultural History of the United States Since 1865 (3)
HIST 5930, 5931. Field and Laboratory Studies in Museum and Historic Site Development (3,0)
HIST 5960. Introduction to Oral History (3)
HIST 5970. Living History (3)

Required public history courses..............................................................12 s.h.

HIST 3900. Introduction to Public History (3)
HIST 3993. Approaches to Historical Objects (3)
HIST 5910. Introduction to the Administration of Archives and Historical Manuscripts (3)
HIST 5920/5921. Techniques of Museum and Historic Site Development (3)

Public history electives.................................................................6-9 s.h.

Choose from the following:

HIST 5930/5931. Field and Laboratory Studies in Museum and Historic Site Development (3)
HIST 5950. Introduction to Quantitative History (2)
(P: 20 s.h. of undergraduate history)
HIST 5951. Directed Readings and Research in Quantitative History (1) (C: HIST 5950)
HIST 5960. Introduction to Oral History (3)
HIST 5970. Living History (3)
HIST 5985. Historic Preservation Planning (3)

Internship.................................................................3-6 s.h.

Choose from the following:

HIST 4940, 4941, 4942. Internship in Archives and Historical Records Administration (3,6,9) (F,S,SS)
(P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor).
HIST 4943, 4944, 4945. Internship in Museum Administration (3,6,9)
(F,S,SS) (P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor)
HIST 4946, 4947, 4948. Internship in Historic Site Administration (3,6,9) (F,S,SS) (P: Senior standing; minimum Cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor)

Maximum of 6 s.h. may count toward the requirement.

5. Internship (Choose from the following.).................................................. 3 s.h.

HIST 4940, 4941, 4942. Internship in Archives and Historical Records Administration (3,6,9) (F,S) (P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor) HIST 4943, 4944,
4945. Internship in Museum Administration (3,6,9) (F,S) (P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor)

HIST 4946, 4947, 4948. Internship in Historic Site Administration (3,6,9) (F,S) (P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor)

6. Cognates (Choose from the following.)................................................................. 96 s.h.

ACCT 2101. Survey of Financial and Managerial Accounting (3) (F,S) (P: MATH 1065 or 1066)

AMID FDMR 2700. Historic Interiors I: 3000 BC Through Mid-Nineteenth Century (3) (WI) (S)(F)

AMID FDMR 2750. Historic Interiors II: Late Nineteenth and Twentieth Centuries (3) (WI) (F) (S)

ANTH 2000. Archaeology Around the World (3) (F,S) (GE:SO)

ANTH 3077. Archaeological Methods (3) (S) (P: ANTH 2000 or consent of instructor)

ART 1906. Art History Survey (3) (F,S) (GE:FA) (P: ART 1905 or 1910)

ART 1907. Art History Survey (3) (F,S) (GE:FA) (P: ART 1905 or 1910)

ART 2905. Masterpieces and Ideas in the History of Art (3) (GE:FA)

ART 5900. Art of the United States (3) (P: ART 1906, 1907)

ENGL 3870. Introduction to Editing and Abstracting (3) (F,S) (P: ENGL 1200)

MGMT 3202. Fundamentals of Management (3) (F,S,SS)

MUSC 2227. Introduction to American Music from Colonial Times to the Present (3) (GE:FA)

PHIL 2275. Professional Ethics (3)(WI*) (F,S,SS) (GE:HU)

PLAN 3000. Urban Planning (3) (F,SS)

7.6. Electives to complete requirements for graduation.

Insert on pp. 166 of 2004 – 2005 catalog

senior colleges in meeting the BSBA degree requirements. No course may count as a College of Business concentration requirement and also count as fulfilling the business core requirements of the College of Business.

DEPARTMENT OF ACCOUNTING

Edwin A. Doty, Chairperson, 3208 Bate Building

BSBA in Management Accounting

The BSBA in management accounting does not satisfy the educational prerequisites nor provide a comprehensive program of training for professional certification. Students aspiring to achieve professional certification should refer to the requirements for the BSA/MSA degree program. Students pursuing the BSBA in management accounting must earn a minimum grade of C in accounting courses to satisfy any upper-level accounting course prerequisites. Also, to graduate, students must earn a minimum grade of C and a minimum cumulative GPA of 2.0 in all 3000- and 4000-level accounting courses taken.

Minimum degree requirement is 120 s.h. of credit as follows:

1. General education requirements (See Section 4, General Education Requirements for all
Baccalaureate Degree Programs), including those listed below ........................................... 42 s.h.

BIOL 1060. Environmental Biology (4) (F,S,SS) (GE:SC) or CHEM 1020. General Descriptive Chemistry (4) (GE:SC) or GEOG 1700. Environmental Geology (4) (F,S) (GE:SC) or PHYS 1050. Physics and the Environment (4) (F,S,SS) (GE:SC)

COMM 2420. Business and Professional Communication (3) (F,S,SS) (GE:FA)
ECON 2113. Principles of Microeconomics (3) (F,S,SS) (GE:SO)
ECON 2133. Principles of Macroeconomics (3) (F,S,SS) (GE:SO) (P: ECON 2113)

MATH 1066. Applied Mathematics for Decision Making (3) (F,S,SS) (GE:MA) (P: Appropriate score on mathematics placement test or approval of dept chair)

PHIL 2274. Business Ethics (3) (WI*) (F,S,SS) (GE:HU) or PHIL 2275. Professional Ethics (3) (WI*) (F,S,SS) (GE:HU)

PSYC 1000. Introductory Psychology (3) (F,S,SS) (GE:SO)

SOC 1110. Introduction to Sociology (3) (F,S,SS) (GE:SO)

2. Cognates ........................................................................................................................................... 6 s.h.

ENGL 3880. Writing for Business and Industry (3) (WI) (F,S,SS) (P: ENGL 1200)

MATH 2283. Statistics for Business (3) (F,S,SS) (P: MATH 1065 or 1066 or equivalent)

3. Business core ........................................................................................................................................... 36 s.h.

ACCT 2401. Financial Accounting (3) (F,S,SS) (P: MATH 1065 or 1066 or 2119 or 2121 or 2171)

ACCT 2521. Managerial Accounting (3) (F,S,SS) (P: ACCT 2401)

DSCI 2223. Introduction to Computers (3) (F,S,SS)

DSCI 3063. Management Information Systems I (3) (F,S,SS) (P: DSCI 2223)

DSCI 3123. Operations Management (3) (F,S,SS) (P: Minimum grade of C in MATH 1066, 2283; C: MGMT 3202)

DSCI 3223. Business Decision Modeling (3) (F,S,SS) (P: Minimum grade of C in DSCI 2223; MATH 1066 or 2119 or 2121 or 2171; 2283)

FINA 2244. Legal Environment of Business (3) (F,S,SS)

FINA 3274. Financial Management (3) (F,S,SS) (P: ECON 2113; MATH 2283; P/C: ACCT 2521)

MGMT 3202. Fundamentals of Management (3) (F,S,SS) (P: ECON 2113)

MGMT 4842. Business Policy (3) (WI) (F,S,SS) (P: DSCI 3123; FINA 3274; MKTG 3832; MGMT 3202, declared major in the College of Business; senior standing)

MKTG 3832. Marketing Management (3) (F,S,SS) (P: ECON 2113)

Choose one international perspectives course from:

ACCT 4451. International Accounting (3) (F,S) (P: FINA 3724)

FINA 4454. International Finance (3) (S) (P: FINA 3724)

MGMT 3352. International Business (3) (F,S,SS) (P: MGMT 3202)

MKTG 3852. Cultural Environment of International Business (3) (F,S) (P: Junior standing; completion of a minimum of 3 s.h. in ECON [may be specified by dept])

MKTG 4992. International Marketing (3) (WI) (F,S) (P: MKTG 3832)

4. Core ....................................................................................................................................................... 15 s.h.

Insert on pp. 168 of 2004 – 2005 catalog
ENGL 3880. Writing for Business and Industry (3) (WI) (F,S,SS) (P: ENGL 1200)
MATH 2283. Statistics for Business (3) (F,S,SS) (P: MATH 1065 or 1066 or equivalent)

3. Business core .................................................................................................................................................. 48 s.h.

ACCT 2401. Financial Accounting (3) (F,S,SS) (P: MATH 1065 or 1066 or 2119 or 2121 or 2171)
ACCT 2521. Managerial Accounting (3) (F,S,SS) (P: ACCT 2401)
ACCT 6701. Law for Professional Accountants (3) (P: Candidate for graduation or consent of MSA adviser)
DSCI 2223. Introduction to Computers (3) (F,S,SS)
DSCI 3063. Management Information Systems I (3) (F,S,SS) (P: DSCI 2223)
DSCI 3123. Operations Management (3) (F,S,SS) (P: Minimum grade of C in MATH 1066, 2283; C: MGMT 3202)
DSCI 3223. Business Decision Modeling (3) (F,S,SS) (P: Minimum grade of C in DSCI 2223; MATH 1066 or 2119 or 2121 or 2171; 2283)
DSCI 4293. Statistical Analysis (3) (F,S) (P: MATH 1066, 2283)
FINA 2244. Legal Environment of Business (3) (F,S,SS)
FINA 3724. Financial Management (3) (F,S,SS) (P: ECON 2113; MATH 2283; P/C: ACCT 2521)
FINA 6604. Financial Management II (3) (P: DSCI 6123; FINA 6144)
MGMT 3202. Fundamentals of Management (3) (F,S,SS) (P: ECON 2113)
MGMT 4842. Business Policy (3) (WI) (F,S,SS) (P: DSCI 3123; FINA 3724; MKTG 3832; MGMT 3202; declared major in the College of Business; senior standing)
MGMT 6832. Human Resources (3) (P: MGMT 6102)
MKTG 3832. Marketing Management (3) (F,S,SS) (P: ECON 2113)

Choose 3 s.h. from:
ACCT 4451. International Accounting (3) (F,S) (P: FINA 3724)
FINA 4454. International Finance (3) (S) (P: FINA 3724)
MGMT 3352. International Business (3) (F,S,SS) (P: MGMT 3202)
MKTG 3852. Cultural Environment of International Business (3) (F,S) (P: Junior standing; completion of a minimum of 3 s.h. in ECON [may be specified by dept])
MKTG 4992. International Marketing (3) (WI) (F,S) (P: MKTG 3832)

4. Core .................................................................................................................................................................. 36 s.h.

ACCT 3551. Intermediate Accounting I (3) (F,S,SS) (P: ACCT 2521; P/C: FINA 3724)
ACCT 3561. Intermediate Accounting II (3) (F,S,SS) (P: ACCT 3551)
ACCT 3621. Cost Accounting (3) (F,S) (P: ACCT 2521)
ACCT 3731. Advanced and Nonprofit Accounting (3) (F,S) (P: ACCT 3561)
ACCT 4651. Accounting Information Systems (3) (F,S) (P: ACCT 3561; DSCI 3063)
ACCT 6611. Auditing (3) (F,S) (P: ACCT 4651 or consent of MSA adviser)
ACCT 6801. Accounting Theory (3) (P: Consent of MSA adviser)
ACCT 6811. Cost Accounting Theory (3) (P: Consent of MSA adviser) or ACCT 6911. Research in Taxation (3) (P: ACCT 6981; consent of MSA adviser) or ACCT course above 6600
ACCT 6891. Federal Income Taxation (3) (P: ACCT 3561 or consent of MSA adviser)
ACCT 6901. Advanced Federal Taxation (3) (P: ACCT 3731, 6891; or consent of MSA adviser)
ACCT 6951. Auditing Seminar (3) (P: To be taken during final semester or consent of MSA adviser)
ACCT 6981. The Professional Accounting Environment (3) (P: Candidate for graduation)

5. Undergraduate electives to complete requirements for graduation: 6 s.h. non-business electives to complete 60 s.h. outside the College of Business (DSCI 4293 serves as an AACSB approved outside the College of Business course). 9 s.h. may be in business and accounting courses not listed above. A minimum grade of C is required to satisfy any upper-level accounting prerequisites.

The Department of Accounting will not accept for credit upper-level courses (those numbered 3000 or above at ECU) taken at a junior college or community college. The department chairperson will determine on an individual basis the extent to which upper-level courses taken at senior colleges may be used to meet degree requirements at East Carolina University. All other East Carolina University Graduate School and College of Business requirements must be followed. **Students not completing the entire curriculum will be required to meet the BSBA requirements in order to receive a bachelor's degree. The BSA degree may not be awarded separately from the MSA.**

**Insert on pp. 169 – 170 of 2004 – 2005 catalog**

**DEPARTMENT OF DECISION SCIENCES**

**Scott Dellana, Chairperson, 3410 Bate Building**

**BSBA in Decision Sciences**

The decision sciences department offers the bachelor's degree with concentrations in management information systems and operations management, providing students with a strong technical background on which to build interpersonal and problem-solving skills. Minimum degree requirement is **120 s.h.** of credit as follows:

1. **General education requirements (See Section 4, General Education Requirements for all Baccalaureate Degree Programs), including those listed below ................................................. 42 s.h.**

   - COMM 2420. Business and Professional Communication (3) (F,S,SS) (GE:FA)
   - ECON 2113. Principles of Microeconomics (3) (F,S,SS) (GE:SO)
   - ECON 2133. Principles of Macroeconomics (3) (F,S,SS) (GE:SO) (P: ECON 2113)
   - MATH 1066. Applied Mathematics for Decision Making (3) (F,S,SS) (GE:MA) (P: Appropriate score on mathematics placement test or approval of dept chair)
   - PHIL 2274. Business Ethics (3) (WI*) (F,S,SS) (GE:HU) or PHIL 2275. Professional Ethics (3) (WI*) (F,S,SS) (GE:HU)
   - PSYC 1000. Introductory Psychology (3) (F,S,SS) (GE:SO)
   - SOCI 2110. Introduction to Sociology (3) (F,S,SS) (GE:SO)

2. **Cognates................................................................. 6 s.h.**

   - ENGL 3880. Writing for Business and Industry (3) (WI) (F,S,SS) (P: ENGL 1200)
   - MATH 2283. Statistics for Business (3) (F,S,SS) (P: MATH 1065 or 1066 or equivalent)

3. **Business core .......................................................... 36 s.h.**

   - ACCT 2401. Financial Accounting (3) (F,S,SS) (P: MATH 1065 or 1066 or 2119 or 2121 or 2171)
ACCT 2521. Managerial Accounting (3) (F,S,SS) (P: ACCT 2401)
DSCI 2223. Introduction to Computers (3) (F,S,SS)
DSCI 3063. Management Information Systems I (3) (F,S,SS) (P: DSCI 2223)
DSCI 3123. Operations Management (3) (F,S,SS) (P: Minimum grade of C in MATH 1066, 2283; C: MGMT 3202)
DSCI 3223. Business Decision Modeling (3) (F,S,SS) (P: Minimum grade of C in DSCI 2223; MATH 1066 or 2119 or 2121 or 2171; 2283)
FINA 2244. Legal Environment of Business (3) (F,S,SS)
FINA 3724. Financial Management (3) (F,S,SS) (P: ECON 2113; MATH 2283; P/C: ACCT 2521)
MGMT 3202. Fundamentals of Management (3) (F,S,SS) (P: ECON 2113)
MGMT 4842. Business Policy (3) (WI) (F,S,SS) (P: DSCI 3123; FINA 3724; MKTG 3832; MGMT 3202; declared major in the College of Business; senior standing)
MKTG 3832. Marketing Management (3) (F,S,SS) (P: ECON 2113)

Choose one international perspectives course from:
ACCT 4451. International Accounting (3) (P: FINA 3724)
FINA 4454. International Finance (4) (S) (P: FINA 3724)
MGMT 3352. International Business (3) (F,S,SS) (P: MGMT 3202)

4. Concentration area (Choose one.) .................................................................................................................. 18 s.h.

Management Information Systems:
DSCI 3673. Software Design and Development (3) (F,S) (P: DSCI major; DSCI 3063)
DSCI 4113. Data Base Management Systems (3) (F,S) (P: DSCI 3063)
DSCI 4123. Distributed Information Systems (3) (F,S) (P: DSCI 3063)
DSCI 4133. Information Systems Management (3) (WI) (F,S) (P: DSCI 3063)
DSCI 4163. Management Information Systems II (3) (F,S) (P: DSCI 3063)
DSCI 4173. Management Information Systems III (3) (F,S) (P: DSCI 4163; P/C: DSCI 3673)

Operations Management:
DSCI 4383. Technology in Business Operations (3) (S) (P: DSCI 3123)
DSCI 4493. Management and Analysis of Quality (3) (F) (P: MATH 2283 or 2228 or equivalent)
DSCI 4733. Project Management (3) (F,S) (P: DSCI 3223)
DSCI 4743. Materials Management (3) (F) (P: DSCI 3123)
DSCI 4763. Supply Chain Management (3) (S) (P: Junior standing, minimum grade of C in MATH 2283, 2228)
Choose 3 s.h. from:
DSCI 4163. Management Information Systems II (3) (F,S) (P: DSCI 3063)
DSCI 4293. Statistical Analysis (3) (F,S) (P: MATH 1066 or 2119 or 2121 or 2171; 2283)
MANF 3020. Manufacturing Processes (3) (WI*) (F,S,SS) (P: ITEC 2090; MANF 2076, 2077)

5. Electives (non-business electives to complete 60 s.h. outside the College of Business)

DEPARTMENT OF FINANCE
Stanley G. Eakins, Chairperson, 3420 Bate Building

BSBA in Finance

The BSBA in finance offers the student an opportunity to study financial analysis and financial markets and institutions. Concentrations are offered in managerial finance and financial services. Students interested in pursuing a career in real estate should select the financial services concentration, choosing FINA 4604 as the concentration electives and FINA 4574 as a general elective. Students interested in pursuing a banking career should select the managerial finance concentration, choosing FINA 4654 as one of the two concentration electives. Minimum degree requirement is 120 s.h. of credit as follows:

1. General education requirements (See Section 4, General Education Requirements for all Baccalaureate Degree Programs), including those listed below ......................................................... 42 s.h.
   BIOL 1060. Environmental Biology (4) (F, S, SS) (GE: SC) or CHEM 1020. General Descriptive Chemistry (4) (GE: SC) or GEOL 1700. Environmental Geology (4) (F, S) (GE: SC) or PHYS 1050. Physics and the Environment (4) (F, S, SS) (GE: SC)
   COMM 2420. Business and Professional Communication (3) (F, S, SS) (GE: FA)
   ECON 2113. Principles of Microeconomics (3) (F, S, SS) (GE: SO)
   ECON 2133. Principles of Macroeconomics (3) (F, S, SS) (GE: SO) (P: ECON 2113)
   MATH 1066. Applied Mathematics for Decision Making (3) (F, S, SS) (GE:MA) (P: Appropriate score on mathematics placement test or approval of dept chair)
   PHIL 2274. Business Ethics (3) (WI*) (F, S, SS) (GE:HU) or PHIL 2275. Professional Ethics (3) (WI*) (F, S, SS) (GE:HU) (WI*)
   PSYC 1000. Introductory Psychology (3) (F, S, SS) (GE: SO)
   SOCI 2110. Introduction to Sociology (3) (F, S, SS) (GE: SO)

2. Cognates ................................................................................................................................. 6 s.h.
   ENGL 3880. Writing for Business and Industry (3) (WI) (F, S, SS) (P: ENGL 1200)
   MATH 2283. Statistics for Business (3) (F, S, SS) (P: MATH 1065 or 1066 or equivalent)

3. Business core ......................................................................................................................... 36 s.h.
   ACCT 2401. Financial Accounting (3) (F, S, SS) (P: MATH 1065 or 1066 or 2119 or 2121 or 2171)
   ACCT 2521. Managerial Accounting (3) (F, S, SS) (P: ACCT 2401)
   DSCI 2223. Introduction to Computers (3) (F, S, SS)
   DSCI 3063. Management Information Systems I (3) (F, S, SS) (P: DSCI 2223)
   DSCI 3123. Operations Management (3) (F, S, SS) (P: Minimum grade of C in MATH 1066, 2283; C: MGMT 3202)
   DSCI 3223. Business Decision Modeling (3) (F, S, SS) (P: Minimum grade of C in DSCI 2223; MATH 1066 or 2119 or 2121 or 2171; 2283)
   FINA 2244. Legal Environment of Business (3) (F, S, SS)
   FINA 3724. Financial Management (3) (F, S, SS) (P: ECON 2113; MATH 2283; P/C: ACCT 2521)
   MGMT 3202. Fundamentals of Management (3) (F, S, SS) (P: ECON 2113)
   MGMT 4842. Business Policy (3) (WI) (F, S, SS) (P: DSCI 3123; FINA 3724; MKTG 3832; MGMT 3202; declared major in the College of Business; senior standing)

International Business (27 s.h.):
Choose six courses beyond the one business core international perspectives course requirement (ACCT 4451; ANTH 2010 or POLS 2020; FINA 4454; MGMT 3352, 4352; MKTG 3852, 4992)

Competency in one foreign language as demonstrated by scoring Intermediate-High on the Listening and Reading sections and Intermediate-Mid on the Speaking and Writing sections of the ACTFL Test.

Minimum of one semester abroad, enrolled in an approved academic program with a focal world region.

Choose 9 s.h. based on one of the following world regions chosen by the student (not more than two courses from any one dept):

**Africa/Middle East:**
ANTH 3003. Cultures of Africa (3) (OY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
COMM 3180. Intercultural Communication (3) (P: COMM 1001 or 1002) Formerly COMM 3080
COMM 3390. International News Communication. (3) (S) (GE:SO) Formerly COMM 3390
ECON 3353. Economics of Underdeveloped Countries (3) (GE:SO) (P: ECON 2133)
FORL 2624. Francophone Literature of Africa in Translation. (3) (GE:HU)
GEOG 2110. World Geography: Less Developed Regions (3) (F,S,SS) (GE:SO)
GEOG 3050. Africa (3) (S) (GE:SO)
HIST 3670. History of the Middle East (3) (WI*) (GE:SO)
HIST 3810. History of Africa (3) (WI*) (GE:SO)
PHIL 2690. World Religions (3) (F,S) (GE:HU)
POLS 3260. Middle Eastern Political Systems (3) (S) (GE:SO)
POLS 3265. African Political Systems (3) (S) (GE:SO)
POLS 3293. International Organizations (3)
POLS 3295. International Law (3) (P: POLS 2020 or consent of instructor)
PSYC 3314. Psychology of Religion (3) (GE:SO)

**Asia:**
ANTH 3002. Cultures of East Asia (3) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)
ANTH 3009. Motherhood of God in Asian Traditions (3) (EY) (GE:SO)
ART 3920. Asian Art (3) (WI*). (F,S).
COMM 3180. Intercultural Communication (3) (P: COMM 1001 or 1002) (P: COMM major or minor or consent of instructor)
COMM 3390. International News Communication. (3) (S) (P: COMM major or minor or consent of instructor)
ECON 3353. Economics of Underdeveloped Countries (3) (GE:SO) (P: ECON 2133)
GEOG 2110. World Geography: Less Developed Regions (3) (F,S,SS) (GE:SO)
GEOG 3050. Africa (3) (S) (GE:SO)
GEOG 3051. Asia (3) (S) (GE:SO)
HIST 3611. History of the Far East Since 1600 (3) (GE:SO)
HIST 3620. History of Modern Japan (3) (GE:SO)

HIST 3630. History of Modern China (3) (GE:SO)

HIST 4610. History of Southeast Asia (3) (GE:SO)

PHIL 2690. World Religions (3) (F,S) (GE:HU)

POLS 3280. South Asian Political Systems (3) (SS)

POLS 3293. International Organizations (3)

POLS 3295. International Law (3) (P:POLS 2020 or consent of instructor)

PSYC 3314. Psychology of Religion (3) (GE:SO)

Europe:

AMID 2700. Historic Interiors I: 3000 BC Through Mid-Nineteenth Century (3) (WI*) (F)

COMM 3180. Intercultural Communication (3) (P: COMM-1001 or 1002) (P: COMM major or minor or consent of instructor)

COMM 3390. International News Communication. (3) (S) (P: COMM major or minor or consent of instructor)

ECON 3353. Economics of Underdeveloped Countries (3) (GE:SO) (P: ECON 2133)

ECON 4373. International Trade (3) (S) (GE:SO) (P: ECON 2133; 3144)

FORL 2620. French Literature in Translation (3) (GE:HU)

FORL 2660. Spanish Literature in Translation (3) (GE:HU)

FORL 2680. German Literature in Translation (3) (GE:HU)

GEOG 2100. World Geography: Developed Regions (3) (F,S,SS) (GE:SO)

GEOG 3003. Political Geography (3) (WI) (S) (GE:SO)

GEOG 3047. Western Europe (3) (WI*) (GE:SO)

HIST 3435. History of Europe Since 1914 (3) (GE:SO)

HIST 3450. History of Modern Germany (3) (GE:SO)

PHIL 2690. World Religions (3) (F,S) (GE:SO)

POLS 3234. West European Political Systems (3) (F) (GE:SO)

POLS 3235. East European Political Systems (3) (S) (GE:SO)

POLS 3236. The Soviet Successor States (3) (F) (GE:SO)

POLS 3293. International Organizations (3)

POLS 3295. International Law (3) (P:POLS 2020 or consent of instructor)

PSYC 3314. Psychology of Religion (3) (GE:SO)

Latin America: South America:

ANTH 3016. Cultures of the Caribbean (3) (S) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)

ANTH 3017. Cultures of Mexico and Guatemala (3) (OY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)

ANTH 3018. Cultures of South and Central America (3) (EY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)

COMM 3180. Intercultural Communication (3) (P: COMM-1001 or 1002) (P: COMM major or minor or consent of instructor)
COMM 3390. International News Communication. (3) (S. (P: COMM major or minor or consent of instructor)

ECON 3353. Economics of Underdeveloped Countries (3) (GE:SO) (P: ECON 2133)

FORL 2661. Latin-American Literature in Translation (3) (WI*) (GE:HU)

FORL 2760. Special Topics in Hispanic Studies (3) (GE:HU)

FORL 3660. Hispanic Women Writers (3) (GE:HU)

GEOG 2110. World Geography: Less Developed Regions (3) (F,S,SS) (GE:SO)

GEOG 3049. Latin America (3) (WI*) (GE:SO)

GEOG 3056. Middle America (3) (GE:SO)

HIST 3711. Introduction to Latin-American History: Since 1808 (3) (WI*) (GE:SO)

HIST 3760. The ABC Powers: Argentina, Brazil, Chile (3) (SO2) (GE:SO)

HIST 3780. Mexico and Central America (3) (WI*) (GE:SO)

PHIL 2690. World Religions (3) (F,S) (GE:HU)

POLS 3270. Latin-American Political Systems (3) (S)

POLS 3293. International Organizations (3)

POLS 3295. International Law (3) (P:POLS 2020 or consent of instructor)

PSYC 3314. Psychology of Religion (3) (GE:SO)

For non-North American Students:

North America:

AMID 2700. Historic Interiors I:3000 BC Through Mid-Nineteenth Century (3) (WI*) (F)

ANTH 3017. Cultures of Mexico and Guatemala (3) (OY) (GE:SO) (P: ANTH 1000 or 2010 or 2200 or consent of instructor)

COMM 3180. Intercultural Communication (3) (P: COMM 1001 or 1002) (P: COMM major or minor or consent of instructor)

COMM 3390. International News Communication. (3) (S) (P: COMM major or minor or consent of instructor)

ECON 3420. Money and Banking. (3) (WI*) (S) (GE:SO) (P:ECON 2133)

GEOG 2110. World Geography: Less Developed Regions (3) (F,S,SS) (GE:SO)

GEOG 3046. United States and Canada (3) (F) (GE:SO)

GEOG 3056. Middle America (3) (GE:SO)

HIST 1051. American History Since 1877 (3) (WI*) (F,S,SS) (GE:SO).

HIST 2012. American Business History (3) (WI*) (F) (GE:SO)

HIST 3031. Economic History of the United States Since 1865 (3) (GE:SO)

HIST 3245. The United States Since 1945 (3) (WI*) (F) (GE:SO)

HIST 3780. Mexico and Central America (3) (WI*) (GE:SO)

PHIL 2690. World Religions (3) (F,S) (GE:HU)

POLS 3293. International Organizations (3)

POLS 3295. International Law (3) (P:POLS 2020 or consent of instructor)

POLS 3270. Latin-American Political Systems (3) (S)

PSYC 3314. Psychology of Religion (3) (GE:SO)
Management (18 s.h.):

MGMT 4242. Organizational Behavior (3) (F,S) (P: MGMT 3202 or PSYC 3241. Personnel and Industrial Psychology (3) (F,S,SS)

MGMT 4482. Managerial Negotiation (3) (F,S) (P: MGMT 3202)

Choose 12 s.h. from:

MGMT 4342. Organizational Change and Development (3) (F,S)

MGMT 4343. Organizational Leaders and Leadership (3) (F,S)

MGMT 4252. Entrepreneurship (3) (WI) (F) (P: FINA 3724; MGMT 3202; MKTG 3832)

MGMT 4272. Managing the Family Business (3) (WI*) (S) (P: MGMT 3202)

MGMT 4352. Management in a Global Economy (3) (F) (P: MGMT 3352 or MKTG 4992 or FINA 4454)

MGMT 4402. Human Resource Management (3) (F,S) (P: MGMT 3202)

MGMT 4422. Labor Relations (3) (F) (P: MGMT 3202)

MGMT 4952. Topics in Management (3) (F,S) (P: MGMT 3202; consent of dept chair)

Insert on pp. 405 – 406 of 2004 – 2005 catalog

MGMT: MANAGEMENT

3202. Fundamentals of Management (3) (F,S,SS) Registration preference given to declared and intended majors with a minimum 2.5 GPA. P: ECON 2113. Organizational management, including managerial functions, understanding of individual needs and motivation, and managerial leadership.

3352. International Business (3) (F,S,SS) Registration preference given to declared and intended majors with a minimum 2.5 GPA. P: MGMT 3202. Framework within which international business is conducted. Analysis of typical business and economic problems in multinational business.

4001, 4002, 4003. Special Issues and Topics (1,2,3) (F,S) May be repeated for maximum of 3 s.h. P: Business major; consent of dept chair and instructor. Individual study of special issues and topics in management and business. Subject approved by instructor.

4242. Organizational Behavior (3) (F,S) Registration preference given to declared majors with a minimum 2.5 GPA. May receive credit for one of MGMT 4242, PSYC 3241. P: MGMT 3202. Human aspect of managing modern organizations. Modern theory and application of behavior with emphasis on applications.

4252. Entrepreneurship (3) (WI) (F) Registration preference given to declared majors with a minimum 2.5 GPA. P: FINA 3724; MGMT 3202; MKTG 3832. New venture creation and management.

4262. Small Business Management (3) (WI) (F,S) Registration preference given to declared majors with a minimum 2.5 GPA. 2 classroom and 2 lab hours per week. P: FINA 3724; MGMT 3202; MKTG 3832. Student teams provide management counseling to area small businesses under continued supervision of instructor. Travel necessary. Drivers must provide copy of valid driver’s license and liability insurance. Drivers reimbursed for required travel.
4272. Managing the Family Business (3) (WI) Registration preference given to declared majors with a minimum 2.5 GPA. P: MGMT 3202. Business, personal, and interpersonal issues associated with family owned and managed firms.

4342. Organizational Change and Development (3) (F,S) P: MGMT 3202; MGMT 4242 or PSYC 3241 Formerly MGMT 3342 Registration preference given to declared and intended majors with a minimum 2.5 GPA. Basic, yet comprehensive, overview of organizational development. Evolution of field, key concepts, and methods that drive organizational development; techniques to diagnose opportunities for change; and tools to implement and evaluate organizational development initiatives.

4343. Organizational Leaders and Leadership (3) (F,S) P: MGMT 3202; MGMT 4242 or PSYC 3241 Formerly MGMT 3343 Registration preference given to declared and intended majors with a minimum 2.5 GPA. Current and emerging leadership theories as bases for discussing leadership ability of both historical and contemporary organization managers.

4352. Management in a Global Economy (3) (S) Registration preference given to declared majors with a minimum 2.5 GPA. P: FINA 4454 or MGMT 3352 or MKTG 4992. Application of US management practices in foreign economies and performance implications of applying foreign management practices in US economy. Ethical, legal, and social responsibility concerns.

4402. Human Resource Management (3) (F,S) Registration preference given to declared majors with a minimum 2.5 GPA. P: MGMT 3202. Management, procurement, development, maintenance, compensation, and utilization of effective working force by line and staff executives.

4422. Labor Relations (3) Registration preference given to declared majors with a minimum 2.5 GPA. P: MGMT 3202. Labor in US. History, structure and government of unions, labor law, collective bargaining processes, contract administration, and public sector organizations.

4482. Managerial Negotiation (3) Registration preference given to declared majors with a minimum 2.5 GPA. P: MGMT 3202. Role of negotiation in management. Goal formation, buying and selling, employer-employee relations, and mergers and acquisitions. Various bargaining strategies and tactics.

4842. Business Policy (3) (F,S,SS) P: Senior standing; declared major in College of Business; DSCI 3123; FINA 3724; MKTG 3832, MGMT 3202. Integrated analysis of administration and policy determination from overall management point of view under conditions of uncertainty.

4952. Topics in Management (3) (F,S) Registration preference given to declared majors with a minimum 2.5 GPA. May be repeated for credit with change of topic and consent of dept chair. P: Senior standing; MGMT 3202; consent of dept chair. Selected topics.

Respectfully submitted,

Ellen L. Arnold
12/9/04