I. Proposal #58 – ANTH 260: Forensic Anthropology

A focus on the study of physical characteristics found in human skeletal remains for the purpose of identifying individuals, and determining events and actions that may be related to the death of the individual.

A new course, not seeking general education credit, possible resource issues

II. Proposal #59 – ANTH 264: Primates

Focuses on the evolution, social organization, and behavior of nonhuman primates of particular interest to humans: those whose ecological adaptations are similar to our own: terrestrial monkeys and apes, and those most closely related to us: chimpanzees and gorillas.

A new course, not seeking general education credit, possible resource issues

III. Proposal #68 – ENST 215: Toxic Threats to Reproduction and Child Development

Humans and ecosystems in the United States and worldwide are regularly exposed to some 85,000 synthetic chemicals, most of which are poorly tested or untested for human health effects. This course will explore the effects of chemicals--such as heavy metals, pesticides, solvents, dioxins, PCBs, and endocrine disruptors--on reproduction and child development, and will look at intervention strategies to reduce toxic threats throughout the lifecycle.

A new course seeking general education credit in Life Science Issues, possible resource issues

IV. Proposal #72 – ENST 230: Earth Systems Science

The Earth is changing, and understanding this change requires an understanding of the interrelated systems of the Earth. This course investigates the systems (hydrosphere, atmosphere, biosphere, and lithosphere) and the complex cycles and interactions between them, both globally in the classroom and locally through a field/lab experience. Offered every fall.

An existing course seeking a number change, from ENST 230 to ENST 110, and a change in General Education category from Physical Science Issues to Physical Science Lab with the addition of a lab component, bringing course units from 1 to 1.25. Possible resource issues.

V. New Major – Environmental Studies

Environmental Studies addresses a broad range of issues concerning the relationship of human beings with the natural world. Understanding these issues requires that knowledge from diverse disciplines be brought together, and new modes of thinking be developed. At Illinois Wesleyan, the Environmental Studies Program is designed to provide students with a basic knowledge of the scientific concepts, the societal factors—cultural, political, and economic—and the ethical dimensions behind environmental issues. The program includes both interdisciplinary courses and courses that address environmental issues from a variety of disciplinary perspectives, and offers both a major and a minor degree.
Students majoring in Environmental Studies have two basic ways to complete their degrees. They can pursue a General Major in Environmental Studies, expanding upon the core courses required of all majors with additional course work in the natural sciences, human culture and social institutions. Alternatively, they can pursue a specialist degree in which they attain in-depth knowledge of a particular area of study through completion of a Concentration in one of five fields: Ecology, Environmental Chemistry, Environmental Toxicology, Environmental Policy, or International Environmental Sustainability. The General Major in Environmental Studies provides the flexibility necessary for those interested in the environment but as yet undecided in their career path, or those interested in the humanities, to pursue their interests and develop a broad base of knowledge in the field. The Concentrations are designed especially for those who intend to pursue graduate education in environmental science, environmental policy or law, or international sustainable development. A student who wishes to pursue a disciplinary major, but would like to supplement their education with coursework on the environment, should consider pursuing an Environmental Studies Minor. All students seeking an Environmental Studies degree should consult with the ES Director early in their studies to determine which course of study is most appropriate for achieving their desired goals.

**Requirements for the Major**
A minimum of 11 courses (at least four of which are at the 300-level or above) to include the following:

1. ENST 100 Environment and Society AV
2. ENST 110 Earth Systems Science PSL
3. ENST 120 Environmental Issues LSI (Students pursuing a concentration in Ecology, Environmental Chemistry or Environmental Toxicology should instead take BIOL 217 Introduction to Ecology)
4. ENST 365 Ethical Dilemmas in Environmental Politics or PHIL 302 Ethics and the Environment
5. Six courses selected to complete the requirements, described below, of either a:
   a. General Major in Environmental Studies
   or
   b. Concentration in Environmental Studies
6. ENST 480 WI Senior Seminar: Creating a Sustainable Society

All majors are also expected to take one of the following introductory statistics courses: BIOL 209, ECON 227, PSYCH 227, SOC 227, and are encouraged to study abroad.

No more than one internship may be used to fulfill the requirements for the major or the minor; and courses may not count for two majors or for both a major and a minor.

**Requirements for the Minor**
A minimum of six courses, at least two of which are at the 300-level or above, to include the following:

1. ENST 100: Environment and Society AV
2. ENST 110: Earth Systems Science PSL or ENST 120: Environmental Issues LSI
3. ENST 397: Internship or ENST 480: Senior Seminar: Creating a Sustainable Society, taken in the junior or senior year.
4. Three additional courses from the list of Environmental Studies courses below.

Students pursuing a minor are highly encouraged to take an introductory environmental ethics course (ENST 365 or PHIL 302).

Courses may not count for both a major and a minor; and no more than one internship may be used to fulfill the minor requirements.

**GENERAL MAJOR IN ENVIRONMENTAL STUDIES**
Students pursuing a General Major in Environmental Studies must select two courses in each of the following three areas (Natural Science, Human Culture, and Social Institutions), at least two of which are at the 300-level or above. No course may be used to count for two categories. Only two of the six required courses may be satisfied through either an internship (ENST 397) or a directed reading (ENST 250), and these may not both be used to satisfy the requirements in any given area (i.e. natural sciences, etc.). No more than one internship and one directed study may be used to satisfy the requirements for the major.
A. Natural Science

BIOL 164   Marine Realm
BIOL 217   Introductory Ecology
ENST/CHEM130  Chemistry of the Environment
ENST 132   Atmospheric Pollution
ENST/CHEM 135  Water Quality
ENST 215   Toxic Threats to Reproduction and Child Development
PHYS 239   Problems of Nuclear Disarmament
BIOL/ENST 350  Tropical Ecology (prerequisite: ENST 120)
BIOL/ENST 370  Conservation Biology (prerequisite: ENST 120) ENST 250 Directed Readings in Environmental Studies, with approval of ES program director
ENST 397 Internship, with approval of ES program director

B. Human Culture

ANTH 274   Peoples and Cultures of East Africa
ANTH 288   Consuming Passions: The Anthropology of Food
ENGL 170   Radioactive: Writing in the Nuclear Age
ENGL 220   American Ground Zero
ENGL 220   Thinking like a Mountain: Literature and Environmental Consciousness
ENST/HIST 248 American Environmental History
HIST 360   Modern Brazil
ENST 250 Directed Readings in Environmental Studies, with approval of ES program director
ENST 397 Internship, with approval of ES program director

C. Social Institutions

ANTH 274   People’s and Cultures of East Africa
ANTH 288   Consuming Passions: The Anthropology of Food
ECON 340   Environmental and Natural Resource Economics (prerequisite: ECON 100)
ENST/HIST 248 American Environmental History
ENST 260/PSCI 260 American Environmental Politics
ENST/PSCI 360 Comparative Environmental Politics
ENST/PSCI 361 Globalization and the Environment
ENST/PSCI 362 Cooperation in Environmental Policymaking: The Public-private Sector Nexus
HIST 360   Modern Brazil
PSCI 309   Politics of Regulation
SOC 344   Population and Environment
ENST 250 Directed Readings in Environmental Studies, with approval of ES program director
ENST 397 Internship, with approval of ES program director

CONCENTRATIONS IN THE MAJOR

ECOLOGY   (Advisor: Harper)

Students concentrating in Ecology must take:
BIOL 209   Biostatistics (prerequisite: BIOL 102)
ENST 370   Conservation Biology (prerequisite: BIOL 102)
ENST 450   Independent Study OR ENST 451: Independent Research and Writing

Plus two courses from the following list:
BIOL 219   Invertebrate Zoology (prerequisite: BIOL 102)
BIOL/ENST 302 Parasyitology (prerequisite: BIOL 102)
BIOL 306   Plant and Fungal Diversity (prerequisite: BIOL 102)
BIOL 314   Microbiology (prerequisite: BIOL 102)
BIOL 316   Evolution (prerequisite: BIOL 102)
BIOL 320   Marine Biology (prerequisite: BIOL 102)
BIOL 327       Advanced Ecology *(prerequisite: BIOL 102)*  
BIOL/ENST 350  Tropical Ecology *(prerequisite: BIOL 102)*  
ENST 250      Directed Readings in Environmental Studies, with approval of concentration advisor  
ENST 397      Internship, with approval of concentration adviser  
MATH 300      Mathematical Modeling, with approval of concentration adviser  

And one course on human culture or social institutions from the following list:  
ANTH 274      Peoples and Cultures of East Africa  
ANTH 288      Consuming Passions: The Anthropology of Food  
ECON 340      Environmental and Natural Resource Economics *(prerequisite: ECON 100)*  
ENGL 170      Radioactive: Writing in the Nuclear Age  
ENGL 220      American Ground Zero  
ENGL 220      Thinking like a Mountain: Literature and Environmental Consciousness  
ENST/HIST 248 American Environmental History  
ENST/PSCI 260 American Environmental Politics  
ENST/PSCI 360 Comparative Environmental Politics  
ENST/PSCI 361 Globalization and the Environment  
HIST 360      Modern Brazil  
PSCI 309      Politics of Regulation  
SOC 344      Population and Environment  

Depending on their career interests, and in consultation with the Concentration advisor, students should consider taking CHEM 201, 202, 311 and 312.

**ENVIRONMENTAL CHEMISTRY  (Advisor: Hoffmann)**  
Students concentrating in Environmental Chemistry must take:  
CHEM 311      Organic Chemistry *(prerequisite: CHEM 202)*  
CHEM 301      Quantitative Analysis *(prerequisite: CHEM 202)*  
CHEM 304      Instrumental Analysis  
ENST/Chem 330 Topics in Environmental Chemistry and Toxicology *(prerequisite: BIOL 102)*  

Plus one course from the following list:  
CHEM 312      Organic Chemistry  
CHEM 332      Inorganic Chemistry  
CHEM 414      Biochemistry I *(prerequisite: CHEM 312)*  
BIOL 327      Advanced Ecology  
ENST 250      Directed Readings in Environmental Studies, with approval of concentration advisor  
ENST 397      Internship, with approval of concentration adviser  
ENST 450      Independent Study  
ENST 451      Independent Research and Writing  
MATH 300      Mathematical Modeling, with approval of concentration adviser  

And one course on human culture or social institutions from the following list:  
ANTH 274      Peoples and Cultures of East Africa  
ANTH 288      Consuming Passions: The Anthropology of Food  
ECON 340      Environmental and Natural Resource Economics *(prerequisite: ECON 100)*  
ENGL 170      Radioactive: Writing in the Nuclear Age  
ENGL 220      American Ground Zero  
ENGL 220      Thinking like a Mountain: Literature and Environmental Consciousness  
ENST/HIST 248 American Environmental History  
ENST/PSCI 260 American Environmental Politics  
ENST/PSCI 360 Comparative Environmental Politics  
ENST/PSCI 361 Globalization and the Environment  
HIST 360      Modern Brazil  
PSCI 309      Politics of Regulation  
SOC 344      Population and Environment
Students are also expected to take BIOL 101, and 102.

**ENVIRONMENTAL TOXICOLOGY  (Advisors: Hoffmann and Frick)**

Students concentrating in Environmental Toxicology must take:

- CHEM 311  Organic Chemistry (*prerequisite:* CHEM 202)
- CHEM 312  Organic Chemistry
- CHEM 414  Biochemistry I
- ENST/CHEM 330 Topics in Environmental Chemistry and Toxicology (*prerequisite:* BIOL 102)

Plus one course from the following list:

- BIOL 327  Advanced Ecology
- CHEM 301  Quantitative Analysis (*prerequisite:* CHEM 202)
- BIOL 312  Genetics (*prerequisite:* BIOL 102)
- BIOL 412  Molecular Genetics
- ENST 250  Directed Readings in Environmental Studies, with approval of concentration advisor
- ENST 397  Internship, with approval of concentration adviser.
- ENST 450  Independent Study
- ENST 451  Independent Research and Writing
- MATH 300  Mathematical Modeling, with approval of concentration advisor

And one course on human culture or social institutions from the following list:

- ANTH 274  Peoples and Cultures of East Africa
- ANTH 288  Consuming Passions: The Anthropology of Food
- ECON 340  Environmental and Natural Resource Economics
- ENGL 170  Radioactive: Writing in the Nuclear Age
- ENGL 220  American Ground Zero
- ENGL 220  Thinking like a Mountain: Literature and Environmental Consciousness
- ENST/HIST 248  American Environmental History
- ENST/PSCI 260  American Environmental Politics
- ENST/PSCI 360  Comparative Environmental Politics
- ENST/PSCI 361  Globalization and the Environment
- HIST 360  Modern Brazil
- PSCI 309  Politics of Regulation
- SOC 344  Population and Environment

Students are also expected to take BIOL 101, 102.

**ENVIRONMENTAL POLICY  (Advisor: Jahiel)**

Students concentrating in Environmental Policy must take:

- ENST/PSCI 260  American Environmental Politics
- PSCI 309  Politics of Regulation
- ECON 340  Environmental and Natural Resource Economics (*prerequisite:* ECON 100)

Plus two courses from the following list, only one of which may be ENST 250, 397, 450 or 451:

- ENGL 220  American Ground Zero
- ENST/HIST 248  American Environmental History
- ENST/PSCI 360  Comparative Environmental Politics
- ENST/PSCI 362  Cooperation in Environmental Policymaking: The Public-private Sector Nexus
- PSCI/SOC 370  Action Research Seminar
- SOC 344  Population and Environment
- ENST 250  Directed Readings in Environmental Studies, with approval of concentration advisor
- ENST 397  Internship, with approval of concentration adviser
- ENST 450  Independent Study
- ENST 451  Independent Research and Writing
And one additional environmental science course from the following list:

- BIOL 164  Marine Realm
- ENST/CHEM 130  Chemistry of the Environment
- ENST 132  Atmospheric Pollution
- ENST/CHEM 135  Water Quality
- ENST 215  Toxic Threats to Reproduction and Child Development
- PHYS 239  Problems of Nuclear Disarmament
- BIOL/ENST 350  Tropical Ecology
- BIOL/ENST 370  Conservation Biology

**INTERNATIONAL ENVIRONMENTAL SUSTAINABILITY**  (Advisor: Jahiel)

Students concentrating in International Environmental Sustainability must take:

- PSCI 326  Globalization and Development
- ENST/PSCI 361  Globalization and the Environment OR ENST/PSCI 360 Comparative Environmental Politics
- ANTH 274  People’s and Cultures of East Africa OR ANTH 288 Consuming Passions: The Anthropology of Food

Plus two courses from the following list, only one of which may be ENST 250, 397, 450 or 451:

- PHYS 239  Problems of Nuclear Disarmament
- ANTH 274  People’s and Cultures of East Africa
- ANTH 288  Consuming Passions: The Anthropology of Food
- ENST/PSCI 360  Comparative Environmental Politics
- ENST/PSCI 361  Globalization and the Environment
- HIST 360  Modern Brazil
- SOC 344  Population and Environment
- ENST 250  Directed Readings in Environmental Studies, with approval of concentration advisor
- ENST 397  Internship, with approval of concentration adviser.
- ENST 450  Independent Study
- ENST 451  Independent Research and Writing

And one additional environmental science course from the following list:

- BIOL 164  Marine Realm
- ENST/CHEM 130  Chemistry of the Environment
- ENST 132  Atmospheric Pollution
- ENST/CHEM 135  Water Quality
- ENST 215  Toxic Threats to Reproduction and Child Development
- PHYS 239  Problems of Nuclear Disarmament
- BIOL/ENST 350  Tropical Ecology
- BIOL/ENST 370  Conservation Biology

Students concentrating in this area are especially encouraged to study abroad.

**VI. Revision of Environmental Studies Minor**

**A. Background**

In considering core competencies which all Environmental Studies students must poses upon graduation (as part of our deliberations in designing the new ES major), and as a result of the development of a couple of new courses in the Program, the Environmental Studies faculty agreed it was time to revisit the minor. The results of these deliberations are presented in the provisional Catalog Copy for the Environmental Studies Program attached, and the proposed changes from discussed in the following section.

**B. Proposed Changes to the Minor and justification for these changes**

Three changes to the minor are proposed:
1. **Introduction to environmental science:** The existing minor requires students to take ENST 227 (to be renumbered as ENST 110) Environmental Issues. Under the proposed changes, students will have the option of fulfilling this introductory environmental science requirement with either ENST 110 Earth Systems Science (PSL) or ENST 120 Environmental Issues (LSI).

   The ES faculty is in agreement that ENST 110 and ENST 120 are equally important introductions to environmental science, though each provides a different focus (ENST focuses on earth systems science and ENST 120 focuses on ecology.) We would like to allow students to select the introductory environmental science course of greatest interest to them.

2. **Culminating Experience:** The existing minor requires students to conclude their ES minor with either an environmental internship ENST 397 or an independent study ENST 450. Under the proposed changes, students minoring in ES will be offered the choice between doing an environmental internship, ENST 397 or participating in the new senior seminar, ENST 480.

   The ES faculty feels that students will learn more from the interactive experience of working with ES majors in ENST 480. As well, we agree that, given limited faculty resources, we would like to devote our time supervising independent studies to ES majors who are more integrally engaged in the field.

3. **Recommended course:** The final proposed change to the minor is the recommendation that students take an environmental ethics course, either ENST 365 (the new number for ENST 262) or PHIL 302.

   The ES faculty recommends this addition because we feel strongly that thinking in environmental ethics is a core competency that all ES students should be exposed to. We chose not to require an environmental ethics course for the minor because we did not want to increase the number of courses required for the minor and because we thought that it was important to allow students pursuing a minor maximum flexibility to explore their secondary field.