Agenda Item #05-82 Effective Fall 2006 Effective Spring 2008, with revisions

Eastern Illinois University Revised Course Proposal BIO 2092G, Environmental Life Sciences, Honors

1. Catalog Description

- a. BIO 2092G
- b. Environmental Life Sciences, Honors
- c. 4-0-4
- d. F, S, Su
- e. EVS Honors
- f. A study of the interrelationships of the living and non-living components of the environment, the ecology of humankind, and the interaction of humans with the environment. The course emphasizes current environmental issues and possible solutions and courses of action. Does not count towards the Biological Sciences major or minor. Credit for BIO 2092G will not be granted if the student already has credit for or registration in BIO 2002G or BIO 3850.
- g. Admission to the University Honors College
- h. Fall 2006

2. Student Learning Objectives and Evaluations

- a. Student Learning Objectives: In accordance with the goals of general education, students will:
 - Compare and contrast issues pertaining to environmental topics. (critical thinking, speaking)
 - Analyze and interpret data as it is related to environmental studies. (critical thinking)
 - Identify differences between "progress" and "growth" from an environmental perspective. (critical thinking)
 - Describe ways that citizens can live low-impact environmental lives and still maintain a high standard of living. (critical thinking, speaking, writing)
 - Evaluate knowledge about important environmental issues and how they may be solved in a scientific, economic and political framework. (critical thinking, responsible citizens)
 - Analyze, discuss and evaluate environmental topics presented in the popular media or elsewhere. (critical thinking, global citizenship, writing and speaking effectively)
- b. How will student achievements of the stated learning objectives be assessed?
 - Assessment will be based on the following grading procedure (can vary with instructor):

Pop-quizzes (15%)

Short hand-in projects and problem sets (15%)

Three (3) Semester Exams (40%)

One environmental project worth (15%)

A cumulative final exam (15%)

	Pop quizzes (15%)	Short hand in project and problem sets (15%)	Term exams (3) and a final exam (55%)	Environmental project (15%)
Compare and contrast issues pertaining to environmental topics	X	Х	X	X
Analyze and interpret data as it is related to environmental studies	X	X	X	Х
Identify differences between "progress" and "growth" from an environmental perspective	X	X	X	X
Describe ways that citizens can live low-impact environmental lives and still maintain a high standard of living	X	X	X	X
Evaluate knowledge about important environmental issues and how they may be solved in a scientific, economic and political framework	X	Х	Х	X
Analyze, discuss and evaluate environmental topics presented in the popular media or elsewhere	X	X	Х	X

- c. The course is not technology-delivered
- d. Not a graduate level course
- e. The course is writing active. Written pop-quizzes will be given on an irregular and unannounced schedule. Approximately 50% of the exams will consist of short essay questions. A written summary of a project dealing with a topic of environmental concern is required.

3. Outline of the Course

- a. Course outline is based on two 100-minute class meetings each week for 15 weeks
 - I. Humans in the Environment: (weeks 1-2)
 - Our changing environment
 - Solving environmental problems
 - History of conservation
 - II. The World We Live In: (weeks 3-5)
 - Ecosystems and energy
 - Ecosystems and living organisms
 - Ecosystem and the physical environment
 - III. A Crowded World: (weeks 6-7)
 - Understanding Populations
 - Facing the problem of overpopulation
 - IV. The Search for Energy (weeks 8-9)
 - Fossil Fuels
 - Renewable Energy
 - V. Resources: (weeks 10-12)

- Water: A fragile resource
- Preserving Earth's Biological Diversity
- Land Resources and Biodiversity
- VI. Environmental Concerns (weeks 13-14)
 - Global atmospheric changes
 - Solid and hazardous waste
- VII. Tomorrow's World: (week 15)
 - The problems we face

b. Not technology-delivered

4. Rationale

- a. Environmental Life Science, Honors offers Honors College students a science course that belongs in the Biological Sciences component of the scientific awareness segment in the General Education Curriculum. As noted in the outline, this course will help make students aware of environmental problems and possible solutions to these problems. Critical thinking is an important component of this course because it requires that students think about "tradeoffs" between the environment and human development. Similarly, students will be exposed to the incredible interrelationships that are basic to ecological principles and the impact that human development has upon these interrelationships.
- b. Prerequisites: Admission to the Honors College. Given the course content and the level of critical thinking, writing and speaking involved a 2000 level is appropriate.
- c. This course is a revision of the current course Environmental Life Sciences, Honors (BIO 3092G). This course is similar to BIO 2002G, yet it does not duplicate this course because Honors College students may not take both courses for credit. In addition, this course includes a more detail-oriented curriculum and more in-depth discussion than BIO 2002G.
- d. This course will not be required for any major or program but will satisfy the scientific component of the General Education Honors College students

5. Implementation

- a. Faculty members to whom the course will be assigned initially: Any qualified faculty member in the Department of Biological Sciences
- b. Specify additional costs to students: none
- c. Text: Brennan (2005), Environment: The Science Behind the Stories (1st edition), Benjamin Cummings

6. Community College Transfer

A community college will not be judged equivalent to this course

- 7. Date approved by the department: October 6, 2005
- 8. Date approved by the college curriculum committee: 28 October 2005
- 9. Date approved by the Honors College: 24 October 2005
- **10.** Date approved by CAA: 16 December 2005