

BIO 123-001 Human Ecology Syllabus Spring 2008

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Office hours: On-campus T 1:00-2:00 W 2:00-3:00 or by appointment
On-line Blackboard Discussion W 7:00-8:00 pm

Required Text: Withgott & Brennan, "Environment: The Science behind the Stories"
Third Edition; ISBN: 0-8053-9573-3
Publisher: Pearson/Benjamin-Cummins.

I. COURSE OVERVIEW

Humans dominate and significantly impact virtually every ecosystem on earth. This course is designed to give students a basic understanding of Ecological and Evolutionary Biology so that they can objectively assess current environmental issues facing the human population. We will study how natural ecosystems function and the changes to ecosystems that have resulted from human activity. We will conduct independent research and study environmental problems from a variety of perspectives including social, economic, legislative, and political, all grounded in our study of biology.

II. STUDENT LEARNING OUTCOMES

Students will:

- Gain science-based knowledge on human use and impacts in natural ecosystems.
- Display a complete understanding of the scientific method and distinguish between science and non-scientific information.
- Discuss the scientific theories of natural processes underlying complex ecological issues.
- Apply critical reasoning skills to assessment, analysis, and synthesis of ecological issues in an objective manner.
- Discover, refine, reflect on, and critically examine beliefs on philosophical, ethical, and social issues of human ecology.
- Develop and utilize research, reading, and writing skills.

The course requirements are based on these learning objectives. Students will participate in written assignments, reading, research, and active discussion of the assigned topics. Student assessment methods are described below.

III. CLASS FORMAT

1. WEB-BASED INSTRUCTION

This is a 100% web-based course requiring significant independent study by students. Students must read the assigned chapters from the text book, along with supplemental materials, on the set schedule listed below. A review of essential concepts in each chapter will be posted on Blackboard. These will be in the form of Powerpoint presentations accompanied by PDF notes. The notes will also have references to links to the textbook's website and other supplemental materials on the internet.

- Students should use the instructor's lecture materials to assess how well they understand the essential concepts. If you have difficulty understanding these materials, this indicates that you need to do additional reading and research on the topics. Students should feel free to contact the instructor for broader discussions or clarifications. However, if a student needs more detailed explanations, the student should come in to the instructor's office on campus; part-time and evening students can arrange to meet with the instructor in the evening hours. The instructor will also be online on Wednesdays 7:00-8:00 pm EST for rapid response to student inquiries.

2. ASSESSMENT

- Students must review the file **Course Activities** posted on **Blackboard Course Information** for details on the following assessment.

1) Discussion Board Forums

Students must log in to the **Blackboard Discussion Forum** every week, review the topic, read the posted comments, and post a comment. There will be ten (10) Forum topics through the semester; each post will be worth 10 points for a total of 100 points.

2) Written Assignments

There will be four (4) written assignments on major concepts and topics. Many of these will be taken from the "Weighing the Issues," "Discussion Questions," or "Investigate It!" sections of the textbook and its online site. These assignments are designed for students to demonstrate their mastery of important concepts, as well as to discuss their own viewpoint based on their reading and research.

- Assignments will be posted on and should be submitted back into the **Turnitin Assignments** page on our course Blackboard site. Turnitin is proprietary software that checks student papers for plagiarism. Students will be allowed to submit their paper and check the report for possible plagiarism, so that they can make corrections before final submission of an assignment.

- Due dates for assignments are listed in the Schedule of Activities below. No late assignments will be accepted. Please do not request extensions because none will be given. (The instructor regrets implementing this policy, but there will be many student assignments coming in on a regular basis with no feasible way to handle past-due assignments.)
- Written assignments will be graded using the +/- A to F letter grade scale:
 - A (corresponding to 95%) – An excellent report that demonstrates mastery of the topic based on readings, research, and objective synthesis of information; the report is complete in terms of focus on the topic, organization, and writing skills. A grade of A+ (100%) will be given for flawless reports, whereas A- (90%) will be given for excellent reports with few basic writing errors.
 - B (85%) – A good report
 - C (75%) – An acceptable report
 - D (65%) – A substandard report
 - F (55%) – A poor report
 - F (0%) – No report submitted

3) Examinations

There will be three (3) examinations (including the final exam). Tests will be based on major concepts, principles, and case studies. A list of review topics will be posted prior to each test. These tests will be standard format consisting of multiple-choice questions and short definitions. Students will have a designated period of time to login and take the timed test.

[For example, a particular test will be available for access over a specific 5 day period; during this time, a student can log in to the test and will have 30 minutes to answer 30 questions. In this sense, the tests are not “open book.”]

Grade Distribution	Points
Exam 1	100
Exam 2	100
Final Exam	100
Discussion Forum posts (10)	10 each
Written Assignments (4)	100 each
TOTAL POINTS	800

Overall Course Grade:

A	800-720
B	719-640
C	639-560
D	559-480
F	<480

IV. IMPORTANT COURSE INFORMATION

- **Web-based Course Instruction:** Supplemental information with links to tutorials on Blackboard modules, Turnitin Assignments, and other tools needed in this course will be posted on **Blackboard Course Information**.

*Students must agree to read and to abide by all policies stated in the Course Syllabus and supplemental documents in **Blackboard Course Information**. Students must also agree to log in at least once per week to the course shell on Blackboard. This constitutes a contractual agreement between student and instructor of BIO123.*

- **University Policy:** Students are required to read and abide by the University Honor Code and other information described in the Code of Student Rights & Responsibilities at the following website:
<http://www.nku.edu/~deanstudents/policies.htm>
- **Accommodations:** Students with disabilities should review the information on available resources and accommodations at the following website:
<http://www.nku.edu/~disability/>
- **Grades** will be posted in **Blackboard Gradebook** only. Grades cannot be given to students over the phone or via email because of security concerns. Midterm grades for freshmen only will be posted on Norse Express.
- **Study:** A general rule is that students should spend at least 3 hours study time for each hour of class time to get a passing grade. Therefore, at minimum, students should be prepared to spend 9 hours per week preparing for this course. Additional work usually translates to a higher final course grade. This period includes reading lecture texts and research on discussion topics.
- **Important dates:** February 4 -- last day to drop the course without a grade;
March 31 -- last day to withdraw from the course with a grade of “W”.

BIO123 Human Ecology
Schedule of Activities – Spring 2008

WEEK		TOPIC	ASSIGNMENT
January	14-18	Chapter 1: Introduction Chapter 4: Chemistry to Energy	
	22-25	Chapter 5: Evolution, Biodiversity, and Population Ecology	
	28-1	Chapter 6: Species and Community Ecology	Assignment 1
February	4-8	Chapter 7: Ecosystem Ecology	
	11-15	Chapter 8: Human Population	Exam #1¹ (Chapters 1, 4-7)
	18-22	Chapter 9: Soils & Agriculture	
	25-29	Chapter 10: Biotechnology & Food	
March	3-7	Chapter 11: Biodiversity & Conservation Chapter 12: Land Use	Assignment 2
	10-14	-- SPRING BREAK --	
	17-21	Chapter 15: Freshwater Resources	Exam #2¹ (Chapters 8-11, 12)
	24-28	Chapter 16: Marine Resources	
	31-4	Chapter 17: Air Pollution	
April	7-11	Chapter 18: Global Climate Change	Assignment 3
	14-18	Chapter 19: Fossil Fuel Energy	
	21-25	Chapter 20: Conventional Alternatives Chapter 21: Renewable Alternatives	Assignment 4
	28-2	Chapter 2: Environmental Ethics & Economics	
May	5-9		FINAL EXAM¹ (Chapters 15-21, 2)

¹**Chapter 3 Environmental Policy** covers aspects of major environmental legislation and policy issues. We will incorporate this material throughout the course.

[For example, we will incorporate discussion of the U.S. Clean Water Act of 1977 (see page 69) during our study of Chapter 15 Freshwater Resources.]