

ECOLOGICAL BASIS FOR ENVIRONMENTAL ISSUES
ECOL1000
UNIVERSITY OF GEORGIA
SPRING 2015

Meeting Times:

Lecture: MWF 10:10- 11:00

Odum School of Ecology Auditorium

Office Hours: Any by appointment

Instructor:

Dr. Scott Connelly

Odum School of Ecology, Room 28

scottcon@uga.edu

(Please contact me through email, and NOT the elc system)

Teaching Assistant:

Mr. Marcus Zokan

Odum School of Ecology

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Course Overview & Objectives:

This course is designed to give you an appreciation of the complexity and simplicity of natural systems. By the end of this course, you will have a better understanding of system structure and regulation at the organismal, population, community, and ecosystem levels. This background will provide you with the tools needed to evaluate environmental problems confronting society, and you will have a better understanding of how to protect and manage ecosystems for future generations. We will cover a variety of basic ecological principles to better appreciate environmental challenges threatening the sustainable future of humankind. To this end, we will discuss population growth, global climate change, loss of biodiversity, air & water pollution, and environmental ethics, among other topics.

This course emphasizes critical thinking skills and the scientific method as a way to introduce facts into an arena which information and logic are often completely lacking. We will examine current environmental issues, both within Georgia and globally, to reinforce the relevance of the material being studied.

ECOL1000 is a 3-credit hour science course with an optional 1-credit laboratory (ECOL1000L). It is credited as a University of Georgia Core Curriculum science course, and satisfies the University of Georgia's Environmental Literacy graduation requirement.

Text and Additional Material:

We will be following to some degree:

"The Environment and You", Norman Christensen

Publisher: Addison Wesley; 1 edition (January 7, 2012)

ISBN-10: 0321734386

ISBN-13: 978-0321734389

The text is NOT required. Many of the chapters in Christensen will be covered in some fashion during the semester. I will provide on-line partial copies of all PowerPoint lectures, which be available through UGA eLearning Commons (eLC).

The PowerPoint lectures will include material in the text, and additional material covered in class. The PowerPoint handouts are intended to reduce the amount of note taking required during lectures; they are not intended to replace the need to attend class, as additional material will be presented during lectures.

Additionally, students will be required to read several papers throughout the semester. These papers will be uploaded to eLC, and announced in class. Each paper has been chosen because of its relevance to current environmental events. You will be expected to have read and understood the main points in each article, although it will not be possible (due to time constraints) to discuss each paper during class. Several questions on each exam may be related to these readings.

Attendance:

Attendance in lecture is strongly encouraged as material covered and emphasized in class will be the basis for the quizzes and exams. The quizzes will be unannounced. If missed for any reason, there will be NO make-ups for these quizzes.

Do not use computers during class time unless their use is directly related to class. Use of cell phone, etc., are not permitted during class time.

Course Grading:

Grading for the lecture portion of the course will be determined by 5 quiz scores, 2 midterm exams and a final exam. The quizzes and exams will be multiple choice. Questions will be written to assess your ability to synthesize material presented in class, including videos, guest lectures and assigned readings. The final grading distribution will be:

Quizzes (best 5 grades of 8 count)	20%
Midterm Exam #1, Exam #2, Exam #3 (best 2 grades of the 3 count)	50%
Final Exam	30%

Quizzes:

There will be 8 unannounced short quizzes during the semester. Each will consist of 5 multiple choice questions from the previous lecture or two. These quizzes are intended to keep you up-to-date on lecture material, and will give you a good idea of the type of questions to expect on the exams. There are NO make-up quizzes. However, you may miss **three** quizzes for any reason (sickness, travel, transportation issues, death in the family, etc.) without it affecting your grade. If you complete more than 5 quizzes, you may drop the lowest scores (take 8 quizzes, drop 3; take 7 quizzes, drop 2, etc.).

Exams:

You may drop the one lowest score of the first 3 exams. You may not drop your score on the final exam. Make-up exams will **not be allowed** except for students who experience serious personal illness or immediate family emergency on the date of the exam and who meet all of the following requirements: (1) Students must notify the instructor of the reason for their absence prior to the exam. (2) Students must provide official documentation of serious personal illness or immediate family emergency within one week of the exam date. (3) If the

documentation is confirmed, the make-up exam will be given at the earliest possible date following the scheduled exam. The exam will not be identical to the class exam, and may be essay based.

The plus/minus grading system will be used, according to UGA policy. Withdrawals (W) are possible up to the midpoint of the semester. A WF is mandated by the University for any withdrawal after March 19.

Academic Honesty:

The Institute of Ecology adheres to the University's standards in defining academic honesty; you are bound by the rules governing academic honesty at UGA. Cases of suspected academic dishonesty will be reported to the Office of Judicial Programs. Ignorance of what constitutes plagiarism or dishonest work is no excuse. Conviction will result in a grade of "F" for the course and may incur additional penalties from the University. Please refer to the UGA Academic Honesty Policy and Student Honor Code.

Summary of Important Dates to Remember:

<u>Calendar Event</u>	<u>Date(s)</u>
Add/ Drop	Jan 5-9
Martin Luther King Jr. holiday	Jan 19, Monday
Exam #1	Jan 30, Friday
Exam #2	Feb 27, Friday
Spring Break	March 9 - 13
Withdrawal deadline	March 19, Thursday
Exam #3	April 3, Friday
Last day of class	April 27, Monday
Reading Day	April 28, Tuesday
Final Exam	April 29, Wednesday 8-11AM

Schedule of topics to be covered:

Week 1 / Jan 5 - 9	Introduction and course goals Population Growth Population Limits
Week 2 / Jan 12 - 16	Ecosystem Services Overview / Economics Air Quality
Week 3 / Jan 19 - 23	Ecosystem Services / Food Resources Ecosystem Services / Water Resources
Week 4 / Jan 26 - 30	Energy / Oil & Coal & Gas Review & Exam #1