

Syllabus
Environmental Biology
FALL 2017
EVSS 610

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Dept. of Biology, College of Charleston

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Office: New Science Center (SSMB) Room 144

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Office Hours: Weds 930-1030 or by appointment via email.

Class hours: Tuesday/Thursday 3:05-4:20 pm Room: RSS 249

Description of Course: Environmental biology is a core course for graduate students in the MES program. We will focus on current research areas in environmental biology through introductions of topics, literature discussions and student presentations. We will be exploring a range of topics from a biological perspective from Climate Change to Genetically Modified Organisms from microbes to landscapes. Through readings in the primarily literature we will explore a new topic each week, yet you will notice through time that topics are inter-related and we will examine links through the semester. Broader impacts of this course including: familiarizing you with how to read a scientific paper, exposing you to cutting-edge experimental designs, methodologies, statistical techniques, and learning how to dig into the Environmental Biology literature on a broad range of topics. For such a field, we will look at the breadth of current understanding and make connections across diverse topics. There is no way to ‘cover’ it all. For each discussion, I will choose recent papers on the topic. Each student will engage the class in guided discussion during the semester (alone and in pairs or small groups).

Instructional objectives and student learning outcomes: The learning outcomes for this semester are 1) to gain an understanding of the broad scope of environmental biology from a natural science perspective, 2) to discuss topics in recent primary and scholarly literature and initial quantitative discussions of data and their presentation, 3) to synthesize primary literature across a diverse set of topics and 4) through readings, presentations and discussion learn how environmental biologists do their work. Students will develop skills in reading, evaluating and discussing scholarly literature in environmental biology. Students will also learn how to search for and synthesize scholarly literature in environmental biology, and present complex ideas in writing for audiences of their peer-professionals. We will also link scholarly topics with environmental biology in the news. Students will develop critical thinking, writing, and presentation skills. Additional goals include: students learning to facilitate discussion among other professionals in the field, engage with professionals with diverse backgrounds, actively participate in discussion, prepare for discussion through prior development of questions and topics.

Text: *Primary Literature Articles posted on OAKS, bring paper copies or computer/tablet electronic copy with you to class. NB: I prefer paper copies.*

Course pre-requisites: meet requirements for admission to the MES program

Week	Course schedule	Written Work Due Dates
Aug 22 Aug 24	Introduction to the course The Interface of Environmental Biology and Policy	
Week 2		
Aug 29	Climate Change	Handout envt. bio in our lives paper.
Aug 31	Climate Change	
Week 3		
Sept 5 Sept 7	Biology of environmental disasters Biology of environmental disasters	Env. Bio in our lives 1. paper due
Week 4		
Sept 12 Sept 14	Urban Ecology Urban Ecology	
Week 5		
Sept 19	GMO's (Genetically Modified Organisms)	Hand out of Mid- term exam
Sept 21	GMO and Crop Biology	
Week 6		
Sept 26	Invasive Species	Mid term Exam Due on OAKS, incl. paper topic in exam
Sept 28	Invasive Species	
Week 7		
Oct 3	Endangered Species/Endangered ecosystems	Env. Bio in our lives paper 2 handout
Oct 5	Endangered Species/Reserve design	
Week 8		
Oct 10 Oct 12	Fisheries Oceans	Env. bio in our lives paper 2 due
Week 9		
Oct 17 Oct 19	FALL BREAK (no class) Environmental Microbiology	Outline with citations of final paper due
Week 10		
Oct 24	Ecology and Evolution of Disease	

Oct 26	Ecology and Evolution of Disease	Draft of final paper due for peer review
Week 11		
Oct 31	Pollution	
Nov 2	Pollution	Peer review due
Week 12		
Nov 7	Ecosystem services	
Nov 9	Ecosystem services	Final paper due
Week 13		
Nov 14	Ecology in Charleston/Lowcountry	
Nov 16	Student presentations	Final Exam Handed out
Week 14		
Nov 21	Student presentations	
Nov 22-26	Thanksgiving break	
Week 15		
Nov 28	Student presentations	
Nov 30	GUEST SPEAKER	Final Exam Due (OAKS) Dec 12 by 7pm

*The syllabus is subject to change. Any changes will be announced in class. Assignment due dates are listed above.

Attendance policy: Attendance is required as the student learning objectives are a combination of readings, discussion, engagement with peers and presentations – class time is when we learn in this way. Please communicate with the professor *in advance* if class may be missed for professional MES obligations (e.g. presentation of thesis work at a scholarly conference). Students remain responsible for preparation of questions and course reading even when absent. In case of illness, please communicate with the professor prior to the start of class. Depending on circumstances, SKYPE attendance may be appropriate.

Electronics policy: Computers are welcome in the classroom. Their use is intended for only course content. Cell phones may be out when anticipated news of emergencies (e.g. weather alerts or anticipated Cougar Alert updates). Contacted for personal emergency during class, please respectfully step out of the classroom.

Grading policy: grades will be based on the following work:

Midterm Exam - 500 Pts.

Final Exam – 500 Pts.

Env. Bio. In Our Lives 1. Paper – 200 Pts.

Env. Bio. In Our Lives 2. Paper – 200 Pts.

Draft final paper – 300 Pts

Peer review of paper – 100 Pts

Final paper – 500 Pts

Presentation of final paper – 200 Pts

Active participation in class discussions, leading discussions, discussion leading essay, daily discussion questions, current event presentations – 2,500 Pts.

Total semester points: 5,000.

Final grades will be calculated based on percent points earned out of the total available semester points.

Grades for Graduate Students: 92% A (Quality points: 4), 88-91% B+ (3.5), 80-87% B (3.0), 77-83% C+ (2.7), 70-76 C (2.0), below 70% F (0.0), XF Failure due to academic dishonesty

College Required Syllabus Material

1. **Center for Student Learning:** I encourage you to utilize the Center for Student Learning's (CSL) academic support services for assistance in study strategies, speaking & writing strategies, and course content. They offer tutoring, Supplemental Instruction, study strategy appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at <http://csl.cofc.edu> or call (843)953-5635.
2. **Center for Disability Services** (<http://disabilityservices.cofc.edu/for-faculty/faqs.php>)
 - Any student eligible for and needing accommodations because of a disability is requested to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged.
 - The College will make reasonable accommodations for persons with documented disabilities. Students should apply for services at the Center for Disability Services/SNAP located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying me as soon as possible and for contacting me one week before accommodation is needed.

3. College of Charleston Honor Code and Academic Integrity

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student's actions are related more to a misunderstanding will be handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student's file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student's transcript for

two years after which the student may petition for the XX to be expunged. The F is permanent. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration--working together without permission-- is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others' exams, fabricating data, and giving unauthorized assistance. Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor. Students can find the complete Honor Code and all related processes in the Student Handbook at <http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php>

College Policy on religious holidays and dates specific to 2017-2018 academic year can be found here:
<http://academicaffairs.cofc.edu/documents/procedures-and-practices/statement-of-accommodation.pdf>

Should these dates require accommodation for you, please request accommodation in advance of the date.

