EVR1001H - Intro. to Environmental Science

Fall, 2018 3 credit hours WF 10:00AM - 11:20AM, BHC 127

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UCF Course Description: EVR 1001H Cos-Bio 3(3,0)

Environmental science and environmental systems in the context of real places, real people, real problems, and real data. Fall.



http://www.open.ac.uk/science/main/studying-science/Environmentalscience-Q52

Course Objectives:

- To understand the core principles of environmental science
- To understand the importance of the scientific method in advancing environmental science
- To gain experience identifying environmental challenges and implementing solutions
- To develop reasoning and writing skills expected of environmental scientists

Textbook: None – instead, we will use assigned readings. You may need to use a campus computer to access some assigned readings, particularly those in scientific journals.

Attendance and Participation: Are strongly encouraged.

If you need help: Web Courses is the required form of communication. Your message must be written in a professional manner and include your full name as it appears in the class roster. I will try to answer questions within two class days unless the answer already is in the syllabus, has been answered in class, posted on web courses, or can be determined using readily-available resources or common sense.

Office hours: We 1230 – 1330 h or by appointment at another mutually convenient time. Please confirm meetings in advance because academic advisees, graduate students, members of the media, etc., also meet with me during office hours. Office hours are subject to change to accommodate other responsibilities. Changes will be announced in class and/or on Web Courses.

Schedule

Scheau		A I D I' V
Date	Topic	Assigned Reading or Viewing
22 AUG	Introduction: customizing the syllabus to <i>your</i> interests	UCF syllabus requirements
24 AUG	Environmental issues at UCF	
29 AUG	Project brainstorming day	
31 AUG	The scientific method & other ways of	Comparing the engineering design process
	knowing	and the scientific method
		Koch's postulates (read Tulchinsky excerpt
		first, then Cohen's; the rest are optional)
5 SEP	Case study: sunscreens & corals	Downs et al. 2016
		Hawai'i sunscreen bill
7 SEP	Light, heat, visual & noise pollution	Ecological light pollution
		Neighborhood Inventory of Visual Pollution
12 SEP	Paper discussion #1 – Air pollution	Robert Griffiths & Rebecca Gaschler
14 SEP	Paper discussion #2 – Climate change/Global warming	Cathleen Towne & Anton Strickland
19 SEP	Green & alternative energy	Affordable and Clean Energy
13 321	Green a diternative energy	Clean Energy Momentum
21 SEP	Green technology & buildings	Overview of Green Buildings
26 SEP	Paper discussion #3 – Water pollution	Aislinn Widmeier & Carson McAbee
28 SEP	Herbicides and pesticides	Silent Spring - I
3 OCT	Soil pollution	Lead bioaccumulation in small mammals
5 OCT	Fracking	Natural gas: Should fracking stop?
10 OCT	Project updates	Natara Sast Shoata Hasking Stop.
12 OCT	Midterm Exam	
17 OCT	Paper discussion #4 – Waste management	Jacob Schlueb & Kara Gallelli
19 OCT	Paper discussion #5 – Population growth	Parker Hollerand & Lindsay Gregson
24 OCT	Paper discussion #6 – Ecosystem services	Gavin Dearsman & Cole Clark
26 OCT	Paper discussion #7 – Habitat	Jackson Salyers & Kyla Ruwet
20001	loss/Deforestation	Juckson Suryers & Ryla Nawet
31 OCT	Tragedy of the commons	The Tragedy of the Commons
	3021, 2 2 2 2 2	Extensions of "The Tragedy of the
		Commons"
2 NOV	Paper discussion #8 – Natural resource	Lindsay Feldman & Henry Latner
	depletion	,
7 NOV	Paper discussion #9 - Biodiversity/	Mitchell Smith & Elizabeth Bettis
	Endangered species	
9 NOV	Paper discussion #10 – Invasive species	Johnathan Starling
14 NOV	Genetically-modified organisms	Frequently asked questions on genetically
	-	modified foods
16 NOV	Project reports	
21 NOV	Project reports	
28 NOV	Project reports	
7 DEC	Final exam: 0800 - 0950	

Syllabus: The schedule, topics, activities and class rules are tentative and the professor reserves the right to alter them as needed. Students will be notified of changes in lecture and/or via Web Courses.

Lecture notes: Engage your brain - take notes! You are responsible for all materials covered in class, and if you are absent, you must obtain notes and other resources from your classmates.

Audio and video-recording are not allowed. Outside of the notetaking and recording services offered by Student Accessibility Services, the creation of an audio or video recording of all or part of a class is <u>not</u> allowed. Use of cell phones, lap top computers, tablets, etc. during class is prohibited unless authorized by the instructor. Instead, take written notes and start a 3-ring binder for hard copies of required readings and lecture notes.

Grading: Your numerical grade will be determined by your work on the midterm and final exams, your paper discussion & annotated bibliography, and your group project, less deductions for disruptive conduct¹, as follows:

Midterm exam	25%
Final exam	25%
Annotated bibliography and paper discussion	25%
Group project	25%

All exams are cumulative and will include diverse questions on all aspects of the course, including lecture material, readings, discussions, project reports, and other activities. Exams will be challenging and will require you to use scientific methods and apply environmental concepts to new situations. To encourage good study habits and discourage memorize/regurgitate/forget behavior, I will politely decline to answer questions one class day before each exam.

I use competency-based grading in all my courses: to earn an A, one must demonstrate the abilities expected of an excellent, introductory-level student in environmental science. If the entire class demonstrates such abilities, I will be absolutely delighted to give everyone an A! The easiest way for everyone to earn an A is to help each another - peer learning and altruism benefit everyone. Graded tests and materials in this course will be returned individually.

Numerical grades will be converted into letter grades as shown on below:

92.6 – 100.0	A	72.6 - 77.4	С
89.5 – 92.5	A-	69.5 - 72.5	C-
87.5 – 89.4	B+	67.5 – 69.4	D+
82.6 - 87.4	В	62.6 - 67.4	D
79.5 – 82.5	B-	59.5 – 62.5	D-
77.5 – 79.4	C+	59.4 or less	F

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¹ Five points will be deducted from your final numerical grade for each instance of disruptive classroom behavior, including (but not limited to): arriving after lecture has started or leaving lecture early; using a cell phone, computer, tablet, or other unauthorized electronic device during class time; unauthorized video or audio recording of a lecture; other discourteous behavior.

Make-up exams and other assignments: Both exams are cumulative, so if an acceptable absence forces you to miss the midterm exam, its weight will be added to the final exam. Acceptable absences are major illness, serious family emergencies, special curricular or professional requirements (e.g., attending a scientific meeting), court-imposed legal obligations, military obligations, severe weather conditions, religious holidays, and participation in official university-sponsored activities such as intercollegiate athletics. Acceptable absences must be documented, in advance if possible. If you miss an exam for other than an acceptable absence your score will be a zero. Likewise for paper discussions and project reports – you must be present and contributing, and submit work on time to receive credit.

Ethics: As reflected in the UCF creed, integrity and scholarship are core values that should guide our conduct and decisions as members of the UCF community. Plagiarism and cheating contradict these values, and so are very serious academic offenses. Penalties can include a failing grade in an assignment or in the course, or suspension or expulsion from the university. Students are expected to familiarize themselves with and follow the University's Rules of Conduct (see http://goldenrule.sdes.ucf.edu/).

Withdrawal: The deadline for withdrawal without penalty is published by UCF. You must decide whether to remain in the course by that time. I do not give grades of Incomplete and the Biology Department (my home department) does not permit NC (No Credit).

Disability statement: The University of Central Florida and Dr. Fauth are committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact Dr. Fauth as soon as possible. Students should also connect with Student Accessibility Services (SAS) http://sas.sdes.ucf.edu/ (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

Campus Safety Statement: Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide's physical location and review the online version at http://emergency.ucf.edu/emergency_guide.html
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see http://www.ehs.ucf.edu/AEDlocations-UCF
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to my.ucf.edu and logging in. Click on "Student Self Service" located on the left side of the screen in the toolbar, scroll down to the blue "Personal Information"

heading on the Student Center screen, click on "UCF Alert", fill out the information, including e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK"

- Students with special needs related to emergency situations should speak with their instructors outside of class
- To learn how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (https://youtu.be/NIKYajEx4pk).

Deployed Active Duty Military Students: A deployed active duty military student who feels the need for a special accommodation due to that unique status should contact Dr. Fauth to discuss the circumstances.

Three keys to success:

- Pay attention
 - Work hard
 - Have fun!

