

EVR 1001H – Introduction to Environmental Sciences (Honors) - Fall 2017



Photo from NASA Moon Mission

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Office Hours: It will be best to e-mail or call me to set a formal appointment. I am usually available during official drop-in office hours (i.e., Wed, Thurs., & Fri 10:30 – 11:30 a.m.) to answer any questions. If these times do not work for you, we can try to arrange another time.

Class Web Site: Accessible through the <http://webcourses.ucf.edu> or through your <http://my.ucf.edu> account. Lecture notes, review questions, midterm answers, grades, relevant internet sites and additional readings will be posted at this site. Usually most of the PowerPoint slides will be available the day (sometimes night) before class. If this is your first time taking a web-assisted course go to: <http://learn.ucf.edu/> to help you logon and familiarize you with the system.

Lecture Meeting Times: Wednesdays, and Fridays, 8:30 - 9:50 a.m. Biology Building (BIO 0212)

Course Description: The course is an introduction to the environmental sciences. I will stress the aspects of “Humans in the Environment” and a science-based approach toward understanding the nature and scope of contemporary problems in relation to natural systems. It outlines the interactions of biological, physical, chemical, geological, and sociological principles that define natural and anthropogenic ecological change. We will focus on relevant issues of the day and explore discussions beyond the textbook to add context relevant to being an effective steward of a sustainable Earth.

Course Purpose: To investigate environmental science and environmental systems in the context of real places, real people, real problems and real data. (Often focusing on local Florida issues that are broadly relevant)

Learning Objectives:

Upon successful completion of this course students will be able to:

1. Describe the structure and function of significant environmental systems.
2. Use scientific reasoning to identify and understand environmental problems
3. Critically evaluate arguments regarding environmental issues.
4. See the impact your choices and actions have on the environment.
5. Propose and evaluate potential solutions to environmental problems.
6. Place yourself and your projected career now and in the future in the context of the changing World.

Textbook: The required textbook is listed below:

Environment: Science, Issues, Solutions. Manuel Molles and Brendan Borrell W.H. Freeman and Company NY. ISBN-13: 978-0-7167-7. ISBN10: 0-7167-6187-4. This should be available from the Bookstore.

There may be used versions of this book or they may be available from other sources. Various **Chapter Readings**, activities, videos, etc. will be posted and/or assigned in class which will take us into more challenging discussions regarding the role of “Humans in the Environment” will be assigned throughout the semester along with selected other media sources.

Class Schedule: (The Instructor may alter this based upon topics and progress of the class). The testing dates will stand firm:

Class Meetings	<u>Date</u>	<u>Lecture/Discussion Topic</u>	<u>Preparation</u>
1	Wed 8/23	Course Introduction – First Day Writing Exercise – Expect to write answers to thought provoking questions!	Come to class! Bring materials with which to write. A computer will be okay but I will need the file emailed to me in class same day.
<u>Setting the Stage for a Pathway to Collapse – Humans in a Can!</u>			
2	Fri. 8/25	Let’s discuss the class goals, term paper, and Wednesday’s thought provoking questions.	Syllabus review, term paper discussion, and Wednesday Class Discussion
3	Wed. 8/30	Diamond’s Dozen	Read and be Prepared to Discuss handout from the author of “Collapse”
4	Fri. 9/01	Half Earth and the Human Ecological Footprint	Read Handout about Half Earth and be Prepared to Discuss
<u>Broad Components of Environmental Science</u>			
5	Wed. 9/06	How Science Works	* IRMA
6	Fri. 9/08	History of Environmental Science	IRMA*
7	Wed. 9/13	Environmental Ethics	* IRMA

8	Fri. 9/15	Ecosystems and Economic Systems	* IRMA
9	Wed 9/20	Class Group Project Discussion	
<u>Conservation, Species, Ecosystems</u>			
10	Fri. 9/22	How Science Works/Environmental Ethics	
11	Wed. 9/27	Conservation of Endangered Species	Read Chapter 3 and 4 Molles and Borrell
12	Fri. 9/29	(cont.)	Read Chapter 3 and 4 Molles and Borrell
13	Wed. 10/04	Species and Ecosystems	Read Chapter 3 and 4 Molles and Borrell
14	Fri. 10/06	(cont.)	Read Chapter 5
15	Wed. 10/11	Humans	Read Chapter 5
<u>Sustainability of Water, Terrestrial Resources, Aquatic Resources, Energy Supplies</u>			
16	Fri. 10/13	(cont.)	
17	Wed. 10/18	Sustaining Water Supplies (Read Chapter 6)	(Julia presentation)
18	Fri. 10/20	Sustaining Terrestrial Resources (Read Chapter 7)	(Liz presentation)
19	Wed. 10/25	Sustaining Aquatic Resources (Read Chapter 8) By today each student provide two-three test questions	(Donovan presentation)
20	Fri. 10/27	What are we going to Eat	(Alex presentation)
21	Wed. 11/01	TEST1	
<u>Living with our Waste</u>			
22	Fri. 11/03	Environmental Health Risks and Toxicology	(Greg presentation)

23	Wed. 11/08	Waste Management	(Kyle presentation)
24	Fri. 11/10	No Class Hug a Veteran	
25	Wed. 11/15	Air, Water, and Soils	(Hieu presentation) *
26	Fri. 11/17	Renewable Energy	*
27	Wed. 11/22	No Class Today Due to Field Trip on Saturday November 11	
28	Fri. 11/24	NO CLASS - Thanksgiving	
<u>Global Climate Change</u>			
29	Wed. 11/29	Evidence-Based Concerns	*
30	Fri. 12/01	Final Group Project Due	*
	Sat. 12/02	Classes End	
	12/04-12/09	Examination Period (Day to be determined) Final Group Project Presentation	

* The dates of these topics serve as a guideline and are subject to change. Various readings, activities, videos, etc. will be posted and/or assigned in class which will take us into more challenging discussions regarding the role of “Humans in the Environment“ will be assigned throughout the semester along with selected other media sources. **Check back from time to time as this syllabus will be updated!**

Student Responsibilities:

Etiquette - Students should show proper classroom etiquette. Students should show up to class on time. If arriving reasonably late (<5 minutes), students should enter the lecture room quietly and sit in the back. If arriving unreasonably late (>5 minutes), students should not enter the room. Students who need to leave the lecture room early should not come that day. Students should not disrupt other students (or the instructor) in class by talking unless instructed to do so by the instructor. There is expected to be a lot of discussion in this class. Students are expected to participate and practice good etiquette both listening and contributing to the discussion.

Readings - In a very rough manner, assigned readings are designed to coincide with and supplement the lecture component of the course. The nature of the course is somewhat non-linear so certain concepts and discussions are revisited with a different emphasis. Additional readings, activities, will be assigned and made available as appropriate to supplement the class discussions.

Clickers – I will not use clickers.

Midterms and Final Exam - There will be one in-class lecture/class discussion exam, covering material that roughly occurs at even intervals of the course. I strongly suggest that if you not miss any exam since they are your personal evaluation of how well you are doing. A make-up will require a doctor's or other exceptional excuse. The final exam will be a group oral presentation. Exam questions often require analyses of new (but related) information or the synthesis of ideas. These are derived from lectures, readings, and information on the class website. Lecture/class discussion materials will be emphasized, followed by auxiliary materials such as extra readings, videos, or class discussions. Exams are designed to make you think and function as additional learning experiences – they are not experiments in regurgitation of class materials.

Beginning of Semester Activity - Faculty are required to document students' academic activity at the beginning of each course. In order to document that you began this course, please complete the first day's assignment in class and upload to the website by the Friday class 08/25. Failure to do so may result in a delay in the disbursement of your financial aid.

Performance Evaluation:

First Day Written Questions = 5%

Class Participation¹ = 25%

1 Exam during term and 1 individual presentation (2 x 25.0%) = 50%

Final Exam = 20% Group Project Presentation

Total = 100%

Your grade will be based on the following scale: 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; 0-60 = F

Participation: Participation is an important component of this course, and includes being actively and intellectually engaged and communicative during lectures, discussions, and group activities. For presentations, clarity, demonstration of an understanding of the topic, clarity in explaining major points, ability to capture what was discussed and relate it to your own experiences is very important.

Absences: Only legitimate as 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. More than 1 absence may severely affect you success in the class.

¹ The rubric for class participation will be discussed in class.

Cheating: Rules of student conduct (including definitions of cheating, unauthorized assistance, and plagiarism) are published in Section E of the *Golden Rule*. Cheating is not tolerated.

Withdrawal: The deadline for withdrawal without penalty is published by UCF. You will need to decide whether or not to remain in the course by that time. No incomplete grades will be given

Disability Access Statement: The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need accommodations in this course must contact SAS at the beginning of the semester to discuss needed accommodations. We cannot provide accommodations until we have been provided a letter from SAS to the professor outlining for us the required accommodations. Students who need accommodations must register with Student Access Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor

As always, UCF Students are expected to follow the **Golden Rule:** <http://www.goldenrule.sdes.ucf.edu/> and

THE UCF CREED

Integrity, scholarship, community, creativity, and excellence are the core values that guide our conduct, performance, and decisions.

Integrity

I will practice and defend academic and personal honesty.

Scholarship

I will cherish and honor learning as a fundamental purpose of my membership in the UCF community.

Community

I will promote an open and supportive campus environment by respecting the rights and contributions of every individual.

Creativity

I will use my talents to enrich the human experience.

Excellence

I will strive toward the highest standards of performance in any endeavor I undertake.