

Introduction to Environmental Science EVR 1001

Department of Biology, College of Sciences

3 Credit Hours

Course Syllabus

Instructors:	Dr. Roisin Stanbrook; Gabe Benson (TA)	Term:	Fall 2022
Office Location:	BIO101a Biology Building	Class Meeting Days:	TR
Office Hours:	By appointment, TuThur 1.30PM – 2.30PM.	Class Meeting Time:	12.00PM – 1.20PM
Phone:	407-440-1309 (Office)	Class Location:	Health Sciences Building 1 HS1 0119
Email:	Roisin.Stanbrook@ucf.edu gbenson1@Knights.ucf.edu	Course Modality:	P

Course Description

Welcome to EVR1001!

This course examines scientific foundations needed for understanding the earth's environmental systems and human impacts on the environment. Topics include basic ecology, human population growth and world food supply, land and water resources, energy resources, water and air pollution, biodiversity conservation, global climate change, and sustainability.

Course Requirements

This course will require participation both in class and out of class. The course will include lectures, chapter review quizzes, a mid-term assignment and final examination. Class attendance is expected and will be evaluated through a class response systems and unannounced pop quizzes. Students are expected to be respectful to the instructor and their fellow students and behave in an adult and professional manner.

General Education Learning Objectives

This course contributes UCF's general education program (GEP) science foundation learning objectives. At the completion of the course students will be able to:

- Demonstrate an understanding of science as an empirical attempt to acquire information about the real world, develop possible explanations of these phenomena, and test the explanations by predicting the outcome of future observations or experiments.
- Demonstrate an ability to assess the extent to which claims presented as "scientific" satisfy the empirical character of scientific explanations.
- Demonstrate understanding of scientific knowledge and problem solving in a physical or life science.

Specific Course Objectives

At the completion of this course students will be able to:

- Define the field of environmental science and explain importance and relevance to real-world environmental problems.
- Explain how various scientific fields, such as chemistry, ecology, earth science, and other relevant scientific disciplines, contribute to the field of environmental science.
- Analyze and interpret scientific evidence concerning environmental systems and problems in the context of real places, real people, real issues, and real data.
- Think critically about environmental issues and distinguish between sound and unsound interpretations of scientific evidence concerning environmental issues.
- Explain how environmental science relates to other important areas of human understanding and action, including environmental laws and policies, sustainability, equity, and environmental justice.

Required Reading Materials

• Friedland, Andrew, Relyea, Rick 2016. Essentials of Environmental Science, Second Edition. New York: W.H. Freeman and Company

AND

• One of the following:

A Sand County Almanac: Aldo Leopold
 The Milagro Bean Field War: John Nichols
 The Monkey Wrench Gang: Edward Abbey

4. Silent Spring: Rachel Carson5. Planet Walker: John Francis

Evaluation Procedures

Grade Category: Weekly Quizzes

Description of Requirements: Students will complete a total of 14 weekly quizzes in Webcourses throughout the semester to demonstrate comprehension of material covered in the book chapters, and lecture material. Quizzes will be assigned at the end of each week and completed outside of class.

Total: 25% (25/100 points)

Grade Category: Mid-Term exam

Description of Requirements: Students will complete a mid-semester exam covering material presented

in class and in other assignments. Exam is scheduled in class and is open book.

Total: 25% (25/100 points)

Grade Category: Final Exam

Description of Requirements: Students will complete a final exam covering material presented in class and in other assignments throughout the semester. Exam is scheduled in class and is closed book.

Total: 30% (30/100 points)

Grade Category: Written Assignment

Description of Requirements: A 1000-word book report detailing the main theme and environmental message of your chosen book, whether you agree with the message of the book, and whether the environmental issue is still relevant.

Total: 20% (20/100 points)

Grading Scale: A (100-95), A- (94-90), B+ (89-85), B (84-80), C+ (79-75), C (74-70), D (69-60), F (59-0). There is no rounding.

Technology Requirements

Technology	Expectations for Use
WebCourses:	WebCourses will be used for this class. This syllabus and the majority of graded homework assignments will be posted on Webcourses. Please check WebCourses regularly for updates, quizzes and other class information.
E-mail:	ALL email communications with the instructor must be made through Webcourses. Grades will not be provided over email. Communication with classmates via email will be done at the students' discretion.
Computer software	Students are expected to be able to use Microsoft Word, Excel, and Power Point.

Additional Policies

Grading and evaluation	Grades will be calculated according to the above evaluation procedures. Grades will not be distributed in class; an appointment must be made with an instructor to discuss grades. Grades will not be given over the phone, or via email. There is no rounding. Late submissions to all assignments will receive a zero grade without a valid documented excuse.
Attendance and participation	Class attendance is required. Valid excuses for missing class are; illness (medical note required); participation in university-sponsored events that specifically grant class waivers (a "Program Verification" form is required); religious observances (these must be requested by the 10 th business day of the term); military duty; attending a funeral of an immediate family member; and court-imposed legal obligations. If students cannot attend class, it is their responsibility to get notes or resources about for the missed lecture. Coming to class unprepared, arriving late and leaving early are strongly discouraged.
Religious Observances	Students must notify their instructor no later than the 10 th business day of the term if they intend to miss class for a religious observance. For more information, see the UCF policy at https://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALJan19.pdf

Exam make-up	The mid-term and final exams will not be offered at any other time besides the specified date on this syllabus. Failure to take the exams without a valid documented excuse (e.g., doctors note) will result in 0 points issued.
Academic integrity	As stated in the UCF creed, integrity, scholarship, community, creativity, and excellence are the core values that guide our conduct, performance, and decisions as members of the UCF community. Plagiarism and cheating contradict these values, and are very serious academic offenses. Penalties can include a failing grade in an assignment or in the course, suspension, or expulsion from the university. Students should familiarize themselves with UCF's Rules of Conduct at http://osc.sdes.ucf.edu/process/roc >
Course Accessibility statement	The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need access to course content due to course design limitations should contact the professor 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). For students connected with SAS, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential course access and accommodations that might be necessary and 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. Further conversation with SAS, faculty and the student may be warranted to ensure an accessible course experience.
First week academic assignment requirement	As of Fall 2014, all faculty members 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 Academic Assignment in Webcourses by the end of the first week of class e.g. Friday 28 th August . Failure to do so may result in a delay in the disbursement of/or decline of your financial aid.
Campus safety	Every UCF classroom contains an emergency procedure guide posted on a wall near the door. 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 . Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency. To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video https://youtu.be/NIKYajEx4pk .
Deployed active-duty military students	Students who are deployed active-duty military and/or National Guard personnel and require accommodation should contact the instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.
Make-up assignments for authorized University events or co-curricular activities	Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at http://policies.ucf.edu/documents/4-

	401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularAct ivities.pdf
Covid-19	I recognize and understand the difficult times we are all in. The COVID-19 pandemic impacts us all in many ways, including physically, mentally, emotionally, financially, academically, and professionally. I will work with you on challenges you may be encountering and to provide support to help you succeed. However, please keep in mind that I will hold you accountable, especially in terms of class attendance, participation, and contributions.
Notifications in Case of Changes to Course Modality	If the instructor falls ill during the semester, there may be temporary changes to this course, including having a backup instructor take over the course or going remote for a short time. Please look for announcements or mail in Webcourses@UCF or Knights email for any temporary alterations to this course.
Course Accessibility and Disability	Accommodations may need to be added or adjusted should this course shift from an on-campus to a remote format. Students with disabilities should speak with their instructor and should contact sas@ucf.edu to discuss specific accommodations for this or other courses.

Course Schedule

Week	Date	Content	Assignment due
1	Tuesday, August 23 rd	Introductions & Syllabus review, Lecture: CH1	
		Introduction to Environmental Science	
1	Thursday, August 25 th	Lecture: CH1 Process of Science, CH2 Chemistry	
		Basics Concepts	
1	Sunday, August 28 th	Weekly Quiz	11.59pm
2	Tuesday, August 30 th	Lecture: CH2 Energy Basics, Lecture: CH3	
		Energy Flows and Material Cycles	
2	Thursday, September 1st	Lecture: CH3 Global Climate Processes and	
		Biomes, Lecture: CH3 Biomes Continued	
2	Sunday, September 4 th	Weekly Quiz	11.59pm
3	Tuesday, September 6 th	Lecture: CH4 Population and Community	
		Ecology, Lecture: CH4 Evolution and	
		Biodiversity 1	
3	Thursday, September 8 th	Lecture: CH4 Evolution and Biodiversity 2,	
		Lecture: CH5 Human Population Growth 1	
3	Sunday, September 11th	Weekly Quiz	11.59pm
4	Tuesday, September 13 th	Lecture: CH5 Human Population Growth 2,	
		Lecture: CH6 Geological Processes	
4	Thursday, September	Lecture: CH6 Minerals and Soils, Lecture: CH6	
	15 th	Mining	
4	Sunday, September 18th	Weekly Quiz	11.59pm
5	Tuesday, September 20 th	Lecture: CH7 Land Resources and Use, Lecture:	
		CH7 Agriculture (Part 1)	
5	Thursday, September	Lecture: CH7 Agriculture (Part 2), Lecture: CH8	
	22 nd	Energy 1: Non-Renewable Energy	
5	Sunday, September 25 th	Weekly Quiz	11.59pm
6	Tuesday, September 27 th	Lecture: CH8 Energy 2: Renewable Energy,	
		Lecture: CH9 Water Resources and Human Use	

6	Thursday, September 29 th	Guest Lecture: Dr. Josh King	
6	Sunday, October 2 nd	Weekly Quiz	11.59pm
7	Tuesday, October 4 th	Lecture: CH9 Water Pollution 1, Lecture: CH9 Water Pollution 2	11109 pint
7	Thursday, October 6 th	Mid Term Review	
7	Sunday, October 9 th	Weekly Quiz	11.59pm
8	Tuesday, October 11 th	Mid-Term Evaluation (Chapters 1-9)	
8	Thursday, October 13 th	Lecture: CH10 Air Pollution 1, Lecture: CH10 Photochemical Smog and Acid Precipitation	
8	Sunday, October 16 th	Weekly Quiz	11.59pm
9	Tuesday, October 18 th	Lecture: CH10 Ozone Layer, Indoor Air Pollution Lecture: CH11 Solid Waste and Hazardous Materials,	
9	Thursday, October 20 th	Lecture: CH11 3Rs, Lecture: CH12 Human Health, Infectious Disease and Toxins	
9	Sunday, October 23 rd	Weekly Quiz	11.59pm
10	Tuesday, October 25 th	Lecture CH12 Assessing Human Health Risks Lecture: CH13 Conservation and Biodiversity 1,	
10	Thursday, October 27th	Lecture: CH13 Conservation and Biodiversity 2, Lecture: CH13 Conservation and Biodiversity 3	
10	Sunday, October 30 th	Weekly Quiz	11.59pm
11	Tuesday, November 1st	Lecture: CH14 Climate Alteration and Global Warming, Lecture: CH14 Climate Alteration and Global Warming 2	
11	Thursday, November 3rd	Lecture: CH14 Climate Alteration and Global Warming 3	
11	Sunday, November 6 th	Weekly Quiz	11.59pm
12	Tuesday, November 8th	Lecture: CH15 Sustainability and Economic Systems	
12	Thursday, November 10 th	Guest Lecture: GreenWorks Orlando	
12	Sunday, November 13 th	Weekly Quiz	11.59pm
13	Tuesday, November 15 th	Lecture: CH15 Environmental Economics	
13	Thursday, November 17 th	CH15 Lecture: Sustainable Development in the 21 st Century	
13	Thursday, November 17 th	Book reports due	Due by 11.59pm
13	Sunday, November 20 th	Weekly Quiz	11.59pm
14	Tuesday, November 22 nd	Thanksgiving and your Carbon Footprint	
14	Thursday, November 24 th	No class – Thanksgiving Holiday	
14	No Quiz	No Quiz	No Quiz
15	Tuesday, November 29 th	Lecture: US Environmental Policy	
15	Thursday, December 1st	Guest Lecture: FDEP: Environmental Law & Policy	
15	Sunday, December 4 th	Weekly Quiz	11.59pm
16	Tuesday, December 6 th	Final Exam Review Session (last day of class)	
16	Thursday, December 8 th	Final Exam	10.00AM – 12.15PM

Important Dates

Friday, August 26 th	Drop/Swap Deadline on my UCF	
Tuesday, October 11 th	Mid-Term Exam	12.10PM – 1.15PM (in class)
Thursday, November 17 th	Book Reports due	Due by 11.59pm
Thursday, December 8 th	Final Exam	10.00AM – 12.15PM (in class)

UCF Rules of Conduct

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

- 1. Integrity: I will practice and defend academic and personal honesty.
- 2. Scholarship: I will cherish and honor learning as a fundamental purpose of my membership in the UCF community.
- 3. Community: I will promote an open and supportive campus environment by respecting the rights and contributions of every individual.
- 4. Creativity: I will use my talents to enrich the human experience.
- 5. Excellence: I will strive toward the highest standards of performance in any endeavor I undertake.

The following definitions of plagiarism and misuse of sources come from the Council of Writing Program Administrators < http://wpacouncil.org/node/9> and have been adopted by UCF's Department of Writing & Rhetoric.

Plagiarism

In an instructional setting, plagiarism occurs when a writer deliberately uses someone else's language, ideas, or other original (not common-knowledge) material without acknowledg-ing its source. This definition applies to texts published in print or on-line, to manuscripts, and to the work of other student writers.

Misuse of Sources

A student who attempts (even if clumsily) to identify and credit his or her source, but who misuses a specific citation format or incorrectly uses quotation marks or other forms of identifying material taken from other sources, has not plagiarized. Instead, such a student should be considered to have failed to cite and document sources appropriately.

Responses to Academic Dishonesty, Plagiarism, or Cheating

UCF faculty members have a responsibility for your education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to infringements of academic integrity. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see http://goldenrule.sdes.ucf.edu/zgrade.

For more information about UCF's Rules of Conduct, see http://www.osc.sdes.ucf.edu/.

Unauthorized Use of Class Materials

There are many fraudulent websites claiming to offer study aids to students but are actually cheat sites. They encourage students to upload course materials, such as test questions, individual assignments, and examples of graded material. Such materials are the intellectual property of instructors, the university, or

publishers and may not be distributed without prior authorization. Students who engage in such activity are in violation of academic conduct standards and may face penalties.

Unauthorized Use of Class Notes

Third parties may be selling class notes from this class without my authorization. Please be aware that such class materials may contain errors, which could affect your performance or grade. Use these materials at your own risk.

In-Class Recording Policy

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 for personal use is allowed *only* with the advance and explicit written consent of the instructor. Such recordings are only acceptable in the context of personal, private studying and notetaking and are not authorized to be shared with *anyone* or edited without the separate written approval of the instructor.