

EVS 3000 Environmental Science - Spring 2021 - 3 credit hours
Class# 24523 (synchronous online) & 12873 (hybrid)
T 4th period (10:40 – 11:30) via Zoom
R 4-5th periods (10:40 – 12:35): class# 24523 via Zoom, class #12873 in FLG 0220

Syllabus

Instructor: Dr. Danny Coenen (he/him/his)
E-mail: dcoenen@ufl.edu
Office hours: T 12:00-1:45 (Zoom)
Office Phone: 352-294-0516

Teaching Assistant: Jamila Roth (she/her/hers)
E-mail: jroth2@ufl.edu
Office hours: T 8:00-9:00 & R 9:30-10:30 (Zoom)

We are here for you! Please don't hesitate to ask us for assistance!

Course Description

Interactions of humans and their environments, Earth's resources, pollution, and environmental management.

Course Goal

The goal of this course is to provide students with foundational knowledge for the environmental science baccalaureate degrees and minors offered by the School of Natural Resources and Environment (SNRE), with specific science content on ecology, Earth's resources (biotic, fuels, minerals), pollution (air, water, land), climate change, and environmental management.

Place in Curriculum

EVS3000 is a required core course for environmental science majors and minors. Majors should make every effort to take EVS3000 during the second semester of your sophomore year or the first semester of your junior year, when you have completed or are about to complete your general education and critical tracking requirements, and before taking the more specialized core and elective requirement courses for the environmental science degree. Minors may take the course during their junior or senior years. It is recommended, but not required, to enroll in EVS3000L, the accompanying laboratory course, during the same semester.

Course Learning Objectives

By the end of the semester, you will be able to:

- 1) recall key terminology and definitions
- 2) review how foundational principles from biology, chemistry, physics, geosciences, and social sciences are integrated for the study of social-ecological systems
- 3) recognize the scale dependency of environmental processes and issues in the dimensions of space, time, and organization (taxonomy or hierarchy)
- 4) compare biological, material, and energy resources, and associated environmental constraints
- 5) relate the complex relationship between human demography, economics, and technological development to anthropogenic environmental impacts
- 6) apply interdisciplinary approaches to evaluating and developing solutions for environmental problems, taking into account scientific and socioeconomic information, and political constraints
- 7) review primary research articles and appraise how they contribute to the field's body of knowledge
- 8) design and deliver a collaborative presentation on an environmental science topic

Prerequisites

CHM2045 or CHM2047 or CHM2095.

Required Textbook

Environmental Science: Systems and Solutions, 6th edition by McKinney, Schoch, Yonavjak & Mincy (2019). Boston, Massachusetts: Jones and Bartlett Publishers. Available through UF All Access.

Additional required readings will be made available on Canvas or UF library electronic reserves.

Grading Policies

Your final grade for this course will be based on a 1000-point scale and will be weighted as follows:

Grade Component	Points	Percent	Description
Attendance and engagement	200	20	Roll call, activities, discussions, and homework
Article analyses	150	15	Three analyses of current peer-reviewed literature
Issue analysis presentation	130	13	Collaborative presentation
Quizzes	120	12	Four quizzes, 30 pts each
Exam 1	200	20	Multiple choice and short answer
Exam 2	200	20	Multiple choice and short answer

Grading scale

Grade	Points	Percent	Grade	Points	Percent	Grade	Points	Percent
A:	930-1000	93.0-100.0%	B-	800-829.9	80.0-82.9%	D+:	670-699.9	67.0-69.9%
A-	900-929.9	90.0-92.9%	C:	730-769.9	73.0-76.9%	D:	630-669.9	63.0-66.9%
B+:	870-899.9	87.0-89.9%	C+:	770-799.9	77.0-79.9%	D-	600-629.9	60.0-62.9%
B:	830-869.9	83.0-86.9%	C-	700-729.9	70.0-72.9%	E:	0-599.9	0.0-59.9%

These grade cutoffs are exact; students should not expect any rounding of scores at the end of the semester.

Attendance and Engagement: Attending class regularly is foundational to learning. Your attendance grade is based on the number of class sessions you are present for. Please arrive on time and be prepared to learn. Repeated unexcused absences and inappropriate or disruptive classroom behavior will result in a reduction of your attendance grade.

Learning is an active process facilitated by reflecting on, critically thinking about, and applying readings, lecture material, and out-of-class experiences. Your engagement grade is based on the quantity and quality of your contributions to formal and informal in-class discussions and activities, as well as preparatory homework assignments. You are strongly encouraged to participate during each class meeting by asking relevant questions, engaging in discussion, or sharing personal experiences on the topic. The precise number of engagement opportunities will vary depending on the needs and interests of this semester's cohort of students. Your engagement grade is aligned with course learning objectives 1 through 6, with emphasis on 4-6.

Unique requirements for the Spring 2021 semester: Students enrolled in section **12873** must be physically present in the classroom on Thursdays to receive attendance and engagement points unless not cleared to be on campus, feeling ill, or otherwise having been potentially exposed to COVID-19 within the past 14 days. All mask wearing and physical distancing guidelines must be followed, including when entering and leaving the classroom. To communicate with students in the simultaneous online section, you will need to bring a device

capable of running Zoom with you to class, including headphones and microphone. If you wish to switch to the fully online section, please let me know by the end of the drop/add period. For Tuesday classes, the same requirements as for section 24523 apply.

Students enrolled in section **24523** should be connected to Zoom for the entire duration of the class and be prepared to participate. Please leave your camera enabled during class if at all possible, as this helps make lectures more engaging and interactive.

Article Analyses: Science is an ongoing process through which our knowledge about the world around is advanced and refined. For each article analysis, you will identify and critically read current primary research articles on course-related topics and apply your critical thinking skills to analyze how the reviewed research advances or revises scientific understanding of said topic. You will complete three article analyses during the semester, each with a word count of 500-750 words. Grading will be by rubric. This part of your course grade is aligned with course learning objective 7.

Issue Analysis Presentation: Science is a collaborative process, thriving from the contributions of a diverse group of contributors. For your issue analysis presentation, you will work in groups to research an environmental issue and design an engaging, professional VoiceThread presentation on the causes, impacts, and possible solutions to the assigned issue. Grading will be by rubric. This part of your course grade is aligned with course learning objectives 5 through 8

Quizzes: There will be four online multiple-choice quizzes during the semester to assess your progress in comprehending and applying course materials. This part of your course grade is aligned with course learning objectives 1 through 4.

Exams: All information covered in readings and presented in class (incl. live and pre-recorded lectures, videos, discussions, and student contributions) is potential exam material. Exams will consist of a mixture of question styles, including true/false, multiple choice and short answer questions. Exams are closed book/closed notes and will be proctored by Honorlock. This part of your course grade is aligned with course learning objectives 1 through 6.

It is your responsibility to verify that all assignments are successfully uploaded to Canvas. Missing, corrupt, or incompatible files may result in grade penalties up to a score of zero for the assignment.

You are responsible for maintaining duplicate copies of all work submitted in this course, and making those copies available should the need arise. In case of a grading dispute, you will need to notify me via e-mail within one week of the date when the score is posted or the assignment is returned to you. Detailed grading criteria for each assignment will be provided on Canvas.

Course Policies

Attendance and Make-up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>. Requirements specific to EVS3000 are outlined below:

On-time attendance is mandatory. You are permitted three unexcused absences without grade penalty (excepting any in-class activities or extra credit opportunities). Additional unexcused absences incur a score of

zero for the day's Class Attendance and Engagement. Point deductions may also be incurred for repeated disruptive tardiness.

Absences will be excused

- In case of illness, upon receipt of a doctor's note or equivalent, or by following the procedure outlined here: <https://care.dso.ufl.edu/instructor-notifications>. For students in section 12873 on Thursdays, a simple e-mail notification to me is required.
- In case of religious holidays, by informing me via e-mail ahead of time.
- In case of military duty, jury duty, participation in academic conferences, or participation in official university or UAA events, by providing appropriate evidence ahead of time.
- In case of family emergencies, deaths, or other extenuating circumstances, by following the procedure outlined here: <https://care.dso.ufl.edu/instructor-notifications>.
- In all other cases, or if you are unsure, please e-mail me as soon as feasible.

If absent, it is your responsibility to make yourself aware of all due dates via the course e-learning site and/or contacting me. You are still responsible for turning assignments in on time unless an extension has been requested via e-mail and approved by me prior to the deadline. In case of true documented emergencies, I may waive this requirement.

Only work missed due to excused absences can be made up. For absences excused ahead of time, I will develop a make-up plan and schedule. In case of documented illnesses or emergencies, arrangements for completing make-up exams or assignments should be made upon return to class. If experiencing truly extenuating circumstances resulting in longer absences, you should notify me as soon as possible to develop a plan to make up missed work.

Late Work

You are responsible for submitting assignments by their due dates and times. For each day writing assignments are submitted late, I will subtract 10% from the assignment grade. If the assignment is more than five days late, a score of 0 will be entered. I highly recommend starting on assignments early to preclude unexpected emergencies or late-semester stress from compromising your grade. Deadline extensions may be available on certain assignments if requested ahead of time via e-mail. If extended deadlines are not met, late penalties will be assessed based on the original, not the revised due date!

Finally, please do not wait until the end of the semester to discuss problems with the course material or performance in class. Your performance and success are important to me, the College of Agricultural and Life Sciences, and the University of Florida, so please contact me to discuss your concerns as soon as they arise.

Diversity and Inclusiveness Statement

Diversity is one of our biggest assets in the classroom and in environmental science. Different perspectives enrich our understanding of the variety of human-nature interactions and are imperative to developing just solutions to complex environmental problems.

This classroom is a place where you will be treated with respect, and I welcome individuals of all ages, backgrounds, beliefs, ethnicities & races, genders, gender identities, gender expressions, national origins, religions (if any), sexual orientations, ability – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for every other member of the class. This does not mean that you are not allowed to disagree with others, but that such differences should be explored without ad hominem judgment.

Course Communications and Technology

This course uses the Canvas learning management system (<http://elearning.ufl.edu>), where course materials, grades, assignment instructions, and due dates are posted. Content will be delivered through readings, pre-

recorded lecture slides, videos, and live classes during the regularly scheduled class periods. You are responsible for having the appropriate technology to access all course content, including proctoring by Honorlock. This includes a desktop or laptop computer with reliable broadband internet connectivity.

You are expected to check your UF e-mail and the course web site on Canvas (<http://elearning.ufl.edu>) frequently, as information may change during the semester. You should enable Canvas notifications for this class, so that you are notified immediately about grading, assignment feedback, due date changes, announcements, etc.

The preferred way to get ahold of me outside of class and office hours is via e-mail through Canvas or to dcoenen@ufl.edu. You can expect a response within 24 hours on weekdays.

External Communication

You are encouraged to use GroupMe or similar tools to communicate with other students about the class and environmental science-related topics. **You may not, however, discuss quiz and exam questions/answers with others, or collaborate on any assignments intended to be worked on individually.**

Office Hours

Please take advantage of office hours to discuss any questions or concerns. Making an appointment ahead of time is recommended, but not required. If you cannot be present for the regularly scheduled office hour, I will attempt to accommodate you at an alternate time.

Canvas Display Name Change

Canvas uses the "Display Name" as set in myUFL. The Display Name is what you want people to see in the UF Directory, such as "Ally" instead of "Allison." To update your display name, go to one.ufl.edu, click on the dropdown at the top right, and select "Directory Profile." Click "Edit" on the right of the name panel, uncheck "Use my legal name" under "Display Name," update how you wish your name to be displayed, and click "Submit" at the bottom. This change may take up to 24 hours to appear in Canvas. This does not change your legal name for official UF records.

Paper Guidelines

All writing assignments will be submitted to Canvas and must be in **.docx** or **.pdf** format, with the proper file extension. Other file formats will not be accepted.

If you experience difficulties in the writing process are encouraged to contact your TA or me for advice, or visit the UF Writing Studio (see *Campus Helping Resources* below).

I strongly recommend watching the following video on academic honesty, citing sources, and proper paraphrasing by the end of the drop-add period: <https://www.youtube.com/watch?v=g81hPRKWsdM>

CALS and University of Florida Policies

Grades and Grade Points

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

COVID Response Statement

Section **12873** will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.](#)
- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies.](#)

Zoom Conference Privacy

Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>.

Software Use

All UF faculty, staff and students are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

Campus Helping Resources

Your wellbeing is important to me and the University of Florida community. Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling Center & Wellness Center*, 3190 Radio Road, 352-392-1575. Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library & Wellness Coaching. <http://www.counseling.ufl.edu/>
- *U Matter We Care*. 352-292-2273. UF's umbrella program for UF's caring culture. Provides students in distress with support and coordination of the wide variety of appropriate resources. <http://umatter.ufl.edu>
- *Career Connections Center*, First Floor JWRU, 352-392-1601, <https://career.ufl.edu/>.
- Student Success Initiative, <http://studentsuccess.ufl.edu>
- *Dean of Students Office*, 202 Peabody Hall, 392-1261. Among other services, the DSO assists students who are experiencing situations that compromises their ability to attend classes. This includes family emergencies and medical issues (including mental health crises). <https://care.dso.ufl.edu/>

- *Teaching Center*, Broward Hall, 352-392-2010 or 352-392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- *Writing Studio*, 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-center/>.
- *Fork and Field Pantry*. Food and toiletries for students experiencing food insecurity. <https://pantry.fieldandfork.ufl.edu/>.
- *UF Help Desk*. 352-392-4357. Technical support for computer issues and UF web services. <http://helpdesk.ufl.edu/>
- *University Police Department*, 352-392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>
- *Library Support*, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with using the libraries or finding resources.

Student Complaints

Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

Online Course: <http://www.distance.ufl.edu/student-complaint-process>

Course Outline (subject to change – please check the Canvas calendar for the latest information)

Critical Dates

Article analysis 1	Monday, February 1
Quiz 1	Friday, February 5
Quiz 2	Wednesday, March 3
Exam 1	Friday, March 5
Article analysis 2	Friday, March 12
Quiz 3	Friday, April 2
Article analysis 3	Monday, April 5
Issue analysis presentation	Monday, April 12
Quiz 4	Friday, April 16
Exam 2	Wednesday, April 21

Lecture Schedule

Module	Mode	Dates
1 Introduction	Live	January 12-14
2 Fundamental Concepts	Pre-rec	For January 14
3 The Biosphere	Pre-rec	For January 19
4 Biodiversity	Live	January 19-28
5 Thermodynamics & Biogeochemistry	Pre-rec	For January 26
- Natural Hazards	Reading	For January 26
6 Alternate Stable States, Resilience, and Cycles of Adaptive Change	Live	Jan 28-Feb 4
7 Human Population Growth	Live	February 4-11

8	People & Resources	Pre-rec	For February 16
9	Conserving Biological Resources	Live	Feb 16-Mar 2
10	Land Management and Conservation	Pre-rec	For March 2
11	Mining for Mineral Resources and Coal	Live	March 4-9
12	Fossil Fuels	Pre-rec	For March 9
13	Nuclear Power	Live	March 11-16
14	Renewable Energy	Live	March 18-25
15	Pollution and Toxicology	Pre-rec	For March 30
16	Water Resources	Live	March 30-April 6
17	Water Pollution	Pre-rec	For April 1
18	Air Pollution	Pre-rec	For April 6
19	Agriculture	Pre-rec	For April 8
20	Climate Change	Live	April 8-20

Course Alterations

Due to COVID-19, unforeseen circumstances or to enhance class learning opportunities, it may be necessary to alter the information given in this syllabus during the semester. Such changes are not unusual and should be expected. All changes to the syllabus will be announced in class and posted to Canvas. It is your responsibility to keep up with any syllabus changes.