EVS3000 Environmental Science 1

Spring 2026 - Class# 11411
Course Format: In-person, 3 credits
T 4th period (10:40 – 11:30), R 4-5th periods (10:40 – 12:35) - Larsen Hall Room 239

Instructor: Dr. Danny Coenen,

Instructional Associate Professor & Undergraduate Coordinator
Office Location: 2047 McCarty D
Email: dcoenen@ufl.edu
Drop-in Office Hours: W 11:00 am - 1:00 pm, or by appointment

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[Rank/Title]
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Drop-in Office Hours: [Zoom or in-person office hours, day, time, link location]

Course Description

Assess environmental issues arising from human-nature interactions, including biodiversity loss, overpopulation, degradation of ecosystems, and concerns associated with energy and water use. An interdisciplinary approach integrates natural and social science perspectives to explore causes, impacts, and solutions to these issues.

Course Prerequisites

BSC2005(C-) or BSC2010(C-) & CHM2045(C-) or CHM2047(C-) or CHM2095(C-), or equivalent. Having successfully completed BSC2011 is recommended.

Course Overview and Purpose

EVS3000 is the first of two Environmental Science foundation courses offered by the School of Natural Resources and Environment (SNRE). The purpose of this two-semester sequence is to provide students with foundational knowledge for the environmental science baccalaureate degrees and minor offered by SNRE. EVS3000 covers specific science content in ecology, biodiversity, Earth's resources (biotic, mineral, energy & water), and climate change.

- If you are an Environmental Science major, you should take EVS3000 as soon as you meet the prerequisites, but no earlier than semester 3 (i.e., the first semester of your sophomore year), and no later than semester 5 (first semester of your junior year). We recommend enrolling in EVS3000L, the accompanying laboratory course, during the same semester. After completing EVS3000, you should take EVS3500 (Environmental Science 2) during the following semester. Schedule an appointment with SNRE undergraduate advisor Ali Goetz (a.goetz@ufl.edu) if you need help fitting EVS3500 class into your plan of study. For students admitted to UF prior to fall 2025, EVS3500 will count as an elective on your degree audit (you may choose any category other than the B.A. Communication & Leadership category). For students admitted fall 2025 or later, EVS3500 is a Foundation Core requirement.

- If you are an Environmental Science minor, you may take EVS3000 anytime during your junior or senior years. We recommend enrolling in EVS3000L, the accompanying laboratory course, during the same semester. As a minor, you do not need to take the Environmental Science 2 course.
- If you are interested in taking this course as a free elective or for credit towards a non-SNRE major or minor, please contact Ali Goetz (a.goetz@ufl.edu) as early as possible for enrollment information.

Student Learning Outcomes

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

1) recall and apply key terminology and definitions foundational to environmental science.
2) review how 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 an informative and engaging science outreach poster and accompanying lightning talk.
9) reflect on your environmental career goals and identify steps & skills needed to realize those goals.

Textbooks, Learning Materials, and Supply Fees

Purchasing or renting the textbook is recommended, especially if you have not taken EVR2001 Introduction to Environmental Science or AP Environmental Science (or equivalent).

> Cunningham, W.P. & Cunningham, M.A. (2023). *Environmental science: A global concern* (16th ed.). McGraw Hill.

It is available as an eBook through UF All Access at a discounted price. See https://businessservices.ufl.edu/services/uf-bookstore/uf-all-access/ for information and support. Please note: It may take several days after the start of the semester for you to receive access to the textbook.

Optionally, you may also want to consider purchasing the following book for general consultation as you progress through your Environmental Science degree program:

> Pontius, J. & McIntosh, A. (2020). *Critical skills for environmental professionals: Putting knowledge into practice*. Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-28542-5

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

Required Technology

Writing assignments in this class require working in Google Docs. Enrolled students have access to the Google Suite through GatorCloud (https://it.ufl.edu/cloud/), or you may use your personal Google account.

Communication Guidelines

Course Communication

The preferred way to get ahold of me or your TA outside of drop-in office hours is via Canvas message or direct email from your official UF email account. You can expect a response within 24-48 hours on weekdays in most cases. Emails from outside providers, like Gmail, are not considered secure and will be deleted to protect student privacy. Note that it is against FERPA best practices for me to discuss grades through email.

All students are expected to check the course web site on Canvas (https://elearning.ufl.edu) each weekday. In addition, we may send specific communications directly to your UF email, which you should check daily as well. You should enable Canvas notifications for this class, so that you are notified immediately about grading, assignment feedback, due date changes, announcements, etc.

External Communication

You may 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, including quizzes and exams from prior semesters, or collaborate on any assignments intended to be worked on individually. Doing so constitutes academic dishonesty.**

Grading Policy

Course grading is consistent with UF grading policies.

Grading is based on how well you apply the learned material as outlined by assignment-specific rubrics provided on Canvas and the student learning outcomes listed in the syllabus. Your grades rate the *quality* of the work submitted and are not an assessment of the quantity of effort invested.

To avoid losing points, you must verify that all assignments are successfully uploaded to Canvas by the deadline. 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 until the end of the semester. Follow the 3-2-1 backup rule**, meaning that you should keep three copies of your files on at least two different types of media, of which one should be kept off-site. In practice, that typically means a copy saved on your computer, a copy on a portable device (like a USB flash drive), and an online copy using OneDrive (free to UF students through Microsoft 365). If you cannot provide a backup copy if requested, a score of zero will be entered for the assignment.

In case of a grading dispute, you must notify me by email within one week of the date the grade is posted to Canvas. Please include an explanation of what aspect of your grade you disagree with. **End-of-semester requests for grade bumps, assignment do-overs, additional extra credit, etc. will be denied.**

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

Grading Scale

Grade	Points	Percentage	Grade	Points	Percentage
A	930.0-1000.0	93.0-100%	**C**	730.0-769.9	73.0-76.9%
A-	900.0-929.9	90.0-92.9%	**C-**	700.0-729.9	70.0-72.9%
B+	870.0-899.9	87.0-89.9%	**D+**	670.0-699.9	67.0-69.9%
B	830.0-869.9	83.0-86.9%	**D**	630.0-669.9	63.0-66.9%
B-	800.0-829.9	80.0-82.9%	**D-**	600.0-629.9	60.0-62.9%
C+	770.0-799.9	77.0-79.9%	**E**	0.0-599.9	0.0-59.9%

Course Grading Structure

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

Assignment Type	Point Value	Percent of Final Grade
Attendance	100	10%
Engagement	80	8%
Career aspirations reflection paper	100	10%
Article analysis paper	200	20%
Public outreach poster & lightning talk	160	16%
Exam 1	120	12%
Exam 2	120	12%
Exam 3	120	12%

Key Dates and Assignment Overview

Assignment	Due Date
Career aspirations reflection paper	Friday, January 23
Exam 1	Tuesday, February 10
Exam 2	Tuesday, March 10
Article analysis paper	Friday, March 27
Public outreach poster & lightning talk	Friday, April 10
Exam 3	Tuesday, April 21

Attendance

Attending class regularly is foundational to learning. Your attendance grade is based on the number of class periods you are present for. Please arrive on time and be prepared to learn. **You are permitted to miss up to three class periods without impact to your attendance grade**, although any missed engagement activities will incur a score of zero. Additional unexcused absences and inappropriate or disruptive classroom behavior will result in a reduction of your attendance grade.

Absences will be excused:

- in case of illness or injury, upon receipt of a doctor's note or equivalent, or by following the procedure outlined here: https://care.dso.ufl.edu/instructor-notifications.
- in case of family emergencies, deaths, or other extenuating circumstances, by following the procedure outlined here: https://care.dso.ufl.edu/instructor-notifications.
- in case of religious holidays, by informing me via email 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 all other cases, or if you are unsure, please email me as soon as feasible. Absences are generally not excused for personal non-emergency travel and vehicle problems.

If absent, it is your responsibility to make yourself aware of all due dates via the course e-learning site.

Engagement

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 your contributions to formal and informal in-class discussions and activities, as well as 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. Raise your hand at any time to participate! 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 student learning outcomes 1 through 6, with emphasis on 4-6.

Career Aspirations Reflection Paper

Different career paths require different skills, and the process of applying for graduate school differs from finding a government job. This assignment will help you reflect on your career aspirations and identify steps to maximize your chance to realize your aspirations. This part of your course grade is aligned with student learning outcome 9.

Article Analysis Paper

Science is an ongoing process through which our knowledge about the world around us is advanced and refined. For your article analysis, you will identify and critically evaluate a current primary research article on a course-related topic of your choice and apply your critical thinking skills to analyze how the reviewed research advances or revises scientific understanding of said topic and identify any flaws and limitations. This is a formal, high-stakes science writing assignment with a word count of 1000-1250 words (not including references). Grading will be by rubric. This part of your course grade is aligned with student learning outcome 7.

Public Outreach Poster & Lightning Talk

Science is a collaborative process, thriving on the integration of knowledge held by contributors. Communicating science to the public is an important skill for any scientist to master. You will work in small groups of 4-5 students to design an attractive and informative public outreach poster along with a 2–3-minute lightning talk to explain an environmental issue or problem to a non-scientific audience. Grading will be by rubric and include a peer-review component. This part of your course grade is aligned with student learning outcomes 5 through 8, with an emphasis on 8.

Examinations

As a foundation course, acquisition and application of knowledge gained in this course will help you succeed in more advanced coursework and benefit your future careers. All information covered in readings and presented in class (incl. live and pre-recorded lectures, videos, discussions, and student contributions) is potential exam material. I emphasize questions that incorporate elements of critical thinking over rote memorization. Each exam consists of 40-50 multiple choice questions. This part of your course grade is aligned with student learning outcomes 1 through 6.

Course Schedule

EVS3000 is an in-person lecture course with three periods of instruction per week. In addition to the in-person lectures, a few online lectures will be assigned as homework.

Unit	Module
1.1	Introduction
1.2	Fundamental concepts, interdisciplinarity and social-ecological systems (partly online)
2.1	Earth in the solar system, thermodynamics, biogeochemistry
2.2	Principles of ecology
2.3	Biodiversity – classification, evolution & extinction
3.1	Human population dynamics
3.2	Resource extraction and flow through society (online)
3.3	Energy generation and use (partly online)
3.4	Freshwater resources
3.5	Environmental dimensions of agriculture & agroecology*
3.6	Fundamentals of climate change

*time permitting

Technical Support

UF Computing Help Desk & Ticket Number: All technical issues require a UF Helpdesk Ticket Number. The UF Helpdesk is available 24 hours a day, 7 days a week. https://helpdesk.ufl.edu/ | 352-392-4357

Course Policies **(These are important – read and follow these!!!)**

Preamble

First and foremost, we want you to be successful in this class and in your degree program. Being a key foundation core course for your Environmental Science B.A., B.S., and minor, we expect you to assign EVS3000 a high priority. However, if at any point you experience extenuating circumstances that prevent you from performing to your full academic potential, please reach out to me for help!

Office Hours

Please take advantage of office hours to discuss any questions or concerns. Contact your teaching assistant for basic questions, help with assignments, and clarifications regarding grades and feedback. Contact me regarding absences, grading disputes, concerns about other students, and any other issues. If you cannot be present for the regularly scheduled office hours, we will attempt to accommodate you at an alternate time.

Make-up Policy

To maintain fairness, only work missed due to excused absences can be made up. For absences excused ahead of time, I will develop a make-up plan. In case of documented illnesses or emergencies, arrangements for completing make-up exams or assignments should be made upon your return to class. If experiencing truly extenuating circumstances resulting in longer absences, you should let me know as soon as possible. If you miss an exam for a non-excusable reason, a score of zero will be entered. Unfortunately, we are unable to accept assignment do-overs (resubmissions for a higher score) in this class. Missed extra credit opportunities cannot be made up.

Late Work

You are responsible for turning assignments in on time unless an extension has been requested by email prior to the deadline. In case of true documented emergencies, I may waive this requirement. Technical difficulties are not generally an excuse for missing an assessment or assignment; you should have contingency plans in case any such issues arise. Remember to use the 3-2-1 backup rule. For online fall storage, choose a cloud service that can be accessed from any device (OneDrive is free for UF students), and have a plan for internet outages (such as identifying a source for public Wi-Fi near you or using your cell phone as a Wi-Fi hotspot). Try not to wait until the last minute to submit assignments!

Assignments submitted between one and four days late will incur a penalty of 10% of the possible points per day. Work submitted more than four days late will be assigned a score of zero.

I highly recommend starting on assignments early to preclude unexpected emergencies or late-semester stress from compromising your grade.

You may request a 72-hour penalty free deadline extension by emailing me ahead of the posted deadline on either the Career Aspirations Essay or the Article Analysis assignments. Additional extensions may be available for extenuating circumstances; please be proactive and communicate with me if this is the case.

If extended deadlines are not met, late penalties will be assessed based on the original, not the revised due date!

Academic Honesty and Plagiarism

This course follows the university's honesty policy regarding cheating and plagiarism. The School of Natural Resources and Environment's undergraduate programs expect ethically and morally responsible behavior from its students and has **zero tolerance** for academic dishonesty. We recognize that being a university student is a time-consuming and often stressful experience. **Please give us a chance to help you instead of using unauthorized shortcuts!**

Many students are unaware of the seriousness of violating academic ethics. **CHEATING, WHETHER INTENTIONAL OR UNINTENTIONAL, IS A SERIOUS AND POTENTIALLY CAREER-ENDING FORM OF ACADEMIC MISCONDUCT.** It is not a "victimless offense"; it has serious repercussions for your fellow students, your instructor, the reputation of SNRE, and – most of all – yourself!

Copying and pasting from external sources without attribution is <u>never</u> okay in academia. Direct quotes are not commonly used in science writing; paraphrases accompanied by a proper in-text citation should be used instead. Inappropriate use of direct quotes in this class will result in a loss of credit.

Artificial Intelligence (AI) Policy

Artificial Intelligence is an amazing new technology that is revolutionizing the way we access and process information, just like computers, the internet, and mobile phones did in prior decades. Large language models (LLMs) can be useful tools to assist (but NOT replace) writers when brainstorming, spellchecking, and (to a limited extent) editing if used judiciously and with the knowledge that outputs are subject to faulty reasoning and made-up (hallucinated) information. Brainstorming refers to using AI to explore general ideas and questions, not producing detailed outlines or arguments that will appear in your submission. Students should be cognizant that LLMs like ChatGPT, Gemini, Claude, Llama, and similar AI models are not considered academically credible sources and must not be treated as such. They are also ill-suited for finding scholarly sources and generally do a poor job at formatting reference lists.

All work submitted for credit in this class must be entirely your own. Using AI to generate any *content* for you, including but not limited to generating key talking points or copying & pasting AI output in whole or part into work submitted for this class (even if you subsequently edit or paraphrase the AI output), **constitutes academic dishonesty.** You may not use AI to substitute for applying your knowledge and critical thinking on writing assignments.

If you use any AI for **any part of an assignment** (including brainstorming ideas or editing), you **must** state so as part of your submission and include the entire prompt(s) that you used (below your list of references); failure to do so will be considered academic dishonesty. If in doubt whether a particular AI use violates this course's policy, ask first! You will be fully responsible for any errors caused by referencing AI output, and **any unsanctioned AI use will be referred to the Dean of Students Student Conduct & Conflict Resolution office for adjudication**. If found responsible for violating this course's AI policy and/or the UF Honor Code, significant sanctions will be imposed! Remember that taking unsanctioned shortcuts is **your** decision, and you must live with the consequences of doing so, even if this means that you will not be able to realize your career aspirations, continue as an Environmental Science major, or remain a student at the University of Florida.

Further, many web sites, online services, and software packages (e.g. Grammarly, Canva, many word processors) now feature both low-level assistive and high-level generative AI integrations. These policies apply to these services the same way that they do for LLMs. It is your responsibility to determine if any tools you use contain generative AI components, and if so, disclose use of that AI. AI-generated images may not be used unless expressly approved in writing by your instructor for a specific assignment.

Paper Formatting Guidelines

All writing assignments must be worked on and completed in Google Docs. To receive credit for your writing assignments, you must submit **both** a .docx copy to Canvas **and** share the link to the Google Doc with me with full editing access**. Only work in the single shared Google Doc (with multiple tabs if necessary); pasting information or content from elsewhere will be considered academic dishonesty.**

If you submit in another file format, or you do not submit both your .docx file and a link to the shared Google Doc, you will receive a score of zero. All assignments must include citations and references in APA 7th edition formatting. If you use a reference list generator, its use must be acknowledged and the generated references manually checked for correct formatting. You do not need cover pages, running headers, etc.

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

Academic Policies and Resources

Academic policies for this course are consistent with university policies. See https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Campus Health and Wellness Resources

Visit https://one.uf.edu/whole-gator/topics for resources that are designed to help you thrive physically, mentally, and emotionally at UF.

Please contact UMatterWeCare for additional and immediate support.

Software Use

All faculty, staff and students of the university 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.

Privacy and Accessibility Policies

- Instructure (Canvas)
  - Instructure Privacy Policy
  - Instructure Accessibility
- Google Docs
  - Google Docs Privacy Policy
  - Google Docs Accessibility
- Zoom
  - Zoom Privacy Policy
  - Zoom Accessibility