

EVS 3000L | Environmental Science Lab | Spring 2023

INSTRUCTORS:

Tuesday section

Orlando Acevedo-Charry (he/him)
PhD student, SNRE

Email: oacevedocharry@ufl.edu

Office:

Hours: Wed & Thurs 2-3 pmLocation: McCarty Hall D 2053

CLASS MEETING INFORMATION:

Tuesday section (12261)

12:50 – 3:50 pm Black Hall 0724

Wednesday section

Savannah Troy (she/her) PhD candidate, SNRE

Email: savannah.troy@ufl.edu

Office:

Hours: Tues 8-10 am

Location: McCarty Hall D 2053

Wednesday section

8:30 – 11:30 am Turlington 2306

Note: The location of the class will vary by week, with some labs taking place outside or off campus. The instructor will notify the students of the class meeting location in advance. Students must attend the lab section they are enrolled in.

PREREQUISITES:

CHM 2045 or CHM 2047 or CHM 2095

COURSE MATERIALS:

There are no required textbooks. Readings will be made available via Canvas.

COURSE OBJECTIVES:

Environmental science is an interdisciplinary field of study that combines physical, biological, and information science to be able to recognize the interactions and effects of natural and anthropogenic processes on the environment. Because of the diversity and interconnectedness of all aspects of human-environment relationships, environmental science careers are equally varied. Environmental scientists work on problems spanning biogeochemical cycles, energy systems, pollution control and mitigation, natural resource management, and much more!

Our objective in this lab is to give you 1) exposure to the diversity of environmental science careers, 2) an introduction to field- and lab-based methodologies, as well as quantitative techniques, commonly used in environmental research, and 3) professional development opportunities to help you progress in the field.

COURSE ACTIVITIES:

Lab activities will break roughly into three categories:

- Career exploration activities—listening to environmental science professionals about their career trajectory, researching career options which match your interests, or engaging in one-on-one discussions with professionals with whom you share interests.
- Research exercises—practicing common methods for studying environmental problems from different perspectives, including policy, human dimensions, and biology (e.g., hands-on sampling projects, tours of research facilities and field sites, and tutorials of basic statistical programming).
- Professional development activities—developing key practical skills for professional behavior, finding career opportunities that interest you, and preparing compelling application materials.

These activities correspond to the three primary learning outcomes for the course. At the conclusion of this course, students will:

- be able to recognize the many possible professional trajectories in Environmental Science, research environmental career.
- plan and execute basic research projects to address questions in the natural and social dimensions of environmental science.
- Generate professional communications and application materials for career opportunities.

The general structure of the lab will include a first ~1hr part for guess lecturers, sometime visiting different facilities. Then, we will conduct different practice activities including fundaments on research design, exploring credible sources of primary and secondary information (Journal club, Community science platforms and other repositories), and introductory use of software to manipulate and analysis of data (R Studio).

COMMUNICATION:

All course communication outside of class and office hours will be done preferable through Canvas and as a last option your UF email. Nonetheless, you are responsible for checking both regularly to keep up to date. If you have questions or need help outside of class or office hours, we will try to respond to email and chat messages

quickly. Please allow at least 24 hours to hear back from us - this means you may want to work on your assignments early, so you have time to reach out to us if you run into any sticking points.

TOPICS DURING THE SEMESTER (order and calendar TBD)

The activities of the lab will be centered in the following weekly topics:

- What is a professional environmental scientist?
- Careers and graduate school
- Interdisciplinary and social-ecological systems
- Land management and conservation
- Climate science and ecosystem ecology
- National Ecological Observatory Network
- Academic citizenship and science communication
- Sustainability: Food, agriculture, and waste
- Environmental justices and Diversity, Equity, Accessibility, and Inclusion initiatives
- Terrestrial field methods (two weeks)
- Aquatic field methods
- Invasive species
- Data analysis

Critical dates:

No class on March 14-15 due to Spring break.

ATTENDANCE AND PARTICIPATION:

Since this is a lab, attendance and participation are important. Attendance will be taken each week that class meets in-person. Participation credit will be determined based on your interactions, questions, comments, punctuality, and attentiveness. Cell phone and computer use during inappropriate times (e.g., presentations by classmates, instructors, and guests) will result in point deductions. Students are required to ride with the group to off-campus sites. If you are not at the designated meeting point at the scheduled departure time, we will leave without you, and you will receive a 0 for participation and attendance that day. We expect you to interact in a polite and professional manner with your instructors, classmates, and the environmental professionals we will meet with. In the event a student is absent from class, the student will need to contact their instructor regarding a make-up lab assignment in order to earn the points for that day of lab. This make-up assignment will be due within two weeks of the missed class date. After one absence, students need to communicate and work with their instructor on a plan to make up missed labs. These situations will be handled on a case-by-case basis;

we recognize that students may face unexpected challenges during the semester; please contact your instructor as soon as possible if this is the case.

FINAL PROJECT:

This activity will be discussed in class.

LATE POLICY:

Late assignments will be marked down by 10% each week they are late. If circumstances change such that you have trouble completing either the final project or multiple weekly assignments on time, we encourage you to get in touch with your instructor.

PROPER ATTIRE:

Proper attire may vary based on the conditions and the environment we will be in. Several of the class trips require closed-toed shoes and long pants. There will be times when you may wish to wear boots, as we may be in wet, muddy locations. Also, we may experience inclement weather such as rain. Please check the forecast and have rain gear when appropriate. Please contact your instructor if you need assistance in acquiring appropriate attire. Additionally, we highly encourage everyone to wear masks when class meets indoors or if social distance cannot be maintained outdoors.

Announcements will be posted on Canvas/emailed each week to give further direction regarding appropriate attire for the upcoming field trip.

COURSE ADJUSTMENTS:

The UF community is continuing to work under unprecedented conditions, affecting every aspect of life, which may continue to evolve this semester. As a class, we should all work to foster a culture of compassion and empathy for one-another. As instructors, we will make every effort to accommodate your educational experience. However, we will also be following any and all public health and safety recommendations provided by the CDC. In doing so, we will keep you informed as we make decisions about the course. Any changes to the schedule or assignments will be announced via Canvas and updated on the Canvas calendar. If you encounter new circumstances or challenges this semester that affect your ability to do the assignments as designed, please reach out to us and we will try to find a solution that supports your well-being and helps you get the most possible out of this course. The sooner you open a line of communication with us, the better-positioned we will be to figure something out. Please, do not hesitate to get in touch with us at any point.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the <u>Disability Resource Center</u>. It is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

COURSE GRADING:

Component	Percent
Attendance/Participation	60%
Weekly Assignments	25%
Final project	15%
Total	100%

GRADING SCALE:

A	93.0 – 100%	A-	90.0 – 92.9%	B+	87.0 – 89.9%
В	83.0 - 86.9%	B-	80.0 - 82.9%	C+	77.0 - 79.9%
С	73.0 – 76.9%	C-	70.0 – 72.9%	D+	67.0 - 69.9%
D	63.0 - 67.9%	D-	60.0 - 62.9%	F	<60.0%

GRADES AND GRADE POINTS:

For information on current UF policies for assigning grade points, see: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

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/.

ZOOM POLICY:

Our 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 a Zoom session and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during a Zoom session, 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.

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, guizzes, 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: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

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. That said, the software we will be using, R and RStudio, are **free and open source** – R under a GNU general public license and RStudio under GNU Affero general public license V3. They are "free" both in the sense free beer and free speech. As part of the lab, we'll be helping you get set up with R and RStudio on your personal computer. If you do not have access to a laptop, we have a limited supply of laptops we can bring for you to work with.

CAMPUS HELPING RESOURCES:

Health and wellness:

- *U Matter, We Care*: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit <u>U Matter, We Care website</u> to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the <u>Counseling and Wellness Center</u> website or call 352-392-1575 for information on crisis services as well as noncrisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the <u>Student Health Care Center website</u>.
- *University Police Department*: Visit <u>UF Police Department website</u> or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the <u>UF Health Emergency Room and Trauma Center</u> website.
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

Academic resources:

- *E-learning technical support*: Contact the <u>UF Computing Help Desk</u> at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- <u>Career Connections Center</u>: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- <u>Library Support</u>: Various ways to receive assistance with respect to using the libraries or finding resources.
- <u>Teaching Center</u>: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.
- <u>Writing Studio</u>: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Complaints On-Campus: Visit the <u>Student Honor Code and Student Conduct Code webpage</u> for more information.
- On-Line Students Complaints: <u>View the Distance Learning Student Complaint</u> Process.