
George Mason University
College of Science

EVPP 109-2D1 — Ecosphere: Environmental Science I Lab
Asynchronous (Online)
Fall 2025– 1 credit

CLASS MEETING TIMES: N/A (Asynchronous, online)

INSTRUCTOR: Dr. Stephanie Schmidt sschmi11@gmu.edu

INSTRUCTOR OFFICE HOURS: [Book here](#) at least 12 hours in advance

- In Person: **Fridays 10:00 AM – 11:00 AM** (David King Hall Rm 3027)
- **Zoom Drop-ins: Wednesday 3:00 PM – 4:00 PM**
- **Other** – please request date & time via email ≥ 24 hrs in advance

TEACHING ASSISTANT: Anthony Reyes (areyes28@gmu.edu)

Course Description and Mason Core – Natural Science

This course introduces students to the components and interactions making up Earth's environmental systems. It teaches basic and applied concepts in biological, chemical, physical, and earth sciences in an integrated format that is interwoven with lab and field exercises to complement the EVPP 108 lecture.

EVPP 109 is part of the Mason Core curriculum and, when taken with the lecture EVPP 108, fulfills 1 lab credit for the Natural Science with Lab Mason Core requirement for non-science majors. See more [here](#).

Course Objectives and Mason Core

As a Mason Core Natural Sciences course, students will engage in scientific exploration; foster their curiosity; gain enthusiasm for science; and apply scientific knowledge and reasoning to personal, professional and public decision-making. In particular, this class will challenge students to more fully:

1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding: a) evolves based on new evidence, and b) differs from personal and cultural beliefs.
2. Recognize the scope and limits of science.
3. Recognize and articulate the relationship between the natural sciences and society and the application of science to societal challenges (e.g., health, conservation, sustainability, energy, natural disasters, etc.).
4. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).
5. Participate in scientific inquiry and communicate the elements of the process, including:
 - a. making careful and systematic observations.
 - b. developing and testing a hypothesis.
 - c. analyzing evidence.
 - d. interpreting results.

Course Structure and Organization

Students are to complete ~15 **interactive labs** that are divided into **5 units—intro (0), 1, 2, 3, and 4**—each of which will be available for students only once that unit begins, and for 1 to 4 weeks (see schedule for details). **Please Note:** Labs will be completed using provided Canvas assignments, and should not be completed on HOL/SI. Labs completed on HOL/SI may not receive credit until copied to Canvas/Onedrive and failure to provide requisite pictures not included in HOL/SI directions may result in lab failure.

Labs will often include several components: introductory explorations, experimentations, and reflections or discussions. Experimentations will include step-by-step procedures, data collection using shared Onedrive files owned by Dr. Schmidt, photo and/or video taking and upload, and questions about hypotheses, results, or other steps of the scientific method. Students are expected to take pictures while they complete their labs, which will be uploaded on Canvas and/or Microsoft Onedrive.

Please note that a student will receive 0% on any experimentations in which they did not complete required media uploads and/or data workbooks in the appropriate manner.

The first 3 **startup** labs must be required before additional labs can be completed; the remaining **topical** labs will open at the start of their respective unit. Integrated with the lab completion, students will be responsible for creating short 5-15 minute video(s) of their engagement and completion in an outdoor lab assignment; assignment directions will be provided before unit 3 opens.

The required LabPak from HOL/SI will include most required materials; however, labs will often require students to supply some common household items. A comprehensive list is provided on Canvas, and students should consult individual labs on Canvas to view required materials.

Grade Schema

Course grades will stem from the successful completion of lab components and a lab video upload to Canvas. Weights for each lab component are shown below.

Lab Grade Component	% of Lab Grade
Explorations and/or pre-lab assignments	15.0%
Experimentations – Completion of procedure, questions	20.0%
Experimentations – Data Workbooks*	30.0%
Experimentation – Media Uploads*	10.0%
Reflections/Discussions (only top 3 grades)	20.0%
Outdoor Lab Videos	5.0%
Total	100%

The breakdown for percentages and grades are shown below. These will be strictly enforced. Changes to final grades can only be made due to an error in Canvas that is fixed.

A+ : 97.45% – 100+%	B+ : 87.45% – 89.45%	C+ : 77.45% – 79.45%	D : 64.45% – 69.45%
A : 92.45% – 97.45%	B : 82.45% – 87.45%	C : 72.45% – 77.45%	F : < 64.45%
A- : 89.45% – 92.45%	B- : 79.45% – 82.45%	C- : 69.45% – 72.45%	

Extra Credit

The extra credit opportunities in this course come from optional, extra credit questions/procedures in experiments and/or reflections. Additionally, if a student completes all reflections and earns over 70% on each, they will earn +1% extra credit on their final grade.

Course Requirements and Expectations

Note: These do not include EVPP 108 requirements; also consult the EVPP 108 syllabus if you are enrolled.

- **Course Materials:** This asynchronous lab requires the **Hands-On Labs LabPak LP- 3839-BK-01 (ISBN: 2818260259988)**. This LabPak includes access to all instructional materials via **(I) the Hands-On Labs/Science Interactive on-line platform**, and **(II) a kit** that will be mailed to you including most physical materials required to complete the lab exercises. **Purchase the kit on HOL/SI using the instructions here:** [EVPP 109-2D1 Required Lab Materials.docx](#).

It is not possible to complete this course without the required materials. If you cannot obtain the required materials in a timely manner due to finances, global location (depending on shipping), etc., you can drop this on-line section of the lab course and:

- a) **take it at a later time** when you can obtain the required materials;
- b) register for one of the **face-to-face sections** of this course by the last add day.

LabPaks must be purchased (not necessarily obtained) **by Friday, 8/29 @ 11:59 PM ET**.

- **Disposal of Kit Materials:** Students must follow the instructions in the kit for disposing of kit materials based on requirements specific to their locations. Non-consumable components of the kit that do not require proper, safe disposal are the property of the student and may be kept, donated, repurposed, or discarded.
- **Supplemental Kitchen, Home, Office, and/Outdoor Supplies/Environments:** Please ensure access to the list of student-supplied materials and other conditions listed in the lab materials document.
- **Technology:** Students should ensure access to **(a)** a web-enabled device; **(b)** a digital camera with photo and video recording capabilities (can be smartphone camera if it has non-potato quality); **(c)** a color printer (if on campus, email Dr. Schmidt with printing help); and **(d) Microsoft 365 apps like Office, Excel, Forms, etc., which can be accessed from logging in to Onedrive.live.com using a Mason account.**
- **Regular use of Canvas:** Canvas is a required component of this course. In addition to the web version, use of the app is encouraged.
- **Grades in Canvas:** All official grades for lab work will be recorded in Canvas. To view your grades in Canvas, click on the "Grades" tab in left-side menu. Scores will also be available in the platform upon which they are to be submitted (eg, MS Forms).

- **Course Communication:** Use of a @gmu.edu address is required. Email and Canvas will be the primary modes of course correspondence; please check both daily. Use Outlook email to message the instructor (sschmi11@gmu.edu) and/or the teaching assistant (areyes28@gmu.edu) and include **EVPP 109-2D1** in the subject line. **Please note there are other sections of 109; the section number is required in your email.** If urgent, please [flag the email as high importance](#). Responses will be provided within 48 hours (72 hours on weekends).
- **Deliverables and Late Work:** You are responsible for **timely** submissions of labs and other assignments in the correct format (e.g., Microsoft Form submission, Canvas submission, etc).

Late assignments will not be accepted. 1 module extension per student may be provided if a proactive and respectful email is sent, with a maximum extension of 7 days. Please plan appropriately and do not leave labs until the last day of the module. **Work will not be accepted more than (7 days) after deadlines.** Work will not be accepted after 12/9 5:00 PM ET.

Canvas prerequisite settings will be used to restrict access to labs until startup labs (1, 2, and 3) and the Scientific Method lab (4) are completed. Late work will not be excused due to issues with prerequisites, unless it is related to a Canvas technology issue.
- **No sale of course content:** ALL class content is the property of GMU and/or HOL/SI and may not be duplicated or used for commercial purposes without instructor permission. Failure to comply—e.g., posting items on the internet, to AI, or using them in tutoring—is a honor code violation.
- **Instruction during University Closings:** Students should assume that the flow of lab work and due dates/times **will remain unchanged** as a result of weather-related university closures / delayed openings / early closures. In the event that assignment due dates/times must be changed, students will be informed of the changes via Canvas and/or email.
- **Time, Effort, and Planning In Asynchronous Labs:** Since this is a fully on-line, asynchronous course, there is no official “lab period.” However, please be diligent in perform all labs as if you were in a guided environment. Together, the course’s labs and one video assignment should take about 55-75 hours. Please plan appropriately and note the time requirements of some labs (waiting for 2 days between steps, etc.)
- **Space concerns for Asynchronous Labs:** This class requires that you have a space where you can set up your labs, with some of them needing 24-48 hours to be left untouched in between experimental steps. There are no lab spaces devoted to this section of the course.
- **Student Privacy:** Student email addresses will remain private from classmates. You are welcome to engage with classmates using the Discussion Board or Canvas messaging/emailing.
- **Academic Honesty:** As members of the Mason community, students pledge to neither give nor receive unauthorized aid while working on/completing **any** work. **Please see the final page, Academic Integrity, for what that means in this course.** Notably, while you may receive some aid from e.g. parents or friends in e.g. experiment setup, it is still a course requirement that you, personally, must engage in each lab experiment from start to finish. In other words, 2 or more people, even those that live in the same household/dorm:

- cannot use one Lab Paq to complete a lab
- cannot share data/answers (including from past semesters)
- cannot split work between themselves, even if 2 labs are run side by side
- CAN run 2 labs side by side as long as each student does their own lab and each student answers lab homework questions **individually**

Learning Accommodations

If you have a documented learning disability or other condition that may affect academic performance you should: 1) **make sure this documentation is on file with Disability Services** (SUB I, Rm. 4205; 993-2474; <http://ds.gmu.edu>) to determine the accommodations you need; and 2) **talk with me to discuss your needs.**

I must have your accommodation(s) on file with DS before you request accommodation(s).

Mental and Physical Health

Physical Health Concerns: If you require accommodations for any health-related issues, please email your instructor **proactively** to receive accommodations. **If you suspect that you are sick or have been directed to self-isolate, please quarantine or get tested and email your instructor a medical note.** If needed, call the [Student Health Services](#) to get a note from a nurse; their **phone number** is (703) 993-2831.

Mental Health Concerns: Diminished mental health can interfere with optimal academic performance. However, it is expected that you show responsibility over your health. In pursuit of this, nurture productive habits and behaviors and do not be afraid to seek out resources that can aid in this nurturing.

Counseling and Physiological Services (CAPS) (<http://caps.gmu.edu>) provides confidential mental health services, including telehealth meetings, to support the academic success of students. Their free and confidential psychological services include group counseling, skills-based workshops, case management, crisis consultations, and time-limited individual counseling.

Please contact your instructor about any struggles affecting your coursework, and please email your instructor as early as possible regarding health concerns and/or falling behind.**

Academic Integrity

What is academic integrity in this course? When you are responsible for a task, you will perform that task using **your own work**. You will perform individual assignments without collaborating with others and/or using generative artificial intelligence (AI) inappropriately. It is assumed students have a sense of personal responsibility in all course work they complete.

It is expected that students adhere to the George Mason University Honor Code: *"Student members of the George Mason University community pledge not to cheat, plagiarize, steal and/or lie in matters related to academic work."*

Plagiarism: Anti-plagiarism software will be used in this class for scanning student submissions. Please contact your instructor if you have questions **before you submit an assignment**. Plagiarism includes:

- 1) Presenting the data, words, work, or opinions of someone else—including yourself (*self plagiarism*)—**or AI**—as one's own work **without proper acknowledgment**.
- 2) Borrowing the data, sequence of ideas, arrangement of material, or pattern of thought of someone else, including personal work, **or AI**—without proper acknowledgment.

Fabrication: It is never appropriate to make up data, sources, or other information. Any student caught fabricating information will be referred to the Academic Standards Office.

Use of Artificial Intelligence (AI): In this course, AI of any type is not appropriate unless used as a research or comprehension tool rather than an answer or task completion tool (unless that task is deemed rudimentary, per the course's and/or assignment specified learning objectives). In any permitted use of AI, citing AI is always required, including a link to the transcript. Citing and verifying any information it provides is always a student's responsibility, and students will be held responsible for incorrect, out-of-context, over-simplified, and/or incorrectly cited information, as well as irrelevant or inaccessible sources provided by AI.

Uses of AI that are **always prohibited** include (a) copying/pasting or uploading course-provided assignments, instructions, procedures, rubrics, etc. into AI; (b) using AI to generate files or text such as data sheets, Excel sheets, reports, or other deliverables for assignments; (c) using AI to make graphs, figures, or tables; (d) using AI to generate text to answer questions and/or directions; and (d) using AI to produce and/or analyze data.

Other examples may be prohibited if deemed as fabrication and/or cheating per the above stipulations. It is always a student's responsibility to explicitly confirm with their instructor whether AI is permitted for a task.

Consequences of academic misconduct: Failure to adhere to the Honor Code and this section's course stipulations will be deemed a violation of academic integrity. Any individual who becomes aware of a violation is bound by honor to take corrective action. Independent of the extent to which these policies have been violated (e.g., a single answer versus a whole assignment), students will be referred to the Academic Standards Office. Consequences will not be decided by your instructor and may range from a course grade deduction or course failure to University suspension or expulsion. **Please see the [Academic Standards website](#) for more information.**

Grading in the age of AI: It is the instructor's right to create course assignments and rubrics that penalize students based on projected results of inappropriate AI use, even without proof of AI use, if said rubrics are aligned with learning outcomes.

Notice of Mandatory Reporting of Sexual Assault, Interpersonal Violence, & Stalking

George Mason University is committed to providing a learning, living and working environment that is free from discrimination and a campus that is free of sexual misconduct and other acts of interpersonal violence in order to promote community well-being and student success.

We encourage students who believe that they have been sexually harassed, assaulted or subjected to sexual misconduct to seek assistance and support. [University Policy 1202: Sexual Harassment and Misconduct](#) speaks to the specifics of Mason's process, the resources, & options available to students.

****Please note that, as a faculty member, your instructor is designated as a *Responsible Employee* and must report all disclosures of sexual assault, interpersonal violence, & stalking to Mason's Title IX Coordinator per University Policy 1202. In other words: *I want to support you, but I am a mandatory reporter.***

If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC; <https://ssac.gmu.edu/>) at 703-380-1434 or Counseling and Psychological Services (CAPS; <https://caps.gmu.edu/>) at 703-993-2380. You may also seek assistance from Mason's Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

Diversity and Inclusivity

Diversity entails different viewpoints, philosophies, and perspectives. Students of diverse opinions, backgrounds and practices are encouraged to voice their opinions or perspectives and hear those of others; however, pursuit of knowledge via the scientific method is the focus of this course, and students may be penalized for submitting answers that do not appropriately meet the learning outcomes of the course.

Common Policies of the University

Please access the GMU Common Policies [here](#).