

George Mason University
College of Science

EVPP 113 (1 Credit)
Lab for Ecosphere: Environmental Science II
Section 202, Fall 2025

Note: EVPP 112 is a separate course with its own syllabus; please see the 112 syllabus for lecture-specific information.

COURSE INSTRUCTOR: **Hannah Toney** (htoney@gmu.edu)
LAB COORDINATOR: Dr. Stephanie Schmidt (sschmi11@gmu.edu)
CLASS LOCATION: **David King Hall (DK) Rm # 3031**
CLASS DATES/TIMES: **Tuesdays, 10:30 AM – 1:10 PM**
OFFICE HOURS: Before lab or by appointment

Course Description and Mason Core

This course introduces students to lab- and field-based investigations of the science related to human-environment interactions and issues. **When taken with EVPP 112, EVPP 113 fulfills the Mason Core 4-credit Natural Science lab requirement;** see more [here](#).

Course Objectives

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, students will be challenged 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 (i) making careful and systematic observations; (ii) developing and testing a hypothesis; (iii) analyzing evidence; and (iv) interpreting results.**

Lab Overview and Expectations

Lab Activities: *EVPP 113 will comprise both in-lab and out-of-lab work.*

In-class lab activities will include a **pre-lab Kahoot and lecture**; indoor and outdoor **lab/field exercises** completed in groups; **data sheets and scientific method process work** filled out **individually**, to be shown to the instructor before leaving; and **potential reflections or discussions** to be submitted and/or explained before leaving.

These activities may require you to interact with chemicals, mud, organisms, and the outdoors. If you are not comfortable with these conditions, please obtain accommodations from Disability Services. However, please note that various activities cannot be substituted with non-field or lab work.

Out-of-class lab activities will include a **scientific tutorial assignment**, **pre-lab readings on Canvas**, lab preparation through **hand-written scientific process work, including pre-lab (e.g., question, hypothesis, methods), and post-lab (e.g., results, graphs, and conclusions)**, a **lab blog post** (in pairs), a written **lab report (individually)**, and several other **short assignments** interspersed throughout the semester.

General Course Policies/Expectations

- **Paper Lab Notebook:** Students are required to have a lab notebook they use to complete the pre-lab and post-lab scientific process work. There are no size or type requirements but the student should be able to comfortably write, graph, and read instructor responses in their notebook. Each week, students will submit their notebooks during lab for grading.
- **Technology:** Each student is **required to** (1) have a wifi-enabled **laptop or tablet to use during lab periods**, (2) set up and utilize the [Microsoft 365 Apps](#) like OneDrive, Forms, and Excel using your GMU account, and (3) **use Canvas** (and the associated app) to stay updated and to find readings and access/submit assignments or other materials.
- **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. When sending questions, comments, or concerns to your instructor, use MS Outlook and your @gmu.edu address to email your lab instructor (Instructor Toney) and "CC" Dr. Schmidt. Always use **EVPP 113 section 203** in the subject line, in addition to any further relevant subject phrases. Please note that automatic filtering of emails by your instructors may be performed using this email subject line.
- **No Sale of Course Content:** ALL class content is the property of GMU; it may not be duplicated, used for commercial purposes, posted online, and/or copied into generative AI without explicit instructor permission.
- **Instructor Privacy:** Recording and/or distributing recordings of the instructor are not permitted unless approved.
- **Academic Honesty:** As members of the Mason community, students pledge to neither give nor receive unauthorized aid while working on/completing **any** work. See the Academic Integrity heading for class policy.

In-Lab Policies/Expectations

- **Attendance and Excused Vs Unexcused Absences:** Participation in all class sessions is **required** for this lab class. While attendance will be quantified using Kahoot, instructors will keep track of a student's total number of **excused (E)** and **unexcused (U)** absences, where "excused" and "unexcused" are defined below.
- **Unexcused Vs Excused Absences:** Absences may be **excused only if** one or more of the following is satisfied:
 - (a) A doctor's or nurse's note is provided before, or within 2 days after, the lab session that explicitly demonstrates the student's inability to participate in lab **on the date in question**
 - (b) documentation of a student's **scheduling issue** (including athletic or extracurricular activities) is provided **≥ 2 days ahead of time**, where the particular lab date requiring excused absence is specified*,**
 - (c) **unforeseen circumstances** are **documented & OK'd** by the instructor **within 2 days** of a missed lab
 - (d) a student **enrolls in the course late** and **emails the professor within 1 week of enrollment**
 - (e) the student earns their first absence that does not meet the criteria above and would otherwise be unexcused

*Students with >1 scheduling issue should consider enrolling in a different lab section.

**Students with athletic conflicts must document each conflict separately and/or remind their instructor of conflicts.

- **Makeup Policy for Unexcused Vs Excused Absences:**

Unexcused absences: A student with an unexcused absence will receive 0% for attendance, data sheets, and any post-lab work if they have an unexcused absence.

Excused absences: Once a student earns an excused absence, their attendance grade will be exempted. Other missed work will not be exempted and must be made up using the policy below:

- Students should **borrow data from groupmates** to complete the lab data sheet and must submit their data sheet on Canvas within 2 weeks of the missed lab.
- Students must individually complete post-lab work within 2 weeks of the missed lab.
- Students can earn full credit on data sheets and post-lab work only if they also complete a separate **makeup assignment** within 2 weeks of the missed lab.

Note: Makeup work will not be accepted after Tuesday, 12/9 at 5:00 PM.

- **Attendance and Final Grade Policy:** Independent of grades calculated per the course grading schema, the table below indicates the maximum grade a student can earn in the course, identified as the **minimum grade associated with a student's excused, unexcused, and total absence count, respectively** (note: attending alternative lab sessions with approval will not be an absence). **Students with ≥ 5 total absences will earn a D or F.**

<u>Excused</u> count	Max. grade	<u>Unexcused</u> count	Max. grade	<u>Total</u> count	Max. grade
1	A+	1	A+	1	A+
2	A+	2	B	2	A+
3	B+	3	C	3	B+
4	C+	4	D	4	C+
5	D	5	F	5	D
6	F	6	F	6	F

*Example: J has 2 excused absences and 2 unexcused absences. Their maximum grade is the **minimum** of the grades provided above for these respective absence counts: i.e., the minimum of an A+ (2 excused), B (2 unexcused), and C+ (4 total absences).*

Thus, their maximum grade is a C+.

- **Submission of Work:** Students are also responsible for timely submissions of assignments/ assessments in the correct format (e.g., .docx; .xlsx; etc.) and on Canvas. **At all times, pages files or HEIC image files are not accepted.** | More information about course work is provided on page 5.
- **Late Work Policy:** Late work policies are provided on page 5 category.
- **Extension Policy:** Students wishing to obtain an **extension** on any assignment completed outside of lab (e.g., quizzes, post-lab work, lab post, or lab report) must email their instructor and receive permission, given that they also:
 - Provide a doctor's or nurse's note of a **medical emergency** within 2 days of a missed deadline
 - Provide documentation of a **scheduling conflict** at least 2 days **BEFORE** a deadline
 - Provide documentation of **late enrollment** within 1 week of enrollment
 - Provide documentation of other **unforeseen circumstances** within 2 days of a deadline

Approval of requests are not guaranteed and are at the discretion of the instructor.

Note: No course work, even those for which an extension has been granted, will be accepted after 5/5.

Other In-Lab Policies and Data Sheet Deductions:

Punctuality: Students must arrive to lab on time to earn an attendance grade via Kahoot, hear the pre-lab lecture, and participate in lab procedures and data collection. Students who miss Kahoots but arrive < 30 minutes after lab begins will earn a 0 attendance grade; however, they can submit data sheets and earn credit for any lab components they were able to participate in after arriving. Students who arrive >30 minutes after lab begins will be deemed absent (unexcused) and will not be able to submit data sheets or post-lab work. If students leave more than 15 minutes before their group is done with lab work their attendance grade will be manually changed to a 0.

Cleanup and Departure: Lab clean-up is required for each **group** before leaving. **Each lab member** of a group that departs before adequate cleanup and/or fails to participate in cleanup will earn -50% on their weekly data sheet grade.

Digital Devices: Each student must have a digital device to participate in Kahoots, access the lab manual, and complete in-lab work; however, use of digital devices for any other purpose is forbidden. Devices should be put away when not in use. Failure to respect the device policy will result in data sheet deductions per the behavior guidelines below.

Engagement and Behavior: Please pay attention and participate through the entirety of the lab session. Deductions on weekly data sheet grades for any non-participatory, distracting, or disruptive behavior are outlined below:

- Students will earn 0% on their data sheet(s) if they do not help their group complete lab procedures.
- Students will earn 0% on their data sheet(s) if they wear personal audio devices that are not for hearing accommodations, such as headphones, during lab.
- Students will earn 0% on their data sheet(s) if they work on other personal or non-lab-coursework for >50% of class.
- Students will be penalized 25% on their data sheet(s) for each situation where the instructor notices inattentive, non-participatory, distracting, or disrupting behavior—including extraneous use of phones, laptops, or tablets.
- For egregious behavior, the instructor may impose a stricter penalty.

Safety: Safety is a priority in the lab. Students must abide by all **Lab Safety Rules & Practices** (see lab manual).

- For each violation, students will be penalized -50% on weekly data sheet(s).
- **Students who commit ≥ 3 lab safety violations in a given lab period** (besides open-toed shoes) will receive a 0% for those lab's **data sheets, any post-lab work, AND** be counted as absent (unexcused).
- **Open Toed Shoes:** Students who arrive with open toed shoes must leave lab and return with closed toed shoes, or choose to receive an unexcused absence. Students will receive 0 for attendance but can earn full points on their data sheets if they return in sufficient time.
- Students need to wear pants at all times.
- **Regardless of written policy:** If the instructor deems a student's behavior an imminent threat to safety, they will demand that the student stop and immediately leave. The student will receive a 0% for those lab's **data sheets, AND** be deemed **absent (unexcused)**.

Grading Schema

Canvas will be used for updating and submitting grades and will adhere to the following schema. Final grades may be altered depending on a student's absence count. *Note: Changes to final grades will only be made if you report a discrepancy on Canvas and your final grade is updated as a result.*

<i>Week 1 Syllabus and Safety Quiz</i>	2.5.0%		
<i>Pre-Lab Preparation*</i>	20.0%		
<i>Attendance and Punctuality*</i>	10.0%		
<i>Data Sheets*</i>	25.0%		
<i>Post-Lab Work*</i>	20.0%		
<i>Group lab post (1 per semester)</i>	5.0%		
<i>Formal Lab Report</i>	17.5%		
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%	

*Note: for each of the starred categories—*pre-lab preparation, attendance, data sheets, and post-lab work*—a student's lowest grade will be dropped from their final grade.

Elaboration on Grade Categories

- **Week 1 Syllabus/Admin and Safety Quiz (2.5%):** An open-note quiz on Canvas will be due by Tuesday, 9/2 at 11:59 PM. Students will have 4 attempts and their grade will be the average of their attempts. Students will receive 50% if submitted late and before the 3rd class, and 0% otherwise.
- **Weekly Lab Preparation (Pre-lab Work) (20.0%):** Students must prepare for lab activities before attending lab; weekly lab preparation may include a pre-lab reading and procedure document on Canvas. Within a student's individual paper notebook, they must hand-write a pre-lab overview that includes a question, hypothesis, procedure with sketches, and blank data table or figure with labeled variables and units. These will be checked by the instructor upon arrival to lab. **Late pre-lab work will not be accepted.**
Note: The instructor will provide a general template that can be used by students in their lab notebooks.
- **Lab Attendance and Punctuality (10.0%):** Attendance will be graded as 0% or 100% each week and will be logged using a Kahoot that will begin at or within 5 minutes of the start of lab. Kahoots will include questions related to the pre-lab content. Students must receive > 0% on the Kahoot to earn attendance credit. Students who earn 100% will obtain Extra Credit, and can do so a maximum of 3 weeks.
- **Weekly Data Sheets (25.0%):** Students will fill out data sheets from their prepared pre-lab data section and/or supplied documents for each week's relevant lab activity/activities. These should be kept to complete post-lab work, but a picture upload to Canvas is required before leaving lab. For some activities, instructors will require the sharing of a live OneDrive document stored on the student's GMU Microsoft OneDrive—e.g., Excel data sheets. Data sheets will be graded by group for most, but not all, weeks; individuals may receive lower grades than their group if missing components of the data sheets and/or due to class-related behavior.
- **Weekly Post-lab Work (10.0%):** During and/or after lab and before the following lab, students must complete a results and conclusion in their lab notebook. These sections should interpret data collected in class and, where relevant, create graphs, conduct statistical tests, and/or provide discussion. The instructor will provide a general template that can be used by students in their lab notebooks.
- **Individual or Paired Lab Post (5%):** In preparation for the formal lab report, each student or pair will post an overview of one lab activity on Canvas within 2 weeks after the activity was completed in class. Directions and assignments will be supplied in class at least 1 week ahead of time. Posts will model lab "blog" reports.
- **Formal Lab Report (17.5%): Outline, Data Analysis, Draft, Self/Peer Review (7.5%); and Final Lab Report (10%):** Students will be individually complete a formal lab report via an iterative process including a guided outline, data analysis, draft report, self and peer review, and a final report. While data collected for the lab report will originate from group work in lab, **all other components of the lab report must be completed individually.** Besides the peer review process, aid from peers is prohibited. Students must attend the relevant lab sessions where data analysis, outline submission, and peer review are completed to earn credit.

Learning Accommodations

If you have a documented learning disability or other condition affecting academic performance, **make sure it is documented via Disability Services** to determine the accommodations you need (SUB I, Rm. 4205; 993-2474; <http://ds.gmu.edu>). Please **talk with your lab instructor and coordinator to discuss your needs.** The lab instructor and lab coordinator must have your accommodation(s) on file with DS **before** you request accommodation(s). Requests for accommodations **will not be accepted retroactively.**

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 record observations and data based on your group's lab 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 lab observations, 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 lab 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.

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 and/or coordinator 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 lab instructor as early as possible regarding health concerns and/or falling behind.**

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 faculty members, your lab instructor and lab coordinator are designated as *Responsible Employees* and must report all disclosures of sexual assault, interpersonal violence, & stalking to Mason's Title IX Coordinator per University Policy 1202. In other words: *we want to support you, but we are mandatory reporters*.**

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 work that does not pursue knowledge creation through the scientific method. Additionally, please note that **successful engagement in, and completion of, lab activities is a requirement of this course, and it cannot be replaced with other activities due to personal discomforts or disabilities**. If you feel that labs can be more inclusive, do not hesitate to reach out to your lab instructor or Dr. Schmidt.

Common Policies of the University

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