

SYLLABUS

ENR 2101

Introduction to Environmental Science Laboratory
GE Foundations, Natural Science: 1 credit
Spring 2024 (SP24): Online Asynchronous

COURSE OVERVIEW

ENR 2101 is an asynchronous virtual laboratory (100% online) that fulfills 1-credit of the General Education (GE) Category Foundations: Natural Science. It is intended to be taken with the 3-credit GE Foundations: Natural Science course titled "Introduction to Environmental Science Lecture" (ENR2100). Together the ENR2100 lecture (3 credits) and ENR2101 laboratory (1 credit) fulfill 4-credits of the General Education (GE) Category: Foundations, Natural Science.

ENR 2101 will utilize multiple online platforms supported by Ohio State. All content, including labs, slides, demonstrations, presentations, notes, videos, readings will be delivered through Carmen (<https://carmen.osu.edu>) or Ohio State Libraries (<https://library.osu.edu/>). Students will have free access to all course content for the entire semester.

ENR 2101 is asynchronous and self-paced to give students the ability to access and satisfy requirements within a flexible time frame. Labs are broken down into weekly modules and students are given 1 week (7 days) to complete each module. All assignments are open book. However, all course requirements must be completed independently by the enrolled student. All assignments and activities are completed using Carmen.

Instructor

Instructors: Brian H. Lower (PhD), Kylienne A. Shaul (MS), and Ella M. Weaver (MENR)

Teaching Assistants: Listed on Carmen

Course Email: ENR2101@osu.edu

Office Hours: Schedule via Bookings link in Carmen, we will meet via Zoom

Course description

ENR 2101 fulfills 1-credit of the General Education (GE) Category Foundations: Natural Science. Students will engage in theoretical and empirical study within the natural sciences. Students will gain

an appreciation of modern principles, theories, methods and modes of inquiry used generally across the natural sciences. Students will discern the relationship between science and technology, while appreciating the implications of scientific discoveries and the potential impacts of science and technology to address problems of the contemporary world.

Expected learning outcomes

NEW GENERAL EDUCATION CURRICULUM

This course fulfills the General Education (GE) rational for the Foundations, Natural Science category. ENR 2101 fulfills Specific Goal 1 Natural Science and Expected Learning Outcome 1.3.

When this 1-credit ENR 2101 laboratory is taken in combinations with the 3-credit ENR 2100 lecture, together these 4-credits (i.e., 1-credit laboratory + 3-credit lecture) fulfills ALL Goals (i.e., Goals 1 and 2) and ALL Expected Learning Outcomes (i.e., ELOs 1.1, 1.2, 1.3, 2.1, 2.2, 2.3) for the Foundations, Natural Science GE category.

ENR 2101 Fulfills

GOAL 1: Successful students will engage in theoretical and empirical study with the natural sciences, gaining an appreciation of the modern principles, theories, methods, and modes of inquiry used generally across the natural sciences.

Expected Learning Outcome 1.3: Successful students are able to employ the process of science through exploration, discovery, and collaboration to interact directly with the natural world when feasible, using appropriate tools, models, and analysis of data.

LEGACY GENERAL EDUCATION CURRICULUM

The course does not fulfil any requirements outlined under the legacy general education curriculum.

HOW THIS COURSE WORKS

Mode of delivery: ENR 2101 is a 100% asynchronous online laboratory taught through Carmen (<https://carmen.osu.edu>). There are no required sessions when you must be logged into Carmen at a scheduled time. Most course materials (readings, lecture, database access) is free. Where physical materials are required to complete laboratory procedures, we have strived to use materials that you may already own or that are low cost (\$5-\$10).

Pace of online activities: This laboratory is divided into weekly modules. Students will complete one module per week (7 days). Students are expected to keep pace with weekly deadlines but may schedule their efforts freely within each week.

Credit hours and work expectations: This is a 1-credit-hour laboratory. According to [Ohio State policy](#), students should expect to spend 3 hours per week of the average student's time required to earn the average grade of "C" in this laboratory. A student's 3-hour-workweek includes readings, direct instruction, taking notes, studying, conducting labs, and completing assignments (lab reports, quizzes and/or discussions).

Attendance and participation requirements: Because this is an online laboratory, your attendance is based on your online activity and participation. You are expected to log in to Carmen every week. During most weeks you will likely log in multiple times to complete your work. If you have a situation that might cause you to miss an entire week, please email ENR2101@osu.edu to discuss adjusted timelines.

COURSE MATERIALS AND TECHNOLOGIES

Textbook (Recommended)

This course does not have a required textbook. However, if you prefer a textbook, we recommend the following text. This textbook is comprehensive and presents environmental science in a very approachable way. Any edition is acceptable. We will include recommended readings from this text each week.

Karr, S et al. 2018. Environmental Science for a Changing World. Third Edition. New York, NY. W.H. Freeman and Company. Scientific American.

Course technology

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://ocio.osu.edu/help/hours>, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** <http://ocio.osu.edu/selfservice>
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743

BASELINE TECHNICAL SKILLS FOR ONLINE COURSES

- Basic computer and web-browsing skills
- Basic skills with Microsoft Word, Excel and PowerPoint
- Navigating Carmen: for questions about specific functionality, see the [Canvas Student Guide](#).

REQUIRED EQUIPMENT

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Microphone: built-in laptop or tablet mic or external microphone
- (Recommended) Webcam: built-in or external webcam, fully installed and tested
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

REQUIRED SOFTWARE

- **Microsoft Office 365**: All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Full instructions for downloading and installation can be found [at go.osu.edu/office365help](https://go.osu.edu/office365help).

CARMEN ACCESS

You will need to use [BuckeyePass](#) multi-factor authentication to access your courses in Carmen. To ensure that you can always connect to Carmen, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](#) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click "Enter a Passcode" and then click the "Text me new codes" button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the [Duo Mobile application](#) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and the IT support staff will work out a solution with you.

If you experience connection problems with Carmen then the very first thing that you should try is another web browser such as Firefox, Explorer, Chrome, and Safari. If you are having difficulty opening a document or viewing an image or any other issue associated with this class, then it is most likely a problem with your computer, Internet connection or Internet browser. While everything for this class has been thoroughly tested, if you experience a mistake, please let us know so that we can correct it.

GRADING AND FACULTY RESPONSE

How your grade is calculated

ASSIGNMENT CATEGORY	PERCENTAGE
12 – Hypothesis Reading Annotations	5% (0.4% each)
16 – Participation Activities	25% (1.6% each)
14 – Laboratory Assignments	70% (5% each)
Total	100%

*See course schedule for due dates. Everything is due by 11:59PM on Mondays.

HYPOTHESIS READING ANNOTATIONS (12, 0.4% EACH, 5% TOTAL)

Within each weekly module, you will see a pre-lab presented before the lab procedures and assignments. The pre-lab material contains all the information you need to give you a solid background on the week's experiment so that you know what we are measuring or analyzing. Some readings will be long, others short. Depending on your background, some readings will be full of new vocabulary or largely review. To help you manage the reading load, more actively engage in the course material, and get the most out of every reading we will be using a tool called Hypothesis.

Hypothesis is a social annotation tool that will allow you to annotate the week's reading with your group mates. We will be using the same groups used in the discussion boards in order to foster collaboration and build a cohesive and supportive learning community. Research suggests (Aguilar et al. 2021) that annotating texts enhances comprehension, increases memory, and encourages metacognitive and reflective practices. Put plainly, these weekly Hypothesis assignments should help you to better understand the pre-lab material and be better prepared for success in the course labs and discussion assignments.

While you read through each week's readings, you will leave 1-3 annotations based on the provided prompts. During the first week of the course, we will annotate the course syllabus, which will provide an opportunity to explore the tool and get comfortable with its interface. During week's 2-15 we will collaboratively annotate the pre-lab reading which provides background information on the week's experiment. These assignments are graded complete/incomplete and are meant to provide you a supportive environment to review the text with your group mates.

Task

Complete each Hypothesis reading assignment by leaving 1-3 annotations based on the provided prompts. Hypothesis reading assignments are graded complete/incomplete. At least one annotation should be made directly on the text. Additional annotations can be made on the text or in response to another group member's annotation.

Criteria

You will receive a "complete" so long as a good faith effort is given in your annotations. Annotations should be related to the reading, connect the material personally, summarize or paraphrase complex concepts, or ask a meaningful question. Annotations that do not foster further engagement (such as "this was interesting") will not be counted.

PARTICIPATION ACTIVITIES (16, 1.6% EACH, 25% TOTAL):

You will complete a total of 16 participation assignments this semester (2-3 activities per week), all of which will be submitted on Carmen. Each assignment will be unique and worth 1.6% of your Final Grade for the course. Most participation activities are conducted through the Carmen Discussion Board as a group discussion with your assigned lab group. These assignments are open-book, however, you must complete the work on your own without help from peers. A student who demonstrates good faith effort on all aspects of the weekly activity and demonstrates engagement in the activity will receive full credit.

Objectives of participation activities:

1. Communicate your experiment results to your team members.
2. Reflect on the experimental process.
3. Wrap up each lab through a reflective, metacognitive, or "so what" activity.
4. To serve as a formal weekly check-in that promotes and encourages peer-to-peer interaction.

For each participation activity, you will be required to:

Participate in a group discussion on Carmen through written, audio, or video posts. Respond to a structured prompt: For part 1 of each lab the activity will require you to share your data with your group members and reflect on a key component of the experimental process. For part 2 of each lab, the activity will serve to wrap up the lab. The wrap up activity will vary depending on the nature of the lab. Wrap up activities may include a reflection on the data analysis, conducting cursory research on a topic related to the lab, or sharing a component of your data analysis such as a graph. A grading rubric for each assignment is available on Carmen.

LABORATORY ASSIGNMENTS (14, 5% EACH, 70% TOTAL)

You will complete a total of 14 laboratory assignments over 7 labs this semester, all of which will be submitted on Carmen. Most labs will be conducted over one week and comprise of two related laboratory assignments. For example, the Scientific Method lab is composed of two parts, Lab 1 Part 1 and Lab 1 Part 2 (see course schedule below). Within Part 1, you will collect and report data. Within the Part 2 you will summarize and analyze class data collected in Part 1. Each lab assignment will be unique and worth 5% of your Final Grade for the course. Therefore, each lab will be worth 10% of your Final Grade (5% x 2 assignments = 10%). These assignments are open-book however, all work should be your own and copying or reusing previous work or the work of others is not permitted. Collaborating or completing labs with your group members is permitted but not necessary to successfully complete the lab. Assignments will be available on Carmen for 7 days to accommodate all students. Readings, data sets, and instructional videos that are required for laboratory assignments are provided through Carmen. In some cases, physical materials are needed to complete the lab. In these cases, we have chosen materials that you may already have at home or are low cost (~\$5). If you need assistance, please contact the course team.

Objectives of laboratory assignments:

1. Describe common instruments, equipment, techniques and methods used by scientists to collect data. Learn about protocols, operation, benefits and limitations of each.
2. Use described methods to collect data.
3. Use Microsoft Excel to analyze consolidated peer group data through calculations (i.e., mean, p-value, standard deviation, indices).
4. Summarize group results visually using tables and charts and textually using concise scientific language.

Each laboratory will consist of two parts (Part 1 and Part 2) that will be completed over two weeks. Both parts should be completed by you, the student, on your own. For most labs, the following framework is used when feasible. A grading rubric for each lab is available on Carmen.

Part 1 - Learn about the lab procedure and how scientists have used the technique or methods by reading peer-reviewed literature and watching instructional videos provided by your instructor. Execute laboratory experiments at home, collect and report standardized data to your instructor via a Carmen assignment or quiz. Data and results will also be reported to your peer group via the week's participation activity.

Part 2 – Gather your lab group's data from the participation activity submitted for Part 1 of the lab. Consolidate this data in a Microsoft Excel lab template. Analyze grouped data by performing calculations with Microsoft Excel. Interpret and summarize results by creating tables, graphs, and answering short-answer questions. These questions will be based on data that your group collected. You will be asked to analyze data, and answer questions about the experiments that you conducted at home.

Late policy

Assignments will be submitted on Carmen within a flexible time frame of 1 week. These can be completed at any time within the 1-week submission window. Students will be permitted to work 1-week ahead if they choose to do so. Submission after the due date for assignments will result in a **10% deduction per day from the overall grade. The submission window will automatically close after 10 days from the due date and will not reopen.** Submissions that are sent by email will not be accepted. All assignments must be submitted on Carmen. The Hypothesis reading assignments are an exception to this late policy. Hypothesis reading assignments are graded complete/incomplete, and a late penalty will not apply. Hypothesis assignments will close 3-days after the due date.

Extenuating circumstances sometimes occur. Students who miss an assessment due to a legitimate reason (e.g., emergency, hospital visit, extended illness) should contact their instructor at ENR2101@osu.edu to request permission to make-up an assignment. The instructor will determine if an excuse is acceptable. If approved, the student will not be penalized -10% per day. If approved, the student must make up the missed assessment within a time frame specified by the instructor. Since this course has flexible due dates with assignments open for a period of days to weeks on [Carmen](#), acceptable excuses typically entail lengthy illness, extended hospitalization, or other serious issues with official documentation.

The due date for each assignment is provided on Carmen at the beginning of the semester to help students plan their semester. It is the responsibility of the student to know the due date for all assignments. We do this to accommodate students' busy schedules. Students are expected to plan their semester accordingly. Technical glitches such as a bad internet connection, faulty internet browser, a computer that "crashes", a battery that runs out of power, an obnoxious roommate, software malfunction, a flat tire, etc. are not acceptable excuses for missing a deadline. The instructor does not accept assignments by e-mail, and these will be deleted and not graded. Assignments should always be completed and/or submitted using Carmen.

Grading Scale

Letter Grade	%	Proficiency
A	93.00–100.0	Demonstrates complete proficiency of all learning outcomes as demonstrated on assessments; participates in all aspects of the lab in a positive and timely manner.
A-	90.00–92.99	
B+	87.00–89.99	Demonstrates proficiency of at least two learning outcomes as demonstrated on assessments; participates in all aspects of the lab in a positive and timely manner.
B	83.00–86.99	
B-	80.00–82.99	

C+	77.00–79.99	Demonstrates proficiency of at least one learning outcome as demonstrated on assessments; participates in some aspects of the lab in a positive and timely manner. A minimum grade of “C-” will be earned by a student making a good faith effort on all aspects of the lab and demonstrated engagement.
C	73.00–76.99	
C-	70.00–72.99	
D+	67.00–69.99	Fails to meet proficiency of any learning outcome such that student will not be successful in higher-level course; did not complete assessments; demonstrated lack of engagement, did not participate in lab, did not complete assessment in a timely fashion.
D	60.00–66.99	
E	00.00–59.99	

Instructor feedback and response time

- **Grading and feedback:** For assignments, you can expect a grade and feedback within 7 days.
- **Email:** Instructors check and reply to emails daily. Please email ENR2101@osu.edu as this is the email dedicated to the course. Please use your Ohio State email account (name.#) in your communications.

Fair assessment practices

We understand that grades are important to our students, and we strive to have clearly stated learning outcomes. We work hard to ensure that student grades are calculated in a fair and accurate manner. Things that we do to ensure that the assessments we administer are fair and accurate:

1. We use grading rubrics to score all laboratory assignments and participation activities. These rubrics provide clear grading expectations for varying levels of proficiency. Students are able to see a grading rubric before they start working on an assignment so that performance expectations are clearly understood.
2. We evaluate the outcomes of assignments by checking all questions and all answers after an assignment closes to check for mistakes. Typically, we want to see that each question was answered correctly approximately 80% of the time. This 80% threshold indicates that a question was a fair assessment of the course material. If this threshold is not met, we do not count the question or we provide students with another opportunity to answer a new question.
3. We use different kinds of assessments, and each assessment type is weighted equally. We use laboratory assignments and participation activities to calculate a student's grade, and each is worth the same value for a student's Final Grade for the course. This has the impact of increasing a student's course grade by not weighing one assignment more than another.
4. We encourage students to do well on assessments by making all assignments open-book and allowing students to complete all assignments from anywhere.

5. We encourage students to do well on assessments by providing students an extended period of time (e.g., 7 days) to complete assignments.
6. We accept late assignments with a small penalty of -10% deduction per day late. This ensures that a student would not receive an automatic grade of 0% for missing a deadline.
7. We provide clearly stated learning outcomes for our modules that are aligned to course content and assessments so that students better understand why they are completing an activity.

If you have questions about these practices or how your grade is calculated throughout the semester, please contact your instructor at ENR2101@osu.edu.

OTHER COURSE POLICIES

Communication etiquette

Online communication is a critical component of any online environment, including for your success in this course. In all assignments, emails, and comments, let's keep a professional and respectful tone. Regardless of the type of communication used, you should always keep in mind the following:

- **Be respectful:** Treat others the way you want to be treated. Use polite language and avoid using offensive words or phrases that could be hurtful to others.
- **Use proper grammar and spelling:** Avoid using excessive abbreviations, slang or colloquialisms, and use proper punctuation and spelling to ensure clear communication.
- **Be mindful of tone:** Online communication can be misinterpreted easily, so make sure your tone is clear and appropriate. Avoid using all caps, which can come across as shouting.
- **Keep it professional:** Remember that online communication is still a form of professional communication, especially when communicating with professors or interacting with classmates in assignments.
- **Use appropriate subject lines:** Use clear and specific subject lines in your emails, so that the recipient knows what the message is about. Remember that emails are not instant messages. They should be used for longer, formal communications.
- **Avoid spamming:** Avoid sending unsolicited messages or spamming others with unnecessary messages.
- **Don't overshare personal information:** Be mindful of the information you share online, as it can be accessible to anyone. Avoid sharing sensitive or personal information in public online spaces.
- **Respect others' time:** Be considerate of others' time and avoid sending messages outside of regular business hours unless it's urgent.

Remember, good netiquette is about being respectful, professional, and considerate in your online communication. By following these guidelines, you can build positive relationships with your peers and professors while avoiding misunderstandings and conflicts.

Academic integrity policy

POLICIES FOR THIS ONLINE COURSE

- **Assignments:** Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should follow your preferred, recognized style (i.e., APA) to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in—but no one else should revise or rewrite your work.
- **Reusing past work:** In general, you are prohibited in university courses from turning in work from a past course to your current course, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with your instructor at ENR2101@osu.edu.

OHIO STATE'S ACADEMIC INTEGRITY POLICY

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's [*Code of Student Conduct*](#), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If the instructor suspects that a student has committed academic misconduct in this lab, the instructor is obligated by University Rules to report suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages ([COAM Home](#))
- *Ten Suggestions for Preserving Academic Integrity* ([Ten Suggestions](#))
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

Artificial Intelligence and Academic Integrity at The Ohio State University

There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite and others. These tools will help shape the future of work, research and technology — but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use “unauthorized assistance in the laboratory, on field work, in scholarship or on a course assignment” unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing” of writing, ideas or other work that is not your own. These requirements apply to all students — undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

Using AI in this Course

Learning to use AI (e.g., ChatGPT and image generation tools) is an emerging skill that you will likely need to develop and master to be successful in your professional career. Recognizing this, you are permitted to use tools like ChatGPT to aid in you in completing assignments in this course. However, you should use these tools as an aid and not to do the bulk of your writing.

REQUIREMENTS AND LIMITATIONS WHEN USING CHATGPT

- If you provide minimum-effort prompts, you will get low-quality results. You will need to refine your prompts in order to get good outcomes. This will take work.
- Don't trust anything ChatGPT says. If it gives you a number or fact, assume it is wrong unless you either know the answer or can check with another source. You will be responsible for any errors or omissions provided by the tool. It works best for topics you understand.

- AI is a tool, but one that you need to acknowledge using. Please include a paragraph at the end of any assignment that uses AI explaining what you used the AI for and what prompts you used to get the results. Failure to do so is in violation of academic honesty policies.
- See these examples for [how to cite ChatGPT](#) using APA style citation.
- Be thoughtful about when this tool is useful. Don't use it if it isn't appropriate for the case or circumstance.

Copyright disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on Title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu

Your mental health

A recent American College Health Survey found stress, sleep problems, anxiety, depression, interpersonal concerns, death of a significant other, and alcohol use among the top ten health impediments to academic performance. Students experiencing personal problems or situational crises during the quarter are encouraged to contact Ohio State University Counseling and Consultation Service (614-292-5766; www.ccs.osu.edu) for assistance, support and advocacy. This service is free and confidential.

Principles of Community

This course adheres to The Principles of Community adopted by the College of Food, Agricultural, and Environment Sciences. These principles are located on the Carmen site for this course and can also be found at <https://go.osu.edu/principlesofcommunity>. For additional information on Diversity, Equity, and Inclusion in CFAES, contact the CFAES Office for Diversity, Equity, and Inclusion (<https://equityandinclusion.cfaes.ohio-state.edu/>). If you have been a victim of or a witness to a bias incident, you can report it online and anonymously (if you choose) at <https://studentlife.osu.edu/bias/report-a-bias-incident.aspx>.

Religious Accommodations

It is Ohio State's policy to reasonably accommodate the sincerely held religious beliefs and practices of all students. The policy permits a student to be absent for up to three days each academic semester for reasons of faith or religious or spiritual belief.

Students planning to use religious beliefs or practices accommodations for course requirements must inform the instructor in writing no later than 14 days after the course begins. The instructor is then responsible for scheduling an alternative time and date for the course requirement, which may be before or after the original time and date of the course requirement. These alternative accommodations will remain confidential. It is the student's responsibility to ensure that all course assignments are completed.

ACCESSIBILITY ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Requesting accommodations

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Several accessibility accommodations are already built into our course for all students (see list below). We work to provide these accommodations to all students and want to make sure all students have a positive learning experience in our course. Please send documentation from SLDS to ENR2101@osu.edu in order to establish any further accommodations needed during the semester.

1. **Extended Time (1.5x or 2x) Assignments: SLDS-REGISTERED STUDENTS SHOULD EMAIL THEIR PLAN.** A student must send their completed SLDS paperwork to the instructor at ENR2101@osu.edu. Once accommodations are verified, we will setup all assessments accordingly.
2. **Note Taking Assistance/Recording: PROVIDED TO ALL STUDENTS.** We provide all lab presentation slides via Carmen. Fully typed transcripts for lab presentations are provided via YouTube. Students can copy/paste the entire typed transcript anytime using any word processing software (e.g., Microsoft Word) directly from YouTube for all videos. These transcripts serve as written notes for all lectures.

3. **Distraction Reduced Testing Space, Small Group Setting: PROVIDED TO ALL STUDENTS.** Students can take all assessments on Carmen from anywhere. Students who are registered with Office of Student Life Disability Services (SLDS) and require distraction reduced testing space should make their own accommodations.
4. **Closed-captioning and transcripts: PROVIDED TO ALL STUDENTS.** All required multimedia (e.g., videos, podcasts) are accompanied with closed captioning or transcripts that meet ADA requirements. Most times these features are provided by the content producer (e.g., The New York Times, PBS, NPR, Nature, National Geographic). However, you may find select transcripts produced by the course team linked in Carmen.
5. **Flexible due dates for assignments: PROVIDED TO ALL STUDENTS.** All assignments are open on Carmen for a period of at least 7 days to accommodate students' busy schedules. Students can complete these assignments anytime while the window is open. Extenuating circumstances sometimes occur. Students who miss a due date for a legitimate reason (e.g., emergency, hospital visit, extended illness, unforeseen health issue, homelessness) should contact the instructor before the due date by email (ENR2101@osu.edu) to request additional time. The instructor will determine if an excuse is acceptable.

LABORATORY SCHEDULE

Week	Topic	Assessment	Due Date
Wk1 Jan 8 – Jan 15	Introduction	Participation Activity 1 – Introducing Ourselves Discussion Participation Activity 2 – Syllabus Quiz Lab 0 – Setting up Your Software	Monday at 11:59PM
Wk2 Jan 15 – Jan 22	Scientific Method Lab - Origami Frogs	Hypothesis Assignment 1 Lab 1 Part 1 Participation Activity 3 – Lab share and reflection	Monday at 11:59PM
Wk3 Jan 22 – Jan 29		Hypothesis Assignment 2 Lab 1 Part 2 Participation Activity 4 – Confounding Variables	Monday at 11:59PM
Wk4 Jan 29 – Feb 5	Human Populations Lab – Dynamics and Population Growth	Hypothesis Assignment 3 Lab 2 Part 1 Participation Activity 5 – Human Carrying Capacity	Monday at 11:59PM
Wk5 Feb 5 – Feb 12		Hypothesis Assignment 4 Lab 2 Part 2 Participation Activity 6 – Managing Fertility Rates	Monday at 11:59PM
Wk6 Feb 12 – Feb 19	Ecology Lab – Backyard Bird Count	Hypothesis Assignment 5 Lab 3 Part 1 Participation Activity 7 – Lab share and reflection	Monday at 11:59PM
Wk7 Feb 19 – Feb 26		Hypothesis Assignment 6 Lab 3 Part 2 Participation Activity 8 – Invasive Species	Monday at 11:59PM
Wk8 Feb 26 – Mar 4	Water Conservation Lab – Domestic Water Use	Hypothesis Assignment 7 Lab 4 Part 1 Participation Activity 9 – Lab share and reflection	Monday at 11:59PM

Week	Topic	Assessment	Due Date
		Participation Activity 10 – Submit to course dataset	
Wk9 Mar 4 – Mar 11		Hypothesis Assignment 8 Lab 4 Part 2 Participation Activity 11 – Reducing Water Use	Monday at 11:59PM
Wk10 Mar 11 – Mar 15	SPRING BREAK – No course material or assignments		
Wk11 Mar 18 – Mar 25	Air Quality Lab – Particulate Matter and Ground Level Ozone	Hypothesis Assignment 9 Lab 5 Part 1 Participation Activity 12 – Lab share and reflection	Monday at 11:59PM
Wk12 Mar 25 – Apr 1		Hypothesis Assignment 10 Lab 5 Part 2 Participation Activity 13 – Criteria Air Pollutants	Monday at 11:59PM
Wk13 Apr 1 – Apr 8	Energy Lab – Regional Renewable Energy Resources	Lab 6 (only 1 part) Participation Activity 14 – Lab share and reflection	Monday at 11:59PM
Wk14 Apr 8 – Apr 15	Sustainability Lab – Ecological Footprint	Hypothesis Assignment 11 Lab 7 Part 1 Participation Activity 15 – Lab share and reflection	Monday at 11:59PM
Wk15 Apr 15 – Apr 22		Hypothesis Assignment 12 Lab 7 Part 2 Participation Activity 16 – Reduce your footprint	Monday at 11:59PM
Apr 24 – Apr 30	Finals Week – No final exam, course materials, or assignments		