Environmental Microbiology

BIOL 466 Spring 2025
The University of North Carolina at Chapel Hill

Course Information

Credit Hours: 3 credit hours

Pre or Co-Requisites: BIOL 103 and BIOL 104.

Meeting Pattern: MWF 10:10 am-11:00 am

Instructional Format: in-person

Classroom or Location: Wilson Hall 217

Instructor Information

Name: Dr. Sophie McCoy

Email Address: sophie.mccoy@unc.edu

Office Location: Wilson Hall 334A (walk through the lab, office in the back right at the window)

Office Hours: M 1:15 pm-2:45 pm

Course Content

Course Description

This course surveys multiple dimensions of environmental microbiology, including methods and techniques for microbial genomics, transcriptomics, and metabolomics, ecological and evolutionary microbiology, the roles of microbes in ecological systems, and current applications of and issues in environmental microbiology.

Course Texts & Materials

There is no required textbook for this class. We will focus on reading the primary literature, including some older seminal papers and many recent research findings. Learning how to find, read, and interpret the primary literature is a skill you will develop in this course. All required readings will be posted on our course Canvas site. For students who would appreciate additional background reading, two copies of Madigan et al., *Brock Biology of Microorganisms* will be held on course reserve at the library.

This syllabus is a living document and is subject to change. Teaching and learning are dynamic processes. So that the course can adjust to the real-time needs of our class, *changes may be made during the semester in the assignments and content of the course.* These changes will be announced as early as possible. Changes made after the first day of class will be announced on Canvas and highlighted in green on the updated document.

Class Expectations

I expect students to attend lectures, which is very important without an assigned course textbook. Many assignments will require you to plan throughout the semester, as they will be impossible to complete the day before they are due. Unexpected needs, emergencies, and unique situations come up for many students every semester. You can expect that I will treat you like human and do my best to accommodate your situation – it is far easier for me to do this if you communicate with me as soon as possible.

Course Goals & Student Learning Outcomes (SLOs)

General Competencies

1. **Apply the process of science:**

- Distinguish different ways ecologists investigate the natural world (e.g. observation, experiment, modeling, simulation);
- Apply processes of ecological inquiry by making observations, generating testable hypotheses, develop conceptual models, use logic and creativity to design studies to test hypotheses, collect and/or interpret data, detect errors and biases, explain and interpret results, use quantitative reasoning, incorporate feedback to make revisions, explain to broad audience, and contextualize findings within broader knowledge of the field (or course);
- Evaluate science-related claims and information from peer-reviewed sources by examining the relationship between the evidence, arguments, and conclusions presented and by assessing consistency with existing knowledge from valid and reliable scientific sources.

We will practice these skills through: Paper discussion, case studies, readings, and guided inquiry.

2. **Understand the interdisciplinary and collaborative nature of science:**

- Understand how general ecological principles inform understanding of both basic science (e.g., other fields of natural science and ecological subfields) and applied science (e.g., conservation, restoration, human health, agriculture etc.);
- Practice communication and collaboration with other students and observe communication and collaboration between scientists and non-specialist audiences.

We will practice these skills through: In class assignments, case studies, and seminar assignments.

3. **Appreciate the relationship between science and society:**

- Identify, assess, and make informed decisions about ethical and contemporary issues at the intersections of science and society.
- Develop the tools and framework to apply ecological reasoning to issues of policy and practice to applied science questions.

Examples: In class assignments, case studies, seminar assignments, oral presentations, and debate.

Content-specific Competencies

By engaging in this course, you will be empowered to:

- Understand the primary ecological and evolutionary processes that structure microbial communities;
- Describe genomics methods for the study of microbial communities and functions;
- Identify mechanistic links between biological and physico-chemical processes in microbial systems and their relationships to ecosystem function and services; and

- Develop written and oral skills in presenting scientific arguments in the style of scientific and media reports, using primary sources from the scientific literature.

COURSE ASSIGNMENTS & ASSESSMENTS

Assignment Descriptions

In Class Assignments (20% course grade)

In class assignments will be graded for completion not correctness and will be due on Canvas by 11:59pm on the day indicated on the syllabus, which is usually the same day as class. Occasionally, worksheets or activities will be spread over multiple class periods. Your two lowest grades will be dropped at the end of the semester.

In Class Debate (10% course grade)

Verbal participation in in-class debates is mandatory. Each assigned team will have one dedicated class period to prepare for the debate (asynchronously) and to draft and assign verbal components of the debate to team members. Debate teams will be assigned to positions, which means that you may end up arguing for a position that does not align with your own personal opinion. Researching and presenting logical arguments towards opinions you agree with and those you disagree with is an intentional component of the learning objectives of the in-class debates.

Seminar Assignments I & II (10% course grade)

The University of North Carolina at Chapel Hill is an internationally renowned research institution that hosts top scientists for research seminars across our many Schools and Departments. You will attend two microbial themed research seminars, one of which must be attended in person and the second may be attended in person or online. Please see the assignment description on Canvas for details about required components of the seminar write up. Seminars must be pre-approved by Dr. McCoy. A link to a list of approved seminars will be posted on Canvas by the first Friday of the semester and will be updated. You may also email Dr. McCoy for permission if you wish to attend a seminar that is not already listed.

Assignment Design (10% course grade)

Design an in-class activity to help develop familiarity with and assess the understanding of hypothetical future students to a topic that has been covered in this course. You can be inspired by activities we have done in class so far, or you can be as creative as you wish.

Your assignment design project will include both the assignment and a grading rubric, and you will be graded on both components. *This requires you to think critically about why you might ask students to complete an activity or answer a specific question.* At the top of the grading rubric, please state two learning goals (examples provided on Canvas).

This is a solo project that involves two drafts. Each draft will be reviewed by two of your peers for comments on how to improve your assignment. The **multiple drafts** laid out are designed to assist you with the idea development and writing process. **Peer reviews** will be most useful to you if you submit the draft assignment with the same attention to detail you would for a final version. You will be graded on your submission of a first complete draft and completion of two thoughtful peer reviews as part of the total assignment grade. Your final project will be graded by the instructor.

Components:

- Assignment (as distributed to a class) (Draft 1 & 2)
- Grading rubric for each component of the assignment (Draft 2)
- Two learning goals stated at the top of the grading rubric (Draft 1 & 2)

Case Study Presentation (15% course grade)

This is an individual project and presentation. We have a rare opportunity to practice presenting to a group of our peers in a small, upper-level course! Presentations will be given in class and be spread over several topics across the semester. You will sign up for your presentation on the second day of class.

Please start reading your chosen article early so that you have time to meet with me about any questions you have about the methodology, analysis, and conclusions prior to your presentation.

Within your chosen topic, you will select one of the papers I have chosen. Your presentation will follow the format of a standard scientific conference talk: a 12-minute presentation with slides and 3 minutes for questions. Your presentation will include an introduction and motivation for the case study, with a description of the applied problem at hand. You will then introduce the methods, results, and generalizable conclusions of the case study. You may need to reference additional material within your talk – a good starting place are the references cited in the article you will present. Your classmates' assessments will be weighted at 50% and your instructor's assessment will be weighted at 50% to calculate your total score. When conducting a peer assessment, you must include at least one comment to help your classmate improve. The grading rubric is posted on Canvas.

Exams I & II (20% course grade)

There will be two midterm exams held during regular class time (each 15% of your grade). The midterm exams are not specifically cumulative, but some of the material later in the course will build on material covered early on.

Final Exam (15% course grade)

The final exam will be twice the length of the midterm exams. The exam will be cumulative but with emphasis on material from the final unit of the class.

Grading Scale & Schema

Late Work

All non-exam assignments will be penalized 10% for each day late without a Dean of Students approved absence. Assignment submission times will be rounded up, meaning that an assignment turned in 1 hour late will be counted as 1 day late. To obtain an approved absence by the Dean of Students office: https://uaao.unc.edu.

You must obtain advance approval from Dr. McCoy for any exam to be taken early or late, including exams scheduled at ARS with a start date and time before the start or after the end of the exam taken during the regular class period (e.g., if the regular exam ends at 12:05pm, you need approval to schedule an exam that begins at 12:06pm). Please schedule all ARS exams well ahead of time to their availability. For a day-of emergency, please email Dr. McCoy or your TA as soon as possible!

A rescheduled final exam will need permission from the Dean of Students: https://dos.unc.edu/student-support/class-absences-final-exam-rescheduling/ prior to my ability to schedule a make-up exam. This includes day-of emergency situations!

Grading Scale

This course will follow the standard UNC grading scale. No assignments will be dropped other than those specified in the assignment descriptions above (In Class Assignments and Science in the News).

Numeric Grade (%)	Letter Grade
93.5 and above	A
89.5 – 93.4	A-
86.5 – 89.4	B+
82.5 – 86.4	B
79.5 – 82.4	B-
76.5 – 79.4	C+
72.5 – 76.4	C
69.5 – 72.4	C-
66.5 – 69.4	D+
59.5 – 66.4	D
59.4 and below	F

Table a: Grading Scale Table

Grade Appeal Process

Scores and final course grades will be changed only in the event that an exam question was mis-graded or if exam points were totaled incorrectly. Requests for exam re-grading must be in the form of a **written** appeal submitted via Gradescope (the online exam grading platform we use in this course) justifying why your answer should be accepted. For every regrade request, we reserve the right to re-grade your entire exam, therefore a regrade request could lead to an increase, decrease, or no change in your exam score. All appeals for changes must be made within 3 calendar days after the exam is returned. We will not re-grade any question or exam after the 3 days have elapsed but will still work to correct exam point totals if you find an error.

Course Schedule

Week	Date	Topic	Readings	Assignments Due
1	W Jan 7	Introduction to Environmental Microbiology Earth Systems History: The Great Oxidation Event Lecture	• How to read a scientific paper • Scientific Article Review	
	F Jan 9	Earth Systems History: The Roles of Microbes in Planetary Scale Events Lecture	• Falkowski *et al.* 2008	Presentation Sign-ups
2	M Jan 12	Common Microbial Metabolisms & Metabolic Handoffs Lecture Metabolism Worksheet	• Aldridge & Rhee 2014 • Hug & Co 2018	Metabolism Worksheet
	W Jan 14	Methods in Microbial Ecology Lecture Worksheet	• Review short videos linked on Canvas • Caporaso *et al.* 2010 • Grabherr *et al.* 2011 • Thomas *et al.* 2012	Methods Worksheet
	F Jan 16	Ecological Theory: Species Interactions Case Study Activity: Writing an Abstract	• Skim all 4 papers: • Chao and Levin 1981 • Czaran *et al.* 2002 • Berglund *et al.* 2007 • Lueders *et al.* 2006	Writing an Abstract
3	M Jan 19	**No Class – MLK Day**		
	W Jan 21	Microbial Community Assembly Presentation 1: Prest *et al.* 2018 Presentation 2: Echenique-Subiabre *et al.* 2025 Presentation 3: Moeller *et al.* 2016	• Hanson *et al.* 2012	
	F Jan 23	Microbiomes and Organism Health Case Study: Coral Diseases	• Bourne *et al.* 2009	Coral Disease Worksheet
4	M Jan 26	Microbiomes and Organism Health Presentation 4: Santillan *et al.* 2022 Presentation 5: Bourceret *et al.* 2022 Presentation 6: Rosales *et al.* 2020	• Dorrestein *et al.* 2014 • Gilbert *et al.* 2018	
	W Jan 28	Ecological Theory: Disturbance and Succession Lecture IDH Worksheet	• Shade *et al.* 2012	IDH Worksheet
	F Jan 30	Microbial Competition Case Study Activity: Kerr et al. 2002	• Kerr et al. 2002 • Ghoul & Mitri 2016	
5	M Feb 2	Exam I Review		
	W Feb 4	**Exam I**		
	F Feb 6	Microbiology of the Built Environment Lecture Case Study Discussion: Lax *et al.* 2014	• Lax *et al.* 2014	Built Environment Worksheet
6	M Feb 9	**No Class – Wellbeing Day**		
	W Feb 11	Trophic Control by Viruses Lecture Discussion: Knowles et al. 2016	• Knowles *et al.* 2016	Virus Worksheet
	F Feb 13	Viral Ecology Presentation 7: Emerson *et al.* 2018 Presentation 8: Moniruzzaman *et al.* 2020 Presentation 9: Cissell & McCoy 2023	• Wilhelm *et al.* 2016	
7	M Feb 16	Ecological Theory: Infectious Disease **Asynchronous Worksheet**		Infectious Diseases Worksheet
	W Feb 18	Zoonoses and EEID Review Lecture & Discussion	• Come prepared to discuss your worksheet	Assign Debate Teams

	F Feb 20	Zoonoses Presentation 10: Huang *et al.* 2013 Presentation 11: Edmunds *et al.* 2016 Presentation 12: L'Hôte *et al.* 2024		
8	M Feb 23	Symbioses Lecture Presentation 13: Lechene *et al.* 2007 Presentation 14: Douglas *et al.* 2011	• Hoffmeister and Martin 2003	
	W Feb 25	Plant-Microbe Interactions Lecture Presentation 15: Pfister *et al.* 2025 Presentation 16: Power & Mitchell 2004	• Vandenkoornhuyse *et al.* 2015	
	F Feb 27	Biogeochemical Cycles Presentation 17: McCalley *et al.* 2014 Presentation 18: Siljanen *et al.* 2025 Presentation 19: Fonseca *et al.* 2025	• Ramond *et al.* 2022	Seminar Assignment I
9	M Mar 2	Soil Ecosystems Presentation 20: Fierer *et al.* 2013 Presentation 21: Forehead *et al.* 2013 Presentation 22: Pommier *et al.* 2017		
	W Mar 4	Microbial Interactions Media Summary Activity	• Read at least 2 of: • Valentin-Alvarado *et al.* 2024 • Calfee *et al.* 2022 • Geesink *et al.* 2022 • Booth *et al.* 2023	Media Summary I
	F Mar 6	Antibiotic Resistance Lecture Case Study Activity: Avillan *et al.* 2022	• Aminov & Mackey 2007 • Martinez 2008	Antibiotic Resistance Worksheet
10	M Mar 9	Debate Prep I **Asynchronous Meeting with your Team**	• Find your own primary literature • Lax *et al.* 2017 • Palmer & Foster 2022	
	W Mar 11	**Debate I: How should you clean a hospital?**		Debate Response I
	F Mar 13	Agricultural Soils ASM Agricultural Soils Video and Discussion		
	M Mar 16 – F Mar 20	**Spring Break**		
11	M Mar 23	Gene Editing Lecture and Worksheet Assignment Design	• Garneau *et al.* 2010	Gene Editing Worksheet
	W Mar 25	Gene Editing in Agriculture Presentation 23: Danfo *et al.* 2019 Presentation 24: Veillet *et al.* 2019 Presentation 25: Waites *et al.* 2025		Assignment Design - Upload Lesson and Learning Outcomes Component
	F Mar 27	Gene Editing for Conservation Lecture Presentation 26: Kishi *et al.* 2014 Presentation 27: Tripathi *et al.* 2022	• Chen 2024	
12	M Mar 30	Exam II Review		Peer Review I Completed
	W Apr 1	**Exam II**		Exam II
	F Apr 3	**No Class – University Holiday**		
13	M Apr 6	Debate Prep II **Asynchronous Meeting with your Team**	• Find your own primary literature	Assignment Design Full Draft (Lesson and Grading Rubric)
	W Apr 8	**Debate II: Who should set the rules of gene editing?**		Debate Response II
	F Apr 10	Microbiomes in Forensic Science Case Study Activity: Harrison *et al.* 2020	• Speruda *et al.* 2021	Forensic Worksheet

14	M Apr 13	Microbes in the Ocean Lecture Presentation 28: Rubin-Bloom *et al.* 2019 Presentation 29: Lauro *et al.* 2005	• Sylveira *et al.* 2017	Peer Review II Completed
	W Apr 15	Thermal Extremes Presentation 30: Mackenzie *et al.* 2013 Presentation 31: Stock *et al.* 2025 Presentation 32: Ortiz *et al.* 2021		
	F Apr 17	Wastewater Treatment Presentation 33: Drewniak *et al.* 2016 Presentation 34: Arevalo *et al.* 2022 Presentation 35: Hou *et al.* 2022		
15	M Apr 20	Experimental Design Case Study Activity: How would you select for plastic-degrading microbes?	• Wallbank *et al.* 2025	Experimental Design Write Up Assignment Final Draft
	W Apr 22	Engineered Microbial Communities Presentation 36: Chen *et al.* 2015 Case Study Media Summary: Shou *et al.* 2007	• Ratiner *et al.* 2023	Media Summary II
	F Apr 24	Microbes in Outer Space **Asynchronous Worksheet**	• Koehle *et al.* 2023	Microbes in Outer Space Worksheet Seminar Assignment II
16	M Apr 27	Final Exam Review or Flex Topic		
	W May 4 8-11 am	**Final Exam**		

POLICY STATEMENTS

Academic Policies

University Class Attendance Policy

University Policy: As stated in the University's Class Attendance Policy, no right or privilege exists that permits a student to be absent from any class meetings, except for these University Approved Absences:

1. Authorized University activities: University Approved Absence Office (UAAO) website provides information and FAQs for students and FAQs for faculty related to University Approved Absences
2. Disability/religious observance/pregnancy, as required by law and approved by the Equal Opportunity and Compliance Office (EOC)
3. Significant health condition and/or personal/family emergency as approved by the Office of the Dean of Students, Gender Violence Service Coordinators, and/or the Equal Opportunity and Compliance Office (EOC).

Code of Conduct

All students are expected to adhere to University policy and follow the guidelines of the UNC Code of Conduct. Additional information can be found at https://studentconduct.unc.edu/.

Artificial Intelligence (AI) Use Policy

In this course, we will follow the recommendations of UNC's AI Committee for the responsible and ethical use of generative AI tools such as ChatGPT. The committee recommendations are described in full under the Syllabus Guidelines for Generative AI section at this link: https://provost.unc.edu/student-generative-ai-usage-guidance/ Here we provide only excerpts that are most relevant to this course:

Generative AI is extremely useful; however, it has the following limitations:

- How output is arrived at is not clear as the internal processes used to produce a particular output within the generative AI cannot be determined.
- The output is based on existing data (often scraped from online sources) and may reflect biases that should be acknowledged; it may also be inaccurate or entirely fabricated, even if it appears reliable or factual.
- AI evokes a range of intellectual property concerns; sourcing and ownership of information is unclear, and the status of AI output raises numerous questions—e.g., is output equivalent to a published resource? What citational responsibilities are in place for various AI interactions?

Usage Philosophy

Use of generative AI in your coursework is based on the following principles:

1. **AI should help you think.** Not think for you.
   Use these tools to help generate ideas, perform research (in compliance with point 2 below), and analyze problems. Do not use them to do your work for you, e.g., do not enter an assignment question into ChatGPT and copy & paste the response as your answer.
2. **Engage with AI Responsibly and Ethically:** Engage with AI technologies responsibly, critically evaluating AI-generated outputs and considering potential biases, limitations, and ethical implications in your analysis and discussions. Utilize AI technologies ethically, respecting privacy, confidentiality, and intellectual property rights. Ensure that the data used for AI applications is obtained and shared responsibly and in compliance with relevant regulations.
3. **You are 100% responsible for your final product.**
   You are the user. If the AI makes a mistake, and you use it, it's your mistake. If you don't know whether a statement about any item in the output is true, then your responsibility is to research it. If you cannot verify it as factual, you should delete it. You hold full responsibility for AI-generated content as if you had produced the materials yourself. This means ideas must be attributed, facts are true, and sources must be verified.
4. **The use of AI must be open and documented.**
   The use of any AI in the creation of your work must be declared in your submission and explained. Details on how to source your AI usage are explained below.

Specific Guidelines

Not following these guidelines may be a reportable violation to the UNC Honor Court.

We anticipate that many of you will use generative AI as you work toward answering Group Discussion Problems.

- **Research:** If you use AI to support your research, you must account for and document your use. Possibilities include topic brainstorming, search assistance, source evaluation, and summaries and source documentation. Track your use of AI throughout these stages, and then document this assistance as you submit the project. Any material generated through AI in your projects should also be documented in your citations.
- **Writing & Presentation:** In principle, you may submit material that contains AI-generated content, or is based on or derived from it, if this use is properly documented. This may include drafting an outline, preparing individual sections, combining elements, removing redundant parts, and compiling and annotating references. Your documentation must make the process transparent – the submission itself must meet the relevant standards of attribution and validation.
- Group Work: Group work guidelines are based on the type of assignment above (e.g., a group written assignment will use the guidelines for written assignments).

Sourcing Use of AI

- **Accuracy:** Generative AI may invent both facts and sources for those facts. Verification is your responsibility, whether the source of the error is you or the AI makes no difference. You need to check the facts, the quotes, the arguments, and the logic, and document what you did to validate your material.
- **Attribution:** All ideas that are not originally your own have a source and that source must be attributed. Please be aware that generative AI tends to invent sources. You have a two-fold obligation with respect to attribution:

  (1) If a source is identified, find and attribute the original source of the idea, identify the location of the text within the source, and provide a working link to the location (if the source is available online). If you are not able to locate the source, delete that content.

(2) Document the process by explaining how you used generative AI in a work statement that will accompany your submission of major projects in the class. As you submit a project, develop, and include an appropriate version of the below statements:

- "I attest that this project made use of AI in the following ways:"
  You must then use the following form to document your usage. *

*Note that such attribution is not a valid source for facts, only for the output itself.

[1] ChatGPT was used in the development of these guidelines – more specifically, it was employed to generate suggestions for student use policies and to rephrase and consolidate certain sections of the text. Also, Sentient Syllabus was a resource for a number of the ideas within this document.

Syllabus Changes

The instructor reserves the right to make changes to the syllabus including assignment due dates and test dates. These changes will be announced as early as possible.

Acceptable Use Policy

By attending the University of North Carolina at Chapel Hill, you agree to abide by the University of North Carolina at Chapel Hill policies related to the acceptable use of IT systems and services. The Acceptable Use Policy (AUP) sets the expectation that you will use the University's technology resources responsibly, consistent with the University's mission. In the context of a class, it's quite likely you will participate in online activities that could include personal information about you or your peers, and the AUP addresses your obligations to protect the privacy of class participants. In addition, the AUP addresses matters of others' intellectual property, including copyright. These are only a couple of typical examples, so you should consult the full Information Technology Acceptable Use Policy, which covers topics related to using digital resources, such as privacy, confidentiality and intellectual property. Additionally, consult the Safe Computing at UNC website for information about data security policies, updates, and tips on keeping your identity, information, and devices safe.

Data Security & Privacy

UNC-Chapel Hill is committed to fulfilling its responsibilities of transparency as a state-sponsored institution of higher learning, protecting certain types of information, and using information Carolina collects only for appropriate purposes. Consult the UNC-Chapel Hill Privacy Statement for additional information.

Services & Student Support Policies

Equal Opportunity and Compliance - Accommodations

Equal Opportunity and Compliance Accommodations Team (Accommodations - UNC Equal Opportunity and Compliance) receives requests for accommodations for disability, pregnancy and related conditions, and sincerely held religious beliefs and practices through the University's Policy on Accommodations. EOC Accommodations team determines eligibility and reasonable accommodations consistent with state and federal laws.

Counseling & Psychological Services (CAPS)

UNC-Chapel Hill is strongly committed to addressing the mental health needs of a diverse student body. The Heels Care Network website is a place to access the many mental health resources at Carolina. CAPS is the primary mental health provider for students, offering timely access to consultation and connection to clinically appropriate services. Go to the CAPS website or visit their facilities on the third floor of the Campus Health building for an initial evaluation to learn more. Students can also call CAPS 24/7 at 919-966-3658 for immediate assistance.

Title IX Resources

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Reports can be made online to the EOC or by contacting the University's Title IX Coordinator, Elizabeth Hall, or the Report and Response Coordinators in the Equal Opportunity and Compliance Office. Please note that I am designated as a Responsible Employee, which means I must report to the EOC any information I receive about the forms of misconduct listed in this

paragraph. If you'd like to speak with a confidential resource, those include Counseling and Psychological Services and the Gender Violence Services Coordinators. Additional resources are available at safe.unc.edu.

Policy on Non-Discrimination

The University is committed to providing an inclusive and welcoming environment for all members of our community and to ensuring that educational and employment decisions are based on individuals' abilities and qualifications. Consistent with this principle and applicable laws, the University's Policy Statement on Non-Discrimination offers access to its educational programs and activities as well as employment terms and conditions without respect to race, color, gender, national origin, age, religion, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression. Such a policy ensures that only relevant factors are considered, and that equitable and consistent standards of conduct and performance are applied.

If you are experiencing harassment or discrimination, you can seek assistance and file a report through the Report and Response Coordinators (email reportandresponse@unc.edu or see additional contact info at safe.unc.edu) or the Equal Opportunity and Compliance Office. Please note that I am designated as a Responsible Employee, which means that I must report to the EOC any information I receive about harassment or discrimination. If you'd like to speak with a confidential resource, those include Counseling and Psychological Services and the University's Ombuds Office.

Diversity Statement

I expect all students to respect the perspectives, ideas, questions, and opinions of others in this course and to for instructors and students to treat each other with respect and kindness.

Undergraduate Testing Center

The College of Arts and Sciences provides a secure, proctored environment in which exams can be taken. The Undergraduate Testing Center works with instructors to proctor exams for their undergraduate students who are not registered with ARS and who do not need testing accommodations as provided by ARS. In other words, the Center provides a proctored testing environment for students who are unable to take an exam at the normally scheduled time (with pre-arrangement by your instructor).

Learning Center

Want to get the most out of this course or others this semester? Visit UNC's Learning Center to make an appointment or register for an event. Their free, popular programs will help you optimize your academic performance. Try academic coaching, peer tutoring, STEM support, ADHD/LD services, workshops and study camps, or review tips and tools available on the website.

Writing Center

For free feedback on any course writing projects, check out UNC's Writing Center. Writing Center coaches can assist with any writing project, including multimedia projects and application essays, at any stage of the writing process. You don't even need a draft to come visit. To schedule a 45-minute appointment, review quick tips, or request written feedback online, visit the Writing Center's website.