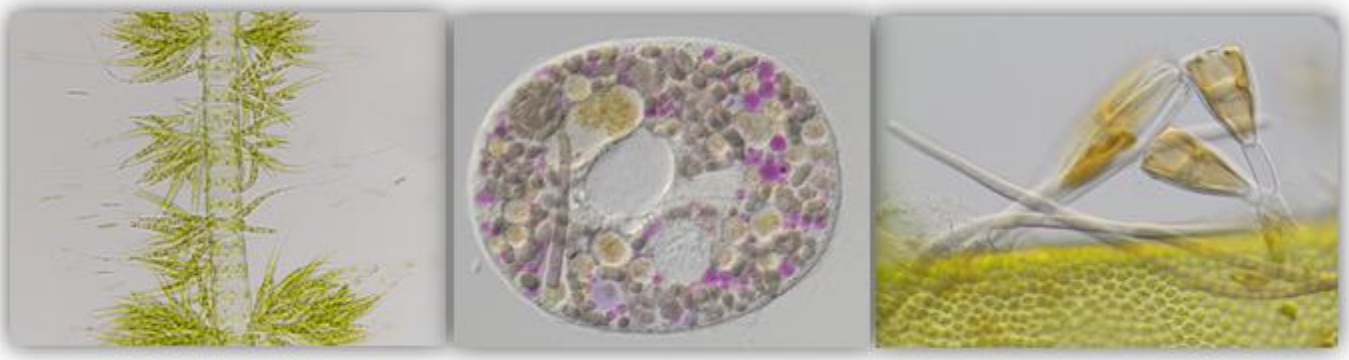


PROTIST DIVERSITY AND ECOLOGY
EVPP 441/EVPP 505

Lecture Syllabus, Spring 2025

Course Content:

Our examination of this material will include asynchronous virtual lectures and laboratories in-person, selected readings, and laboratory exercises.

Mode of instruction

Asynchronous virtual instruction will be used for the lectures. Lectures will consist of prerecorded, narrated power point presentations that will be posted to our Course Webs Site on Blackboard.

Labs in person: Fri 10:30 am – 1:15 pm, Potomac Science Center L005
Lecture power point presentations will be posted to our course webs site (Blackboard) every Monday at 10 am for review prior to the lectures in-person.
Course Web Site: Go to http://mymason.gmu.edu, log in with your netID (this is your email name without @gmu.edu) and your GMU email password. All information for the lectures will be posted here weekly.

Lecture Instructor

Dr. Rosalina Christova
Assistant Professor, Environmental Science and Policy
Office: 2102 Potomac Science Center
Office hours: Friday 1:30 – 3:30 pm and by appointment, including virtual option.
Email: rchris13@gmu.edu
Phone: (703) 993-1048

Communication

Office hours are your opportunity to meet with me one-on-one (and with others, if you like) and ask questions about the course - or anything else. We can talk about campus resources, majors and minors, recommendation letters, writing your CV, your future plans, or we can just have a chat, a cup of tea, and a bite of comfort food.

Emails are the main mode of communication. I'll try to answer emails within 24 hours (except for the weekends), IF you include EVPP/BIOL 350 in the subject line. It is also our responsibility to contact you if

you are absent from **Course Web Site** and lab for more than a week. If that happens, I'll reach out to make sure you are well. **Confidentiality** is important to all of us, so I will protect your privacy. P**lease contact me in advance if you cannot attend a lab, or you need extended time for your assignments** or have any other difficulties.

I understand that life happens and some days are harder than others. Please take care of yourselves, and reach out for support if you need it. I would like to know how you are doing and to help if you need it. If you tell me that you are having trouble, I am not going to judge you or think less of you. I hope you will extend me the same grace.
So, let's lay out some rules:
• You *never* owe me personal information about your health (mental or physical), or anything else
• You are always welcome to talk to me about things that you are going through
• If I cannot help you, I usually know somebody who can
• If you need specific accommodations for test taking or other issues, visit https://ds.gmu.edu/. See the paragraph on the last page of this syllabus for details.
• If you need extra help, miss class, or more time with assignments, just ask. ***I promise I will work with you.***

Course Description and Goals

This course is designed to examine the diversity and ecology of photosynthetic and non-photosynthetic eukaryotic protists and cyanobacteria (precursors to protists) primarily distributed in freshwater and marine habitats. The evolution and phylogeny of these related, but relatively distinct organismal groups are highlighted. An ecological perspective is used to explore the diversity and ecological significance of algae which are the main primary producers in aquatic ecosystems and heterotrophic protozoa which play an important role as consumers in microbial food webs. Biotechnological applications of protists such as their potential as energy sources and as building materials is explored as well economic and health concerns caused by harmful and nuisance algal blooms and protozoan parasites are discussed. The laboratory provides students with hands on exercises to sample, view and identify protists as well as experience in laboratory and field methods used by aquatic ecologists to sample and study protists.
Prerequisites: EVPP 210 or BIOL 213; EVPP 301 or BIOL 300

Course Learning Outcomes

- Knowledge of algal and protozoan diversity and ecology
- Understanding of how the major groupings of protists are differentiated and the major evolutionary steps that led to such a diversity
- Current concepts in protist systematics, ecological adaptations and reproductive strategies
- Ability to discuss the basic characteristics of photosynthetic cells and the role of single and multiple endo-symbioses in major algal lines
- In-depth appreciation of ecological roles of protists in aquatic ecosystems.
- Consideration of importance and functional role of autotrophic algae and heterotrophic protozoa in aquatic ecosystems and food webs.
- Examine and be able to recognize representative common members of each major group of algae and protozoa, including cyanobacteria, both freshwater and marine
- Learn current field and laboratory methods for collecting and identifying benthic and planktonic algae and protozoa
- Learn how to measure some aspects of protist activity and growth in the lab and in the field.

Course Culture, Roles and Responsibilities

Scientists collaborate to learn, ask questions, and explain phenomena. The classroom culture is designed to engage you in thinking like an environmental scientist. This means cooperative learning and problem solving will be emphasized. The most important aspect of this class, and being a scientist, involves how you show up and contribute in a respectful and collaborative way in all your scientific pursuits. You will self-assess your efforts as a community member throughout this class, and your activities as a community member will be evidenced in your performance in the class.

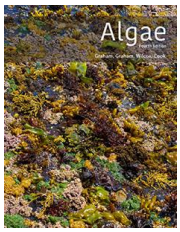
As facilitator I will encourage and create a learning environment in which **all** students are **actively** engaged in the process of scientific thought and reasoning. I would like to create a learning community that supports a **diversity** of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.). To help accomplish this, if you have a name and/or set of pronouns that differ from those that appear in your official records, please let me know. I shall guide your development toward **higher-order thinking and reasoning** skills so you can successfully explore and demonstrate achievement of each of the goals above. My responsibility is to present course concepts and to facilitate your understanding of them, so please ask questions in class and feel free to stop by during office hours or contact us with any questions that are not adequately addressed in class or in our materials. We will work together to find the best solution to support your success in our class.

How to Be Successful in This Course

- This course will give you flexibility, but will also require discipline. This means that you will need to take responsibility for viewing and taking notes during the lectures on your own schedule. It will be easy to get behind unless you are diligent in scheduling time to view the lectures each week.
- **I plan to record two lectures for each week, each a little over an hour in length.** I recommend that you set aside in advance two periods of one and a half hours per week to view and take notes on these lectures. Scheduling this time on a regular basis each week will make you much more successful in this course.
- Attend every lab in person. **If you cannot attend a lab class, please let us know in advance.** This is particularly true of the field trips.
- Access the **Course Web Site** on **Blackboard** and GMU email daily.
- Get familiar with weekly postings and due dates.
- Take good notes and pictures during the field trips and labs.
- Complete exams, assignments and final presentations/papers.
- Devote at least 4 additional hours per week for these learning activities.
- Computer, web and other problems will happen! No worries, inform me in a timely manner and we will figure it out!

Required Textbook

Graham, L. E., Graham, J. M., Wilcox, K. L. & M. E. Cook, 2022. *Algae* (4th Ed.), LJLM Press.
Archibald, J. M. et al., 2020. Handbook of the Protists. Springer (Free download available)



Course Topics and Schedule

This topic sequence is approximate and may change.
All assignments will be posted **on Blackboard Tuesday at 1:00 pm** and **due following Tuesday at 1:00 pm.**

Week/Date	Lecture	Lecture Topic	Reading	Activity
Week 1 1/20	1.1	Why we study protists? Defining protists, protistology and phycology. Protist habitats and ecology. Their ecological importance. Their role in altering the composition of the atmosphere and lithosphere. Harmful algal blooms. Their technological applications in biotechnology, food and pharmaceutical industries. Aquaculture.	Graham et al. 2022, Chapters 1, 2, 4	
	1.2	Overview of major protist groups. Their morphology, reproduction and life cycles. Agal pigmentation, photosynthesis, nutrition in non-photosynthetic protists, Mixotrophy.	Graham et al. 2022, Chapter 1	
Week 2 1/27	2.1	**Cyanobacteria** – "The nitrogen-fixers and toxic harmful blooms producers" Prokaryotic cell structure. Cyanobacteria as precursors of protists. Morphology, diversity, reproduction, distribution and ecology. Extreme habitats. Nitrogen fixation, toxin and odor production. Cyanobacterial symbioses. Fossil record.	Graham et al. 2022, Chapter 6	
	2.2	Protist phylogeny and relationships. Biological classification and species concepts. Vertical vs. horizontal gene transfer. Molecular phylogenetic approaches and applications. • ***Invited Speaker Dr. Dale Casamatta, University of North Florida***	Graham et al. 2022, Chapter 5	
Week 3 2/03	3.1	Endosymbiosis and the diversification of eukaryotic algae. Origins of algal plastids.	Graham et al. 2022, Chapter 7	Quiz 1
	3.2	**Red Algae (Rhodophyta)** – "The marine red carpet" Morphology, diversity, distribution and ecology. Life cycles. Ecological importance in benthic marine communities. Applications: biotechnology, food industry, mariculture. Fossil record.	Graham et al. 2022, Chapter 15	
Week 4 2/10	4.1	**Green Algae I:** "The Precursors to Plants" Ulvophyceae, Treboxiophyceae, Chlorophyceans (including Volvocales, Oedogoniales, Chaetophorales). Morphology, diversity, distribution, reproduction and ecology. Importance in aquatic ecosystems. Applications: biotechnology, food industry, aquaculture.	Graham et al. 2022, Chapter 16-19	Quiz 2
Week 5 2/17	**Exam 1**			**Exam 1**
	5	**Green Algae II:** "The Precursors to Plants" Streptophytes: Zygnematophyceae, Coleochaetophyceae, Charophyceae Morphology, diversity, distribution, reproduction and ecology. Importance in aquatic ecosystems.	Graham et al. 2022, Chapter 20	
Week 6 2/24	6.1	**Chrysophyceans, Synurophyceans, Eustigmatophyceans, Dictyochophyceans** – "The golden microalgae with one hairy flagellum"; **Xanthophyceans** – "The yellow-green algae" Relationships and life histories. Morphology, diversity,	Graham et al. 2022, Chapter 13	

		distribution and ecology. Applications: Mixotrophy. Nuisance blooms. Fossil record.		
	6.2	**Diatoms (Bacillariophyta)** – "The golden unicells enclosed within a silica box" Relationships and life histories. Morphology, diversity, distribution and ecology. Applications: importance in food webs, toxic marine blooms (*Pseudo-nitzschia*). Fossil record.	Graham et al. 2022, Chapter 12	Quiz 3
Week 7 3/03	7.1	**Haptophytes** (Haptophyta/Prymnesiophyta) – "The calcifying plated unicells and their toxic freshwater relatives" Relationships and life histories. Morphology, diversity, distribution and ecology. Applications: carbon sequestration. Toxin producers (*Prymnesium*). Cryptic species. Fossil record.	Graham et al. 2022, Chapter 10	
	7.2	**Brown Algae (Phaeophyta)** – "The marine brown giants" Photosynthetic Stramenopiles III: cellular and flagellar features. Morphology, diversity, distribution and ecology. Life cycles. Ecological importance in benthic marine communities. Applications: biotechnology, food industry, mariculture.	Graham et al. 2022, Chapter 14	Quiz 4
Week 8 3/10		**Spring Break**		
Week 9 3/17	9.1	**Euglenoids** – "The swimmers in polluted ponds" Morphology, life history, diversity, distribution and ecology. Applications: nuisance and toxic blooms.	Graham et al. 2022, Chapter 8	
	9.2	**Cryptomonads** – "The swimmers in lakes" Relationships and life histories. Morphology, diversity, distribution and ecology. Applications: Mixotrophy, kleptoplastidy, ejectosomes.	Graham et al. 2022, Chapter 9	
Week 10 3/24	**Exam 2**			**Exam 2**
	10	**Dinoflagellates** – "The toxic red tides producers" Photosynthetic Alveolates: relationships and life histories. Dinoflagellates: morphology, diversity, distribution and ecology. Applications: toxic marine red tides blooms, freshwater nuisance blooms	Graham et al. 2022, Chapter 11	
Week 11 3/31	11.1	**The Protozoa - "The heterotrophic Protists"** **Ciliates (Ciliophora)** – "The hairy protozoa". Morphology, diversity, distribution, reproduction and ecology. Importance in aquatic ecosystems.	Lynn 2007	
	11.2	**Amoebozoans: "The Blobby Protists"** Lobose amoebae (naked and testate), Rhizarians, Radiolarians, Foraminiferans, Plasmodial slime molds, Cellular slime molds - morphology, life cycle, ecology and habitats. ***Invited Speaker Dr. Brittany Hupp, George Mason University***	Archibald et al. 2020, Chapters: "Amoebozoan Lobose Amoebae, Myxomycetes Dictyostelia"	
Week 12 4/07	12.1	**Heterotrophic Flagellates, Non-photosynthetic Excavates:** *Trypanosoma, Naegleria, Giardia*: parasites on humans. **Non-photosynthetic Alveolates:** Apicoplexans: parasites on humans and animals (e.g., *Plasmodium, Toxoplasma,*	Archibald et al. 2020, Chapter: "Apicoplexa", "Kinetoplastea", "Polycystinea", "Stycholonche",	

		Cryptosporidium). **Non-photosynthetic fungus-like Stramenopiles**: structure, diversity, distribution and ecology. Applications: parasites on plants and aquatic organisms.	"Hyphochytriomycota and Oomycota", "Labyrinthulomycota"	
	12.2	**Phytoplankton Ecology** Response to physical and chemical environment. Productivity and food chain contributions. Protists in food webs and microbial loop. Growth and loss processes. Competition. Grazing. Mixotrophy. ***Invited Speaker Dr. R. Christian Jones, George Mason University***	Graham et al. 2022, Chapters 3, 21 Wehr et al. 2015, Chapter 2	Quiz 5
Week 13 4/14	13.1	**Periphyton Ecology** Response to physical and chemical factors. Productivity and food chain contributions. Growth and grazing. Lakes vs. streams.	Graham et al. 2022, Chapter 23 Wehr et al. 2015, Chapter 2	
	13.2	**Algae in symbioses:** lichens, corals, zooxanthellae, zoochlorellae, nitrogen-fixing cyanobacterial endosymbionts in diatoms and other algae. Importance of symbioses in terrestrial, freshwater and marine ecosystems.	Graham et al. 2022, Chapter 3.2	Quiz 6
Week 14 4/21	14.1	**Algae as environmental monitors.** Algal bioassays. Algae as indicators of water quality and paleoenvironmental conditions. Algae in water and air remediation.	Graham et al. 2022, Chapter 4	
	14.2	**Harmful, nuisance and invasive eukaryotic algae and cyanobacteria**. Distribution, ecological and economic importance. Impact of climate change on harmful algal blooms. Cyanobacterial toxic harmful blooms (planktonic and benthic: overview, distribution, importance, monitoring and management). ***Invited Speaker Dr. Michael Paul, EPA National HAB Program Lead*** ***This lecture will be in person during the lab time (04.18.2025)***	Wehr et al. 2015, Chapter 20 ITRC 2020 https://hcb-1.itrcweb.org/ ITRC 2022 https://hcb-1.itrcweb.org/	
Week 15 4/28	15.1	**Algae and biochemistry.** Role of algae and cyanobacteria in sedimentary rock formation (stromatolites, diatomite, chalk from coccolithophores, coralline rock, lime secreting algae). Production of fossil fuels, and global carbon cycling. Protists in building materials (algae as substitute for concrete).	Graham et al. 2022, Chapter 2, 4 https://time.com/6192603/algae-plant-buildings-carbon	Quiz 7
	Presentations			**Presentations**
FINAL EXAM (Finals Week)				

College of Science
POTOMAC ENVIRONMENTAL RESEARCH AND EDUCATION CENTER
George Mason University

Methods of Evaluation

● **Laboratory activity (100 points total)**

The laboratory report and participation in the laboratory will count 100 pts.

● **Exams (150 points total)**

For the lecture, there will be two mid-term exams (50 points each) and a final exam which will cover the material since the 2nd exam. The exams will have multiple choice questions, true-false questions and a cumulative essay question which allow you to demonstrate your creative thinking about subject matter in this course. Examples will be presented in lecture and posted on Blackboard. Review sessions will be held before each exam. All exams are closed book.

These are **not** open book exams, so please study for the exams and do your own work without consulting with other class members. Address any questions to one of the instructors. The exams will need to be completed in the available time and will be proctored by **Respondus LockDown Browser. For information on how to use Respondus LockDown Browser visit https://its.gmu.edu/knowledge-base/how-to-install-and-use-the-respondus-lockdown-browser/**

● **Class activity (50 points total)**

There will be seven quizzes during the semester to help you to grasp the material, but only five will be graded until you reach the maximum 50 points (10 points each quiz).

● **Lead journal article discussion for all students (50 points)**

A brief 20 minutes presentation is required on any topic of your choosing related to one of more of the lectures. Please use this opportunity to research and present additional information about the fascinating organism or fact you discovered in this course to the class. This presentation will be given during the lectures.

● **Brief paper on lead journal article for graduate students (50 points)**

A brief paper is required consisting of a total of approximately 2500 words (4 pages single spaced) on any topic of your choosing related to one of more of the lectures.

The presentation and paper will pull together information from online sources on an environmental issue involving protists (algae or protozoa) or cyanobacteria and published online. Guidelines will be forthcoming as a separate document. Example publications are provided next: "Didymo (Invasive Freshwater Algae) in Virginia" (https://dwr.virginia.gov/fishing/didymo/); "2021 Cyanobacteria Bloom and Recreational Advisory for the North Fork Shenandoah River, Virginia, USA" (https://www.youtube.com/watch?v=5N-YZon1a_k); PEREC Gunston Cove Ecosystem Study https://perec.science.gmu.edu/our-research/gunston-cove-study/

● **Selected articles for the presentations and papers must be approved by the instructor before Week 10.**

Graded Items	Points
1. Term exams (2 x 50 points each)	50
2. Final exam	50
3. Class activity	50
4. Presentation	50
5. Paper (graduate students only)	50
6. Lab	100
Total Points	**300 (350)**

Your final grade will be a letter grade, while your grades in class will be scores (between 0 and 100). In general, your final grade will be translated to a letter grade at the end of the semester as follows.

Graduate students will not receive (+ and - grades).

(Please note that if you make any grade less than C, the course may not count for certain requirements.)

100-98%	A+	89-88%	B+	79-78%	C+	69-60%	D
97-92%	A	87-82%	B	77-72%	C	<60%	F
91-90%	A-	81-80%	B-	71-70%	C-		

Grading-related Policies:

- **Late Work and Missed Exams.** We all know scholars have responsibilities to their education, on top of their commitments to family, other loved ones, and jobs. In fact, being a scholar is just like having a job. You have to show up on time, stay for your entire shift, do your work, and turn it in by due dates. However, we also know that sometimes one responsibility becomes more important than another, and our plans go awry. **If you have a family, medical, legal, or immigration-related emergency, please let me know so I can support an alternate plan for you to meet your responsibilities to your small group, our class, and yourself**.
- Late work will be subject of **10% deduction** of the grade if not communicated with the instructor in advance.
- All graded materials are subject to the GMU Honor Code and violations must be reported to the Honor Committee. Adherence to the GMU Honor Code is expected of all students (https://oai.gmu.edu/full-honor-code-document/)

References (* indicates free download available):

*Archibald, J. M., Simpson, A.G.B., Slamovits, C.H., Margulis, L., Melkonian, M., Chapman, D. J., Corliss, J. O., 2020. Handbook of the Protists. Springer. https://link.springer.com/referencework/10.1007/978-3-319-32669-6

*Esteban, G.F. and T.M. Fenchel, 2020. The Ecology of Free-living Protozoa. 2nd Ed. Springer. file:///C:/Users/rcjones/Downloads/978-3-030-59979-9.pdf

Graham, L. E., Graham, J. M., Wilcox, K. L. & M. E. Cook, 2022. *Algae* (4th Ed.), LJLM Press. ISBN 978-0-9863935-4-9; https://www.ljlmpress.com/algae.html

*ITRC (Interstate Technology & Regulatory Council). 2020. Strategies for Preventing and Managing Harmful Cyanobacterial Blooms (HCB-1). Washington, D.C.: Interstate Technology & Regulatory Council, HCB Team, https://hcb-1.itrcweb.org/

*ITRC (Interstate Technology & Regulatory Council). 2022. Strategies for Preventing and Managing Harmful Benthic Cyanobacterial Blooms (HCB-2). Washington, D.C.: Interstate Technology & Regulatory Council, HCB Team, https://hcb-2.itrcweb.org/

Lee, R., 2018. Phycology (5th ed.). Cambridge: Cambridge University Press. doi:10.1017/9781316407219

*Lynn, D. H., 2007. The Ciliated Protozoa. Characterization, Classification and Guide to the Literature. 3rd Ed. Springer. file:///C:/Users/rcjones/Downloads/978-1-4020-8239-9.pdf

Reynolds, C.S. 2006. The Ecology of Phytoplankton. Cambridge University Press. https://doi.org/10.1017/CBO9780511542145

Wehr, J.D., Sheath, R.G. & Kociolek, J.P. (eds.) 2015. Freshwater algae of North America. Ecology and classification. Elsevier Academic Press, Amsterdam. 873–905 pp.

*Yeager, R. G., 1996. Protozoa: Structure, Classification, Growth, and Development. Chapter 77 in: Medical Microbiology. 4th Ed. https://www.ncbi.nlm.nih.gov/books/NBK8325/ (Chapters 78-85 contain more detailed descriptions of specific disease-causing protists.)

Common Policies at GMU

Academic Standards

Academic Standards exist to promote authentic scholarship, support the institution's goal of maintaining high standards of academic excellence, and encourage continued ethical behavior of faculty and students to cultivate an educational community which values integrity and produces graduates who carry this commitment forward into professional practice. As members of the George Mason University community, we are committed to fostering an environment of trust, respect, and scholarly excellence. Our academic standards are the foundation

of this commitment, guiding our behavior and interactions within this academic community. The practices for implementing these standards adapt to modern practices, disciplinary contexts, and technological advancements. Our standards are embodied in our courses, policies, and scholarship, and are upheld in the following principles:

- ***Honesty:*** *Providing accurate information in all academic endeavors, including communications, assignments, and examinations.*
- ***Acknowledgement:*** *Giving proper credit for all contributions to one's work. This involves the use of accurate citations and references for any ideas, words, or materials created by others in the style appropriate to the discipline. It also includes acknowledging shared authorship in group projects, co-authored pieces, and project reports.*
- ***Uniqueness of Work:*** *Ensuring that all submitted work is the result of one's own effort and is original, including free from self-plagiarism. This principle extends to written assignments, code, presentations, exams, and all other forms of academic work.*

Violations of these standards—including but not limited to plagiarism, fabrication, and cheating—are taken seriously and will be addressed in accordance with university policies. The process for reporting, investigating, and adjudicating violations is outlined in the university's procedures. Consequences of violations may include academic sanctions, disciplinary actions, and other measures necessary to uphold the integrity of our academic community.

The principles outlined in these academic standards reflect our collective commitment to upholding the highest standards of honesty, acknowledgement, and uniqueness of work. By adhering to these principles, we ensure the continued excellence and integrity of George Mason University's academic community.

Student responsibility: *Students are responsible for understanding how these general expectations regarding academic standards apply to each course, assignment, or exam they participate in; students should ask their instructor for clarification on any aspect that is not clear to them.*

Accommodations for Students with Disabilities

Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit https://ds.gmu.edu/ for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu. Phone: (703) 993-2474.

Student responsibility*: Students are responsible for registering with Disability Services and communicating about their approved accommodations with their instructor in advance of any relevant class meeting, assignment, or exam.*

FERPA and Use of GMU Email Addresses for Course Communication

*The **Family Educational Rights and Privacy Act (FERPA)** governs the disclosure of education records for eligible students and is an essential aspect of any course. **Students must use their GMU email account** to receive important University information, including communications related to this class. Instructors will not respond to messages sent from or send messages regarding course content to a non-GMU email address.*

***Student responsibility**: Students are responsible for checking their GMU email regularly for course-related information, and/or ensuring that GMU email messages are forwarded to an account they do check.*

Title IX Resources and Required Reporting

*As a part of George Mason University's commitment to providing a safe and non-discriminatory learning, living, and working environment for all members of the University community, the University does not discriminate on the basis of sex or gender in any of its education or employment programs and activities. Accordingly, **all non-confidential employees, including your faculty member, have a legal requirement to report to the Title IX Coordinator, all relevant details obtained directly or indirectly about any incident of Prohibited Conduct** (such as sexual harassment, sexual assault, gender-based stalking, dating/domestic violence). Upon notifying the Title IX Coordinator of possible Prohibited Conduct, the Title IX Coordinator will assess the report and determine if outreach is required. If outreach is required, the individual the report is about (the "Complainant") will receive a communication, likely in the form of an email, offering that person the option to meet with a representative of the Title IX office.*

*For more information about non-confidential employees, resources, and Prohibited Conduct, please see **University Policy 1202**: Sexual and Gender-Based Misconduct and Other Forms of Interpersonal Violence. Questions regarding Title IX can be directed to the Title IX Coordinator via email to TitleIX@gmu.edu, by phone at 703-993-8730, or in person on the Fairfax campus in Aquia 373.*

***Student opportunity:** If you prefer to speak to someone **confidentially**, please contact one of Mason's confidential employees in Student Support and Advocacy (SSAC), Counseling and Psychological Services (CAPS), Student Health Services (SHS), and/or the **Office of the University Ombudsperson**.*

Student Support Resources on Campus

The Stearns Center for Teaching and Learning offers great resources supporting student success, such as

- Student Support and Advocacy Center (SSAC)
- Counseling and Psychological Services
- The Learning Services Office or field-specific tutoring
- The Center for Culture, Equity, and Empowerment
- LBGTQ+ Resources
- University Career Services
- University Writing Center

For full list visit https://stearnscenter.gmu.edu/knowledge-center/knowing-mason-students/student-support-resources-on-campus/ and https://wellbeing.gmu.edu/students/.