z004926 | Marine Ecology



Spring 2023 | Dr. Melissa Meadows

What will I learn in this course?

Course Description

Marine Ecology is the study of marine organisms and how they interact with their environment. This semester you will be learning about a variety of marine environments from the intertidal zone to the deep sea, with emphasis on our local marine environment in and near Florida. Throughout the semester, we will discuss how global change is influencing these systems as well as restoration and conservation to halt and even undo some of the damage.

Learning Objectives

Upon completion of this course, you will be able to:

- 1. Understand the conceptual foundations of ecology and how they apply to the marine environment.
- 2. Describe all of the major marine ecosystems and how marine organisms are adapted for each.
- 3. Discuss how humans impact marine ecosystems and how we can mitigate global change.
- 4. Apply knowledge to analyze scientific papers, imagine future career and research possibilities, and generally to solve and educate others about the challenges faced by our world today.

When and how will we meet?

On most Mondays and Wednesdays, we will meet in Mon and Wed 9:35 -10:25 AM

Turlington 2322 for lectures.

Fri 9:35 - 10:25 AM On most Fridays, we will meet also in Turlington 2322 for

Journal Club and other activities. Attendance is REQUIRED,

with one participation grade dropped.

Who is my professor, and how can I get in touch?

Instructor Bio

Dr. Melissa Meadows teaches Marine Biology, Invertebrate Biodiversity, Marine Ecology, and several other biology courses at UF. Her research has taken her around the world working on rainforest birds, hummingbirds, fish in the Red Sea, and more! Dr. Meadows loves being in the field with students; here she is with a diamondback terrapin!:) Want to know more? Check out my intro video: https://tinyurl.com/y6q3jzuu



Instructor Contact

Email: melissa.meadows@ufl.edu Office: Carr Hall room 522B Office Phone: (352) 294-6310

Drop-in Office Hours: Mon 10:45 - 11:45 AM; Wed 3-4 PM

When to Contact Dr. M (and when not to)

Please use office hours and email to discuss topics that are personal to you (your grades, something you are worried about, etc). For any question about an assignment or issue that pertains to others as well, FIRST check the syllabus, announcements, assignment instructions, and course discussion forums. If your question hasn't been answered and is not an emergency, please post on the appropriate course discussion forum. For most technical issues, refer to the table below. If it is an issue needing an answer/fixing more quickly, email Dr. M. I will respond within 24 hours M-F.

Office Hours

If you can't make any of the office hours, email me to schedule a meeting at another time. I want to get to know you, so please come! Also let me know if you would like to meet over Zoom instead of in person.

How will we communicate?

How will my instructor communicate with me?

Important course information from Dr. Meadows will typically be announced in class and/or sent via the Course Announcements feature in Canvas. You may also receive important notifications (pertinent to just you or your group) via Canvas Messages or email.

<u>Please set your notification preferences in Canvas</u> (under Account) so that you receive timely notifications of course announcements and messages, and plan to check your UFL-email regularly. Not having read the information in the syllabus, on Canvas, in course announcements, or in your email will NOT constitute an excuse for missing deadlines, assignments, or other assessments.

How do I contact my instructor?

See Who is my professor, and how can I get in touch? I will respond to you within 24 hours M-F. Emails received after 5 PM Friday and during the weekend may not be answered until Monday.

Who do I contact if I have questions about _____?

Before contacting Dr. Meadows, please double-check the information in this syllabus, the weekly schedule pages in Canvas, the course announcements, assignment instructions, and the discussion boards to be sure that your question hasn't already been answered elsewhere. If it hasn't, refer to the table below.

Something that might be applicable to other students in the course such as questions about course material, clarifications about the requirements for an assignment, or general questions about how the	Post it to the appropriate Discussion Board in Canvas.
course works.	
DRC accommodations, illness or family emergencies, other concerns about the course, etc.	Email Dr. Meadows (<u>melissa.meadows@ufl.edu</u>) and/or come to office hours.
Technical problems with Canvas, Zoom, or personal computer	Contact the UF Help Desk. If necessary, forward their response (with ticket #) to Dr. Meadows
Technical problems with McGraw-Hill Connect*	McGraw-Hill Customer Support: https://mhedu.force.com/CXG/s/ContactUs
Tips for doing well in the course (including on exams)	Please see <u>Tips for Success!</u>
Needing help with mental health, college life, etc.	Please see What if I need help with something not specific to this course?

*PLEASE NOTE - **Connect grade synching with Canvas happens intermittently** once or twice a day, not continuously. If you've finished an assignment and don't see your grade in Canvas, that's normal. It's also normal (though I agree, disconcerting) if you see a zero in Canvas for a partially or recently completed or assignment. This happens if a sync occurs when you are working on the assignment. No worries - if you see your correct grade in McGraw-Hill, it will sync over to Canvas within the next day or so. No need to contact me or tech support unless it's been a few days.

What materials do I need for this course?

eTextbook through McGraw-Hill Connect (Required)

- Marine Biology (11th Ed.), Castro & Huber, 2019, McGraw-Hill. You do not need a
 physical copy of this book unless you prefer it for reading rather than the eBook.
- You can purchase access through UF All Access for a reduced price: https://www.bsd.ufl.edu/AllAccess. Detailed instructions for setting up UF All Access can be found at
 - https://www.bsd.ufl.edu/AllAccess/Faculty/StudentDownloadPDF.
- This will include access to required assignments through McGraw-Hill Connect as well as the eBook.
- **Important:** To connect to McGraw-Hill Connect correctly so that you can complete your first reading and assignments (and your grades will sync with Canvas!!), please be sure to click into your first Connect assignment directly from within our course Canvas site via Assignments. Detailed instructions for how to do this can be found at https://www.bsd.ufl.edu/AllAccess/Home/McGrawHillConnectPDF.

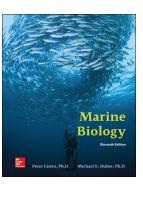
Field Guide (Required)

- Florida's Living Beaches (2nd Ed.), B. and D. Witherington, 2017. Pineapple Press.
- This book is available in paperback (ideal for the field) and as an eBook through Amazon.
- You can purchase via <u>Amazon at this link</u> or I believe the bookstore will have some copies.
- We will use this book throughout the course to get to know Florida's most accessible environments - its shores and the things that wash up or live along them. There will be optional self-guided field excursions where you can use this guide in the field along with the free iNaturalist app to help you identify organisms.
- There are many other field guides available for snorkelers or scuba divers who will gain access to other
 environments. If this is you, I also highly recommend the Caribbean Reef Fish, Creatures (by which they
 mean mostly invertebrates), and Corals books by Humann/Deloach, but these are NOT required for this
 course.

Technology

- All students are responsible for maintaining a functioning computer and internet connection.
- Microsoft Office programs are required for many of the assignments; these can be accessed by current UF students through GatorCloud: http://www.it.ufl.edu/gatorcloud/.
- See the UF Student Computing Requirement policy: https://it.ufl.edu/policies/student-computing-requirements/

There is no additional materials/supplies fee for this course this semester.



What types of graded activities and assignments will we be doing?

Exams

We will have 3 non-cumulative exams throughout the semester on topics discussed during lecture. See <u>Schedule</u> for dates.

McGraw-Hill Connect Assignments

SmartBook and Homework Assignments for each chapter will be completed through McGraw-Hill Connect. SmartBook assignments are intended to be completed after reading a chapter and before attending the lectures about each chapter. It's adaptive, will help you identify what to study more, and is scientifically shown to help students get higher course grades! Homework assignments are interactive questions to help you test your understanding. Generally, you will get full credit for completion of these assignments by the due date.

See <u>eTextbook through McGraw-Hill Connect (Required)</u> for instructions to get access. Your first Connect assignment is an introductory assignment which will explain how Connect works. These will generally be due at the beginning and end of each chapter (see <u>Schedule</u> for approximate dates for each chapter and keep up with the Syllabus "Course Summary", Assignments, and Announcements tabs in Canvas).

If you have any issues with McGraw-Hill Connect, please go to https://mhedu.force.com/CXG/s/ContactUs for support.

Journal Club

Some of our Friday meetings will be to discuss journal articles.

What is a journal club? In scientific research labs, there is usually a Journal Club in which members of the lab meet to discuss recent and relevant scientific research papers of interest to the research of the group. Principal Investigators (the professor), postdocs, grad students, and undergrads will take turns selecting a paper to discuss, distributing it, and leading a discussion about it during a group meeting. Members of the group will contribute their thoughts, points of confusion, critiques, interpretations, ideas for new research stemming from the paper being discussed, and responses to everyone else. It's a lot of fun and you learn a lot! We're going to do the same thing in this class using the current textbook chapter to guide weekly topics for paper discussions.

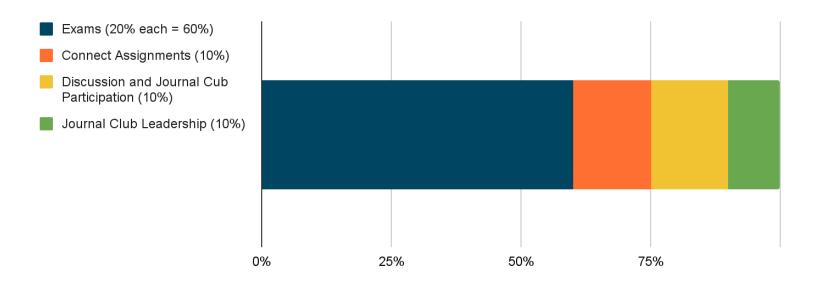
Each week, a group of 5 students will work together to select a paper with the schedule being determined by the chapter they select, develop a short presentation to introduce the paper and the researchers behind it, and lead a discussion with the class.

Everyone else will be tasked with reading the paper ahead of time and making notes on what they'd like to discuss for credit during our meeting.

More detailed information about this assignment will be available on Canvas.

How will my final grade be determined?

Final Grade Weighting by Assignment Category



Will any grades be dropped?

You will be able to drop your lowest 1 Discussion and Journal Club Participation (not leadership!). This is intended to help if you have an absence for any reason, including just needing a mental health day, not feeling well, etc., or if you are there for a discussion but are just having an off day and don't participate to your normal extent. Still, if you are going to be away please let me know as soon as possible. I'll worry, especially during the COVID-19 pandemic.

Will there be any make-ups?

In case of extenuating circumstances that cause you to miss more than your already allowable dropped assignment, please submit documentation to the DSO here: https://care.dso.ufl.edu/instructor-notifications/ and they will email not just me, but ALL of your instructors. If you know about a conflict ahead of time, please let me know in advance. To be excused and eligible for make-ups, especially exams, your conflict must be for a university-approved reason. Please see the UF policy for excused absences https://catalog.ufl.edu/UGRD/academic-r. In all cases, please contact me ASAP to let me know and make arrangements.

Can I submit work late?

Generally, no. See the 2 policies above for dropped grades and make-ups. Please contact me and the DSO if you have extenuating circumstances. Forgetting about the assignment is not a reason to have late work accepted. If you have a technical issue, please contact the relevant technical support listed here and here. Because technical problems happen (and things can take you longer than expected, here. Because technical problems happen (and things can take you longer than expected, here.

Final Grade Scale

Point Range %	Grade
≥ 93.00	А
≥ 90.00	A-
≥ 87.00	B+
≥ 83.00	В
≥ 80.00	B-
≥ 77.00	C+
≥ 73.00	С
≥ 70.00	C-
≥ 67.00	D+
≥ 63.00	D
≥ 60.00	D-
< 60.00	Е

Will final grades be curved or rounded?

No.

Will there be extra credit?

Extra credit assignments MAY be offered. If offered, it will be open to all students and will be clearly communicated in the Course Announcements on Canvas. **NO INDIVIDUAL EXTRA CREDIT WILL BE AVAILABLE**. It is not fair to other students to ask for special treatment at the end of the semester.

What if I'm right on the borderline of the next highest grade?

Please do not request individual special treatment (extended deadlines without a documented excused absence, grade adjustments, individual extra credit) at the end of the semester; I do not adjust grades or provide special treatment for individuals for any reason.

I know it can be very frustrating to be only a few points away from the next highest grade, so please put in the work you need to make sure you earn the grade you want, **starting at the beginning of the semester**!

What other course policies and expectations should I follow?

What is generally expected of me?

PARTICIPATE. Ask questions. Connect with one another. Meet your instructor during office hours. We are a community of learners!

What is the academic honor policy?

Please, y'all. Please. No one wants to deal with an academic honor violation. Just don't cheat or plagiarize.

All assignments, discussions, and exams are expected to be in your own words, and to reflect your own work and your own understanding of the material.

All students registered at the University of Florida have agreed to comply with the following statement:

"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

In addition, on all work submitted for credit the following pledge is either required or implied:

"On my honor I have neither given nor received unauthorized aid in doing this assignment."

If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Student Honor Code and Student Conduct Code at: https://sccr.dso.ufl.edu/process/student-conduct-code/

In this course, academic dishonesty includes (but is not limited to):

- discussing or sharing exam questions or answers with other students present or past
- using outside resources when not explicitly allowed for an exam, quiz, or assignment
- collaborating with other students on course assignments or quizzes when not explicitly permitted
- copying the work of other students in whole or in part
- allowing other students to copy your work
- sharing completed assignments with other students or repositories, either in person or online, during the semester or in the future
- posting course materials on "cheat sites" such as Course Hero
- plagiarism of any kind

Academic dishonesty or other Honor Code violations will not be tolerated, and *each incident* will result in assignment and grade penalties, as well as additional sanctions as appropriate, up to and including a failing grade in the class.

How will we celebrate diversity?

We need diversity of opinion, social class, culture, religion, sexual orientation, gender, race, ethnicity, and ability in science. Enjoy the diverse scientists you learn about. Ask why diversity is lacking. Maintain an environment of respect and inclusion at all times. Listen and learn from all.

How should I interact with classmates?

Behave with courtesy towards your fellow students and the instructors. This is particularly important in discussion boards, peer reviews, and in discussions where you are commenting on the work of other students. Students who are rude or disrespectful will be blocked from future participation (with corresponding loss of points).

What if I have DRC accommodations?

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. This class supports the needs of different learners; it is important for students to share their accommodation letter with Dr. Meadows and discuss their access needs as early as possible in the semester.

Accommodations are only available to students with this documentation from the DRC, and accommodations are not retroactive (i.e. accommodations can not be made for assignments submitted prior to Dr. Meadows receiving the letter).

What is the expected workload for this course?

The UF College of Liberal Arts and Sciences assumes that each student will devote on average 3-4 hours per week per credit-hour to each course during the regular semester. Because Marine Ecology is 3 credits, each student should therefore expect to devote an average of **9-12 hours per week** (in addition to the 150 minutes in class) to this course in a 15-week semester. This time will not necessarily be evenly distributed; some weeks will have heavier workloads than others.

How do I provide feedback on this course?

If you have suggestions on how to make the course better, easier to navigate, etc., please feel free to e-mail these to Dr. Meadows at any point!

Students are also expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available from the Gatorevals website. You will be notified when the evaluation period opens, and can complete evaluations through the email you receive from GatorEvals, in the Canvas course menu under GatorEvals, or via the Evaluation system. Summaries of course evaluation results are available at the public results website.

Can you make an exception to the course policies for me?

No; in the interests of fairness, these course policies, including grading policies, will be applied to all students throughout the semester.

What if I need help?

Questions and Concerns

If you have a question, please don't wait to get it addressed until too late (assignment due date is looming, you failed an exam, etc.)!

If you have a technical question or a course question that others might have as well, see Who do I contact if I have questions about.

If you have a grade concern or other individual question for me (that pertains only to you) or need some extra help, please email me or come to office hours ASAP. Again, don't wait until a failed exam!

What do I do if I'm sick or have a family emergency?

Please submit your documentation to the Dean of Students' Office's Care Team via this link: https://care.dso.ufl.edu/instructor-notifications/. Once you have done that, please e-mail Dr. Meadows regarding your absence so she can work with you to arrange a schedule for you to make up any missed work. This needs to be done as soon as possible (i.e. within a week of the deadline, except in extreme circumstances like prolonged hospitalization).

If you have a pre-scheduled medical absence (i.e. planned surgery) that will cause you to miss a deadline, you will need to work ahead to complete your work prior to the beginning of the absence. Please e-mail Dr. Meadows with any questions.

What do I do if I need to miss a deadline for some other reason?

Deadline extensions are not available for planned absences due to athletics or other university-sponsored events, or personal travel, etc. You are expected to manage your time wisely and **work ahead if needed** in order to complete your assignments by the deadline. If you will be traveling, we recommend that you complete that week's assignments before leaving, due to potential time constraints and unreliable internet connectivity when away from home.

What do I do if I'm having computer problems?

- For issues with your personal computer, with Canvas, or with PlayPosit, please contact the <u>UF Help Desk</u> ((352) 392-HELP).
- For other technical issues see Who do I contact if I have questions about ?

Students are responsible for maintaining their own computer and internet access. Computer/internet problems that happen on the night of the deadline will NOT be grounds for due date extensions, so please do not leave your work until the last minute.

I'm struggling with this class - how can I do better?

See my Tips for Success!

Please let Dr. Meadows know sooner rather than later! I want everyone to do well in this class, and I'm more than willing to work with you to help you improve your performance, but the earlier we're aware of any issues, the more options we will have to help.

If you are struggling with time management and/or study skills, <u>Gatorwell</u> and the <u>UF Teaching Center</u> have lots of resources that can help!

Visit <u>learningscientists.org</u> to learn the 6 strategies for effective learning. Guess what the first one is? NO CRAMMING! **I CANNOT RECOMMEND WATCHING THESE VIDEOS ENOUGH!**

What if I need help with something not specific to this course?

College can be a very stressful time in a person's life, and the current pandemic certainly adds an extra layer of stress on top of everything else. Resources are available on campus to help students meet academic goals and solve personal problems that may interfere with their academic performance. If you find that you are having difficulty emotionally or academically, there is substantial support available. You can use the <u>U Matter We Care website</u> or the list below to help identify the appropriate resources. Please reach out to Dr. Meadows if I can help you identify or connect to these resources.

- <u>Dean of Students Office</u> (352-392-1261) provides a variety of services to students and families, including <u>Field and Fork</u> (UF's food pantry) and <u>New Student and Family programs</u>
- <u>Counseling and Wellness Center</u> (352-392-1575) provides counseling and support as well as crisis and wellness services including a <u>variety of workshops</u> throughout the semester (e.g., Yappy Hour, Relaxation and Resilience).
- <u>Multicultural and Diversity Affairs</u> (352-294-7850) celebrates and empowers diverse communities and advocates for an inclusive campus.
- Office of Student Veteran Services (352-294-2948 | vacounselor@ufl.edu) assists student military veterans with access to benefits.
- <u>Career Connections Center</u> (352-392-1601 | CareerCenterMarketing@ufsa.ufl.edu) connects job seekers with employers and offers guidance to enrich your collegiate experience and prepare you for life after graduation.
- <u>UF Police Department</u>. 392-1111 (or 9-1-1 for emergencies)
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit shcc.ufl.edu
- UF Health Shands Emergency Room/Trauma Center: For immediate medical care in Gainesville, call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; <u>ufhealth.org/emergency-room-trauma-center</u>

Tips for Success!

- 1. **Attend and Participate** studies show that the more you discuss, draw, analyze, and actively participate in class, the more you learn!
- 2. **Read** Read assigned reading before lecture for each class period. Then use lectures to hone understanding and apply your knowledge.

- 3. **Take Notes** Do not be a passive listener! Take active notes while watching lectures, especially on questions asked during the lecture.
- 4. **Ask Questions** Ask immediately. Don't be afraid to ask clarification questions, especially in the discussion forums! Chances are, others need clarification, too. And always feel free to meet with me to go over anything you need help with.
- 5. **Use Your Resources** Use this syllabus to answer questions about the course and locate help when you need it. Use Canvas. Use your textbook. Use your classmates and instructor.
- 6. **Plan Ahead** Plan 9-12 hrs/wk on this course including reading, assignments, and studying. Don't start studying or projects at the last minute.
- 7. **Study Effectively** Visit <u>learningscientists.org</u> to learn the 6 strategies for effective learning. Guess what the first one is? NO CRAMMING!
- 8. I Care! I am deeply invested in YOU and your happiness and success. Email me, come to office hours, etc. to go over course material, talk about life, or just say hi. 😄

Schedule

Date	Format	Topic	Reading		
1/9 - Mon 1/11 - Wed 1/13 - Fri	Lecture	Welcome, Introduction to Marine Ecology	Marine Biology Ch 10		
1/16 - Mon - NO	1/16 - Mon - NO CLASS MLK Jr. DAY				
1/18 - Wed	Lecture	Beach and Dune Ecology	Florida's Living Beaches pages 2-46; 254-288		
1/20 - Fri	Discussion	Special Report - Our Changing Planet	Marine Biology - Special Report - Our Changing Planet		
1/23 - Mon	Lecture	Beach and Dune Ecology	Florida's Living Beaches pages 2-46; 254-288		
1/25 - Wed	Lecture	Between the Tides	Marine Biology Ch 11		
1/27 - Fri	Discussion	Florida Intertidal Communities	Florida's Living Beaches		
1/30 - Mon	Lecture	Between the Tides	Marine Biology Ch 11		
2/1 - Wed	Lecture	Estuaries	Marine Biology Ch 12		
2/3 - Fri	Discussion	Journal Club 1 - Intertidal	Paper selected by Group 1		
2/6 - Mon 2/8 - Wed	Lecture	Estuaries	Marine Biology Ch 12		

EXAM 1 Ch 10-12 + Beach and Dune Ecology Friday 2/10					
2/13 - Mon 2/15 - Wed	Lecture	Life on the Continental Shelf	Marine Biology Ch 13		
2/17 - Fri	Discussion	Journal Club 2 - Estuaries	Paper selected by Group 2		
2/20 - Mon 2/22 - Wed	Lecture	Life on the Continental Shelf	Marine Biology Ch 13		
2/24 - Fri	Discussion	Journal Club 3 - Continental Shelf	Paper selected by Group 3		
2/27 - Mon 3/1 - Wed	Lecture	Coral Reefs	Marine Biology Ch 14		
3/3 - Fri	Discussion	Journal Club 4 - Coral Reefs	Paper selected by Group 4		
3/6 - Mon	Lecture	Coral Reefs	Marine Biology Ch 14		
3/8 - Wed	Lecture	Life Near the Surface	Marine Biology Ch 15		
3/10 - Fri	Discussion	Journal Club 5 - Surface Life	Paper selected by Group 5		
NO CLASS 3/11 - 3/19 - SPRING BREAK					
3/20 - Mon 3/22 - Wed	Lecture	Life Near the Surface	Marine Biology Ch 15		
EXAM 2 Ch 13-1	EXAM 2 Ch 13-15 Friday 3/24				
3/27 - Mon 3/29 - Wed	Lecture	The Ocean Depths	Marine Biology Ch 16		
3/31 - Fri	Discussion	Journal Club 6 - Deep Sea	Paper selected by Group 6		
4/3 - Mon	Lecture	The Ocean Depths	Marine Biology Ch 16		
4/5 - Wed	Lecture	Resources from the Sea	Marine Biology Ch 17		
4/7 - Fri	Discussion	Journal Club 7 - Ocean Resources	Paper selected by Group 7		
4/10 - Mon	Lecture	Resources from the Sea	Marine Biology Ch 17		

4/12 - Wed	Lecture	Impact of Humans on the Marine Environment	Marine Biology Ch 18
4/14 - Fri	Discussion	Journal Club 8 - Human Impacts	Paper selected by Group 8
4/17 - Mon 4/19 - Wed	Lecture	Impact of Humans on the Marine Environment	Marine Biology Ch 18
4/21 - Fri	Discussion	Course Wrap-up	
EXAM 3 Ch 16-18 Monday 4/24			