

BSC2520: Our Oceans: Human Impacts

Quest 2 | Fall 2025



Photo by Melissa Meadows, 2018

Our oceans. They are stunningly beautiful, profoundly impacted by humans, and vitally important to human existence. In this course, we will ask “How do we impact our oceans, and how do they in turn impact us?” We will explore the biodiversity and ecology of our oceans, human impacts on ocean ecosystems, how ocean ecosystems impact humans, and solutions for ecological problems. Thus, this multidisciplinary course will touch on biology, sociology, engineering, and other fields to explore the issue of human impacts on the ocean from many angles. This course affords students the ability to critically examine and evaluate the principles of the scientific method, model construction, and use the scientific method to explain natural experiences and phenomena.

I. General Information

Class Meetings

MWF 4:05 – 4:55 PM Bartram Hall 211

Instructor

Dr. Melissa Meadows

Email: Melissa.Meadows@ufl.edu

Office: Carr Hall 522B

Phone: (352) 294-6310

About Your Instructor

Student hours are YOUR hours! Please come chat!

- [Book me](#) one-on-one during Student Hours in person in my office, Carr 522B, or on Zoom M 1-3; W 2-3. Message me on Canvas for an appointment at another time if needed.
- Please allow **at least 24 hours in between making your appointment and the appointment time** so that I have time to check notifications and know to be there. If not, I cannot guarantee that I will see your appointment reservation in time.
- Zoom link for meetings: <https://ufl.zoom.us/j/3066712046>

Instructor Bio

Dr. Meadows teaches this Quest 2 course Our Oceans: Human Impacts and Impacts on Humans Marine Biology, Invertebrate Biodiversity, Marine Ecology, Visual Ecology, introductory biology, Immersion Semester, and study abroad program in the Galapagos Islands.

Her research has been on seabirds in North Carolina, corals in Florida, rainforest birds in Panama, hummingbirds in Arizona, songbirds in New Zealand, fluorescent fish in the lab in Germany as well as the Mediterranean Sea and the Red Sea, and a whole slew of undergraduate research projects on corals, jellies, and anole coloration in PA prior to starting her position at UF in Fall 2019.



Getting Help - Course Questions Forum

For questions about course content, projects, due dates, etc. that aren't private in nature, use the course questions forums! Please feel free to both ASK and ANSWER questions in the Course Questions Forum on Canvas, and I'll check them periodically as well.

Questions Specific to YOU

- Messages through Canvas will go to my email and will tell me what class you are in. Please use this instead of emailing me directly. [Read the guide here](#) if you haven't used this before.
- Use for ONLY personal questions such as grades, special circumstances, needed accommodations. If your question is not private, use the Course Questions Forum.
- Expect a response within 24 hours during the week, and on the following Monday if message is sent after 5pm on Friday. Be professional in tone and expectations. Please do not expect an immediate response. Please follow the [guidelines here](#) for communication with professors.
- If needed for contact about non-class matters, my email address is melissa.meadows@ufl.edu. All e-mail correspondence must originate from your ufl.edu account, have your full name in the body of the e-mail, and contain your course and section number in the subject line.

Quest and General Education Credit

- Quest 2
- Biological Sciences
- *This course accomplishes the [Quest](#) and [General Education](#) objectives of the subject areas listed above. A minimum grade of C is required for Quest and General Education credit. Courses intended to satisfy Quest and General Education requirements cannot be taken S-U.*

Catalog Course Description

Explores how humans impact oceans and how oceans impact humans. Considers ocean ecosystem biodiversity and ecology. Investigates solutions to problems related to the human-ocean interactions, focusing on the multidisciplinary nature of those solutions and the need to consider multiple stakeholders and views. 3 credits.

Credits

3 credits

Course Fee

N/A (no course fee)

Course Objectives

In this course, students will:

1. Learn how humans depend on the ocean for food, energy and materials, climate maintenance, recreation, and more.
2. Discuss how humans impact the ocean via fisheries, pollution, mining and drilling.
3. Analyze opportunities for ocean conservation.
4. Engage with UF scientists and the public on how humans impact the ocean and it impacts humans.



Required Readings and Works

- Book: All semester, we will be discussing The World is Blue: How Our Fate and the Ocean's are One by Sylvia A. Earle, National Geographic Partners LLC, 2010 **Lots of used copies out there!**
- Additional reading (provided on Canvas): "Our Changing Planet" from Marine Biology, 11th ed by Castro and Huber, pages 237 – 249.
- Documentary films that will be viewed during class:
 - *Mission Blue*. Directed by Robert Nixon and Fisher Stevens, True Blue Films, 2014.
 - *Seaspiracy*. Directed by Ali Tabrizi, A.U.M. Films, 2021.
 - *A Plastic Ocean*. Directed by Craig Leeson, Brainstorm Media, 2016.
 - *Chasing Coral*. Directed by Jeff Orlowski, Exposure Labs, 2017.

II. Graded Work

Description of Graded Work: Grade Weighting

Grade points for each assessment category will be weighted by the following percentages to determine the final grade for the course. Final grade = Sum (points earned / points possible * % of final grade)

% of Final Grade	Description	Due Dates
15%	Participation in class discussions. See rubric below for self-assessment of participation.	See schedule for discussion dates. Assessments due by 11:59 PM each discussion day.
10%	Assignments such as pre-class questions on the reading or film to be discussed.	See schedule for dates. Due by 11:59 PM before each discussion day.
10%	Leadership in discussion of a book chapter or film. See longer description and rubric below.	Varies dependent upon the topic chosen. See schedule.
20%	Public Education Project in which you, together with a group, will create an interactive display/game on a topic of your choice related to the course. You will engage families with your project at the Nature Coast Biological Station Open House in October (experiential learning project).	4 PM Thursday 10/16 before the Open House on 10/18
20%	Scientist Interview Project in which you will work with a group to interview a UF researcher about their work related to human impacts on the marine environment and present it as a class presentation, video, article, or podcast.	3:00 PM 11/17, Presentations 11/17-12/1
25%	Final Paper on an issue of your choice related to the course in which you critically evaluate the issue using approved sources of information, examine its impact on your life and those around you, and present both published and original ideas for solutions or mitigation. At least 1500 words.	Wednesday 11/12

Assignment Details and Rubrics

Participation (15% of final grade): will be self-assessed each day we have a class discussion (see schedule) out of a possible 3 points, due by 11:59 PM the same day. Students will utilize the following rubric to suggest a point value earned AND give a brief description of contributions to the discussion. Instructor has final say on points earned. There will be approximately 20 discussion days, but this may

be amended as needed in case of weather cancellation or other necessary schedule changes. On the date that a student leads the discussion, they will receive an “excused” grade (no grade) in Canvas for this assignment as they will instead be graded on leadership of the discussion. Additionally, the lowest 3 participation grades (or 0s from unexcused absences) will be dropped (see “Life Happens” Policy).

Each student will receive a score for approximately 16 discussions x 3 = 48 total points.

0	Not Present: Student was not present during the meeting
1	Present: Student was present for the meeting but did not participate or seemed not to have read the assigned reading.
2	Active Participant: Student contributed at least 1 answer/discussion point. It was clear the participant read the assigned reading and prepared ideas ahead of class.
3	Thoughtful and Active Participant: Student contributed substantial and well-thought-out answers and discussion points. It was clear the participant read the assigned reading and prepared ideas ahead of class.

Assignments (10% of final grade): Pre-class questions will be due at 11:59 PM the night before most of our in-class discussions (see schedule) to ensure a productive discussion. There will be approximately 16 pre-class assignments, but this may be amended as needed in case of weather cancellation or other necessary schedule changes. For the date a student leads the discussion (and contributes to writing the questions for everyone else), they will receive an “excused” grade (no grade) in Canvas for this assignment as they will instead be graded on the questions they have written for the class. Additionally, the lowest 2 assignment grades (or 0s) will be dropped (see “Life Happens” Policy).

Each student will receive a score for approximately 13 pre-class assignments x 10 = 130 total points.

Leadership in a discussion (10% of final grade): Each student will sign up for a date/topic of their choice during the semester during which they will work with a group to 1) Create a list of 8-10 questions for peers to answer as a pre-class assignment and 2) Lead a discussion about their topic during class. More details on this assignment available on Canvas. Each member of the group will receive a grade (same grade for each component except for sign-up) based on the following rubric for a total of 52 total points.

Discussion Leadership Criteria	Points
Sign-up: Follow directions to sign up for a topic and corresponding date on Canvas.	2
Pre-class Questions: Questions are submitted on time. Questions submitted clearly encourage students to watch the entire film or read the entire chapter and cannot be easily answered without having done this or by AI.	5
Pre-class Questions: Questions are broad enough to allow for different answers from students rather than having a specific answer. Questions should integrate students' personal background, and unique perspectives with the material.	5

Discussion Leadership Criteria	Points
Pre-class Questions: Questions are about topics unique from others discussed already in the semester, although they may reference or expand upon them.	5
In-class Discussion: Short introductory presentation of the chapter/film - Uses the reading or film as a springboard but includes additional information and updates since the book was written or film produced (rather than simply summarizing what was read/ watched). Presentation less than 10 minutes to allow plenty of time for discussion.	10
In-class Discussion: Group members contribute equally to discussion leadership.	5
In-class Discussion: Leadership quality - discussion is well-guided while allowing students ample opportunity to respond. Discussion not dominated by leaders.	5
In-class Discussion: Discussion is dynamic and engaging, and students are not simply repeating what they've already written. Some questions may be written into the presentation, but they should not be exactly the same questions you asked for the pre-class assignment. Some questions may ask students to integrate what they've read and written about with the new information and updates you present. They should be able to draw on their reading/watching and answers to your pre-class questions. Follow-up questions are asked based on what students say in the discussion, others invited to weigh in, and discussion leaders join the discussion.	15
Total Points	52

Public Education Project (20% of final grade): On October 18, 2025, the Nature Coast Biological Station in Cedar Key will host its annual Open House. In this experiential project, students (in groups of 4-5) will engage visiting families in interactive projects that they design aimed at demonstrating how we impact our ocean, especially surrounding coastal and Gulf of Mexico habitats, and how they in turn impact us. Projects can utilize demos, games, activities, etc. to get visitors involved. Students will have time during class to work on these projects and will be required to be present on in-class workdays to receive credit for each project update (see schedule). All materials and instructions will be due on 10/17. Students may attend the Open House to help present the projects along with Dr. Meadows' Marine Biology students and will earn **extra credit (5 points) towards their FINAL PAPER grade** for attending. Aside from in-class work and extra credit, all students in the group will receive the same grade. Projects will be evaluated according to the following rubric for a total of 61 points possible:

Public Education Project Criteria	Points
In-class brainstorm session	5
In-class work and updates 1 and 2	10
Last project update	2

Creativity and originality of design	10
Engagement – public was engaged easily in the presentation/game/demonstration	10
Learning – clear and scientifically-accurate take-away message, participants learned relevant information	20
Directions – directions given were clear and easy to follow so that anyone could have set up/ delivered the project to the public.	2
Completeness – all materials needed to present the project were included	2
Total Points	61



Scientist Interview Project (20% of final grade): In a group of 2-3, students will interview a UF researcher about their research related to human impacts on the marine environment and present it as a class in a creative way such as a podcast, video, mock interview, live interview, magazine article, or anything else interesting they can come up with to present in 10 minutes! The project will be graded according to the following rubric for a total of 170 total points possible:

Scientist Interview Project Criteria	Points
Pre-interview In-class brainstorm session	5
Pre-interview Interview invitation letter	10
Pre-interview Interview questions	20
Pre-interview Progress updates	2
Professionalism - You conducted yourself in a professional way in the interview as evidenced by your questions, demeanor, prior knowledge of the scientist's work from your background research, and the level of polish/ good editing on your final project.	15
Question quality – main questions elicit a good response, more than yes or no questions, one- word answers, etc.	15
Creativity, depth, and interest - Interview is presented in an effective and appealing way that would be interesting for a variety of audiences. The interview answers deeper	20

questions about the scientist's work and its relevance to understanding and repairing human impacts on our oceans.	
Conversationalism – You react and summarize what the interviewee has said like you are having a conversation instead of just moving on to the next question in a list-like way, story flow, flow of questions.	20
On-topic in relation to our course - Topic relates well to human impacts on the ocean/ the ocean's impact on humans. Even if application is not immediately apparent, this is discussed and is a focus of the interview.	10
Length is appropriate and informative , neither too short to get a good idea of the scientist's work with some depth nor too long and unedited so that it drags. (Presentation 10 minutes or less)	10
Interview effectiveness – interview should provide a better understanding of the scientist, their work, and their life. It should inspire others to be interested.	30
Feedback for other groups – 1 point per group, total may vary depending on final number of groups	~13
Total Points	170

Final Paper: Further details will be available in Canvas and discussed in class. The paper will be at least 1500 words and graded according to the following rubric:

Final Paper Criteria	Points
In-class final paper AI tools workshop participation and summary	5
Final paper outline	10
Part 1 Goal: Issue is clearly defined and described; claims backed up by published data demonstrating the existence and severity of the issue.	10
Part 1 Goal: Issue is explored comprehensively from multiple points of view and all stakeholders are discussed.	5
Part 1 Goal: Approach to analyzing the issue is rooted mainly in science and backed up by scientific evidence. However, the issue is also explored from multiple perspectives utilizing a cross-disciplinary approach (ethics, sociology, culture, history, etc.).	5
Part 1 Goal: Claims are backed up by peer-reviewed scientific papers and other published articles from reputable sources. References are used effectively to build a case and explain the issue.	5

Part 2 Goal: Importance of the problem and implications broadly to the state of the planet and the human condition is discussed.	5
Part 2 Goal: Importance of the problem and implications to scientific research and understanding, specific groups of people, and those around you is discussed.	5
Part 2 Goal: Draw connections to your intellectual, personal, and professional development at UF and beyond.	5
Part 3 Goal: Discuss both published and original ideas for solutions or mitigation. Solutions/mitigations must be a nuanced approach to the issue at hand that takes into account impacts on multiple, often conflicting, stakeholders who are impacted by this issue and possibly by its mitigation.	10
Part 3 Goal: Published solutions/ mitigations are thoroughly discussed. What has been tried? What has been attempted and worked? Failed?	5
Part 3 Goal: Novel ideas for tackling the issue are discussed. What novel ideas do you have for tackling the issue? Again, connect this issue to your life and to others. Communicate ideas effectively and convincingly. Develop your ideas in full detail, discuss critiques and possible sticking points that could hinder the success of published ideas as well as your own.	10
Overall Content: Paper exhibits evidence of ideas that respond to the topic with complexity, critically evaluating and synthesizing sources, and provide at least an adequate discussion with basic understanding of sources.	10
Organization and Coherence: Paper as a whole and paragraphs exhibit identifiable structure for topics, including a clear thesis statement and progression of ideas.	5
Argument and Support: Paper uses persuasive and confident presentation of ideas, strongly supported with evidence.	5
Style: Paper uses a writing style with word choice appropriate to the context, genre, and discipline, specifically to a scientific approach to examining human impacts on the ocean but dipping into other disciplines as well as appropriate for the topic chosen by the student. Sentences should display complexity and logical sentence structure.	5
Mechanics: Paper will feature correct or error-free presentation of ideas, using correct spelling, punctuation, and grammar. As such, the paper's topic and arguments are not obscured.	5
References: At least 5 references were used with at least 3 from peer-reviewed scientific journals. References are properly cited within the text and in a reference section of the paper using APA, MLA, or a standard scientific journal style.	5
Total Points	115

“Life Happens” Policy

Everyone has an off day sometimes! Because of this, I'll be **dropping**:

- your lowest 2 Assignment grades AND
- your lowest 3 Discussion Participation grades.

If you miss assignments, don't worry about discussing it with me UNLESS you already have the maximum number of zeros allowed under this policy which will automatically be dropped from your grade. If you miss additional assignment in excess of those allowed by this policy AND your absence is excusable based on UF policy, please see the Course Policies tab for guidelines.

Assignment Extensions

For some assignments, **extensions MAY be granted** if and only if you have already received other zeros that will be dropped based on the "Life Happens" policy above. You must have a documented excused absence lasting at least the three days before and including the due date. For example, if the assignment is due Friday, your documentation of absence must include Wednesday, Thursday, and Friday to be granted an extension. Submit documentation here: <https://care.dso.ufl.edu/instructor-notifications/> and request a letter be sent to the instructor, then message me in Canvas after your letter has been sent to let me know what assignments you are requesting extensions on, and we will discuss any modified due dates.

Grading Scale

For information on how UF assigns grade points, visit: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

A	93 – 100%		C	73 – 76.99%
A-	90 – 92.99%		C-	70 – 72.99%
B+	87 – 89.99%		D+	67 – 69.99%
B	83 – 86.99%		D	63 – 66.99%
B-	80 – 82.99%		D-	60 – 62.99%
C+	77 – 79.99%		E	<60

III. Annotated Weekly Schedule

Plan on average ~9 hrs/wk, including 3 hrs in class and ~6 hrs for outside-of-class reading, assignments, projects, and papers. This is based on the **federal definition of a credit hour** and is a required workload for [university accreditation](#). Your outside-of-class commitment will be higher in the 2nd half of the semester when you are working on larger group projects and the final paper.

Due dates: All assignments are due at 11:59 pm on the day indicated. All readings are chapters from The World is Blue by Sylvia Earle unless indicated otherwise.

Week	Topics, Homework, and Assignments
W 1 8/18	• Topic: Course Introduction, Sylvia Earle • Summary: What are some of our impacts on the ocean, and how does it impact us? What should we do about it? We will discuss some of the themes for the semester. • Required Readings/Works: none • Assignments: none
W 2 8/25	• Topic: <u>Mission Blue</u>, Sylvia Earle • Summary: On Monday and Wednesday, we will watch <u>Mission Blue</u>, a documentary that introduces our course heroine, Sylvia Earle – her life, her work, her passion. We will answer these questions through our discussion of the film <u>Mission Blue</u> on Friday: What is Mission Blue and why is it important? Who is Sylvia Earle, and what is her life’s work? Why is she such an effective communicator? • Required Readings/Works: We will watch <u>Mission Blue</u> (1hr 40 minutes) on Netflix during class time. Due to the provocative nature of this and the 3 other films watched in this class, we will watch and comment on them together as an experiential activity. • Assignments: 1. <u>Mission Blue</u> pre-class questions due Thursday, 2. <u>Mission Blue</u> discussion participation Friday
W 3 9/1	• Topic: <u>The World is Blue</u>, Marine mammal fisheries • Summary: NO CLASS Monday (Labor Day). On Wednesday, we will discuss the introduction of the book <u>The World Is Blue</u> – What is meant by “the world is blue?” Why do we desperately need the ocean for our own survival? We will also introduce marine mammals in a lecture. We will discuss “Taking Wildlife – The Mammals” on Friday. What is the history of marine mammal fisheries? How does eating a marine mammal compare to eating a cow in terms of resources required? Why do marine mammal fisheries still exist, and can they ever be sustainable? • Required Readings/Works: <u>The World is Blue</u> “Introduction” and “Perspective”, pages 15-25; “Taking Wildlife I – The Mammals”, pages 29-51 • Assignments: 1. “Introduction” and “Perspective” questions due Tuesday 2. Intro and Perspective discussion participation Wednesday 3. “Taking Wildlife I – The Mammals” questions due Thursday, 4. “Taking Wildlife I – The Mammals” discussion participation Friday
W 4 9/8	• Topic: Fish fisheries, <u>SeaSpiracy</u> • Summary: On Monday, we will discuss “Taking Wildlife II – The Fish”. What is the Tragedy of the Commons and how does it apply to fisheries? Is Maximum Sustainable Yield a myth? What happens when top predators are extracted from the ocean? On Wednesday and Friday, we will watch the film <u>SeaSpiracy</u> in preparation for discussion on Monday. • Required Readings/Works: “Taking Wildlife II – The Fish”, pages 53-77; Watch <u>SeaSpiracy</u> (1hr 30 minutes) on Netflix during class time.

Week	Topics, Homework, and Assignments
	• Assignments: 1. “Taking Wildlife II – The Fish” questions due Sunday, 2. “Taking Wildlife II – The Fish” discussion participation Monday
W 5 9/15	• Topic: <u>SeaSpiracy</u>, Global change, Fisheries for shellfish • Summary: On Monday, we will discuss <u>SeaSpiracy</u>. What does commercial fishing have to do with the problem of large amounts of plastics in the ocean? Should we be skeptical of some of the claims? On Wednesday, we will discuss the handout “Our Changing Planet”. How is our planet changing? Is it changing at a different pace now that it has historically? How will these changes affect humans, and what can we do? On Friday, we will discuss “Taking Wildlife III – The Shellfish”. What organisms are included in “shellfish”? What do oysters have to do with water quality and shoreline protection? What can we learn from living shellfish vs. dead ones? • Required Readings/Works: “Our Changing Planet” from <u>Marine Biology</u>, 11th ed by Castro and Huber, pages 237 – 249; “Taking Wildlife III – The shellfish”, pages 79-99 • Assignments: 1. <u>SeaSpiracy</u> questions due Sunday 2. <u>SeaSpiracy</u> discussion participation Monday 3. “Our Changing Planet” discussion participation Wednesday 4. “Taking Wildlife III – The Shellfish” questions due Thursday, 5. “Taking Wildlife III – The Shellfish” discussion participation Friday
W 6 9/22	• Topic: Ocean garbage, <u>A Plastic Ocean</u> • Summary: On Monday, we will discuss “The Ultimate Garbage Disposal”. What is the Great Pacific Garbage Patch and why does it exist? What kinds of plastic and other debris are commonly found in the ocean? What can we do to help? On Wednesday and Friday, we will watch the documentary <u>A Plastic Ocean</u>. • Required Readings/Works: “The Ultimate Garbage Disposal”, pages 101-115; Watch <u>A Plastic Ocean</u> (1hr 40 minutes) on YouTube during class time • Assignments: 1. “The Ultimate Garbage Disposal” questions due Sunday, 2. “The Ultimate Garbage Disposal” discussion participation Monday
W 7 9/29	• Topic: <u>A Plastic Ocean</u>, Public Education Project, Biodiversity loss • Summary: On Monday, we will discuss <u>A Plastic Ocean</u>, from tiny microplastics to large tangles of discarded fishing gear. On Wednesday, we will discuss our Public Education project, brainstorm ideas, and form project groups. On Friday, we will discuss “Biodiversity Loss: Unraveling the Fabric of Life in the Sea”. What sorts of organisms live in the ocean? How is life on Earth (and in the ocean) organized? Why does biodiversity loss in the ocean affect humans? • Required Readings/Works: “Biodiversity Loss: Unraveling the Fabric of Life in the Sea” pages 119 - 137 • Assignments: 1. <u>A Plastic Ocean</u> questions due Sunday, 2. <u>A Plastic Ocean</u> discussion participation Monday

Week	Topics, Homework, and Assignments
	- Public Education Project Group Brainstorm due Wednesday “Biodiversity Loss” questions due Thursday, “Biodiversity Loss” discussion participation Friday
W 8 10/6	Topic: Interview a Scientist Project, Public Education Project, Deep-sea drilling for resources Summary: On Monday, we will discuss our next class project, Interview a Scientist, discuss interests, form groups, and find scientists to interview. On Wednesday, we will have time in class to work on the Public Education Project and you will submit a progress update. Bring any needed supplies! Also update on any additional supplies needed and who is bringing them for finishing up the projects on Monday. Your interview invitation letter will be due as well. On Friday, we will discuss “Drilling, Mining, Shipping, Spilling”. What products are mined and drilled from the sea floor? What are the consequences of those practices on life on the ocean floor? What about oil spills? Required Readings/Works: “Drilling, Mining, Shipping, Spilling” pages 139 - 157 Assignments: - Interview Project Group Brainstorm due Monday <u>Scientist Interview Invitation letter due Wednesday,</u> - Public Education Project Update due Wednesday “Drilling, Mining, Shipping, Spilling” questions due Thursday, “Drilling, Mining, Shipping, Spilling” discussion participation Friday
W 9 10/13	Topic: Public Education Project, the Gulf of Mexico Dead Zone Summary: On Monday, we will work on the public education project in class – bring any needed supplies! On Wednesday, we will have a case study discussion on the Gulf of Mexico Dead Zone. What is the dead zone, and why does it form each year? What are the consequences of it for ocean life and humans? On Thursday by 4 PM, you will submit Public Education Projects. NO CLASS Friday (Homecoming) - Participate in the Nature Coast Biological Station Open House on Saturday Oct 18 9-3 in Cedar Key. STUDENTS WHO ATTEND THE OPEN HOUSE WILL RECEIVE 5 POINTS EXTRA CREDIT ON THIS PROJECT, raising their project grade by one letter! Transportation (leave UF 7:30 AM, return about 5 PM) and lunch provided free. Required Readings/Works: none Assignments: - Public Education Project Update due Monday, - Gulf of Mexico Dead Zone case study participation Wednesday, <u>Public Education Group Project due Thursday by 4 pm to Dr. Meadows’ office,</u> - Attend the NCBS Open House Saturday 9-3 for 5 points extra credit
W 10 10/20	Topic: Final paper, changing sea chemistry, Interview a Scientist Project Summary: On Monday, we will discuss the final paper and try out AI tools (ResearchRabbit, ChatPDF, Navigator) to help you find and understand scientific papers and help organize your ideas. On Wednesday, we will discuss “Changing Climate, Changing Chemistry”. What is the evidence for climate change, and what are its

Week	Topics, Homework, and Assignments
	consequences? How is ocean chemistry changing in response to rising CO₂ levels? On Friday, you will develop and submit your list of interview questions for the Scientist Interview project. Your final paper outline will also be due on Friday. • Required Readings/Works: “Changing Climate, Changing Chemistry” pages 159 – 181, watch <u>Chasing Coral</u> documentary (1 hr 29 minutes) during class on Friday. • Assignments: 1. Summary of AI findings for final paper research due Monday, 2. “Changing Climate, Changing Chemistry” questions due Tuesday, 3. “Changing Climate, Changing Chemistry” discussion participation Wednesday, 4. <u>List of interview questions due Friday.</u> 5. <u>Final Paper Outline due Friday.</u>
W 11 10/27	• Topic: Coral bleaching • Summary: On Monday and Wednesday, we will watch the documentary <u>Chasing Coral</u>, and we will discuss it on Friday. Why are coral reefs dying? What happens to a coral when it bleaches? Why do we need coral reefs? Students who would like to receive feedback on a draft of their final paper must submit it by Friday. • Required Readings/Works: “Exploring the Ocean” pages 185 - 201 • Assignments: 1. Chasing Corals questions due Thursday, 2. Chasing Corals discussion participation Friday, 3. <u>Optionally, students can submit a draft of their final paper on Friday to receive feedback and elect to keep the same grade or submit an update by the due date 11/12.</u>
W 12 11/3	• Topic: Ocean exploration, community conservation involvement, governing the ocean • Summary: On Monday, we will discuss “Exploring the Ocean”. What is the history of ocean exploration? What techniques can we use to explore the ocean and what are their limitations? How can exploration lead to conservation? On Wednesday, we will have a case study on Menjangan Island in Indonesia. How have scientists come together with community members to encourage environmental protection? What are key aspects of environmental education? On Friday, we will discuss “Governing the Ocean.” What is the history of attempts to govern the ocean? What are the problems inherent in trying to govern the ocean? What solutions can we work on? You will also submit progress update for the interview project – have you already interviewed? If not, when do you plan to? • Required Readings/Works: “Governing the Ocean” pages 203 – 219 • Assignments: 1. “Exploring the Ocean” questions due Sunday, 2. “Exploring the Ocean discussion participation Monday, 3. Menjangan case study participation Wednesday, 4. “Governing the Ocean” questions due Thursday, 5. “Governing the Ocean” discussion participation Friday, 6. <u>Interview your scientist this week or next, progress update due Friday</u>

Week	Topics, Homework, and Assignments
W 13 11/10	• Topic: Ocean farming, ocean protection • Summary: On Monday, we will discuss “Farming the Ocean”. What are the “right kinds” of aquaculture that can be used to feed our growing human population? What problems do we face when choosing seafood to eat? On Wednesday, we will discuss “Protecting the Ocean”. What is the history of ocean protection, of the establishment of National Marine Sanctuaries in the US? Have more protected areas been established since this book was published? What is the science behind marine reserves? Can we have hope for our ocean’s recovery? <u>Final papers will be due on Wednesday.</u> On Friday, you will have time to work with your group to finish your Scientist Interview Project (no class). • Required Readings/Works: “Farming the Ocean” pages 221-239; “Protecting the Ocean” pages 241-259 • Assignments: 1. “Farming the Ocean” questions due Sunday, 2. “Farming the Ocean” participation Monday, 3. “Protecting the Ocean” questions due Tuesday, 4. “Protecting the Ocean” discussion participation Wednesday, 5. <u>Final papers due Wednesday</u>
W 14 11/17	• Topic: Scientist Interview Presentations • Summary: Every day this week, we will have Interview a Scientist presentations (10 minutes or less each). Class attendance is mandatory to give presenters feedback. • Required Readings/Works: none • Assignments: 1. <u>Interview project submission due Monday at 3:00 PM</u> 2. Interview Project feedback participation each day
W 15 11/24	NO CLASS Monday – Friday (Thanksgiving Break)
W 16 12/1	• Topic: Scientist Interview Presentations, course wrap-up • Summary: On Monday, we will finish all remaining scientist interview presentations. On Wednesday, we will discuss what we’ve learned and how to move forward as good stewards of ocean health. • Required Readings/Works: none • Assignments: 1. Interview Project feedback participation 2. Discussion Participation Wednesday

IV. Student Learning Outcomes (SLOs)

At the end of this course, students will be expected to have achieved the [Quest](#) and [General Education](#) learning outcomes as follows:

Content: *Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline(s).*

- Identify, describe, and explain the ways that humans are impacting the ocean. (Quest 2, B) **Assessments:** Participation in class discussions, assignments such as questions about the reading or film assigned, leadership of a discussion, public education project, scientist interview project, final paper.
- Identify, describe, and explain the ways that the health of the ocean, in turn, impacts human society. (Quest 2, B) **Assessments:** Participation in class discussions, assignments such as questions about the reading or film assigned, leadership of a discussion, public education project, scientist interview project, final paper.

Critical Thinking: *Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the discipline(s).*

- Critically analyze and evaluate quantitative data on changes in the ocean and world and whether humans are causing these impacts. (Quest 2, B) **Assessments:** Participation in class discussions, assignments such as questions about the reading or film assigned, scientist interview project, final paper.
- Critically analyze and assess your own contributions to global and ocean change and identify ways in which you can improve your impact. (Quest 2) **Assessments:** Participation in class discussions, assignments such as questions about the reading or film assigned, final paper

Communication: *Students communicate knowledge, ideas and reasoning clearly and effectively in written and oral forms appropriate to the discipline(s).*

- Communicate to the public how humans are impacting the oceans and how we can help. (Quest 2, B) **Assessments:** public education project
- Communicate in writing and orally the major issues facing ocean life and humanity as a result of human impacts. (Quest 2, B) **Assessments:** Participation in class discussions, assignments such as questions about the reading or film assigned, leadership in a discussion, public education project, scientist interview project, final paper.

Connection: *Students connect course content with meaningful critical reflection on their intellectual, personal, and professional development at UF and beyond.*

- Reflect on what you have learned in the course and develop a way to connect with the public on these issues as well as with a UF scientist studying human impacts on the ocean. (Quest 2) **Assessments:** public education project, scientist interview project
- Reflect upon how you can incorporate human impacts on the ocean and solutions to these problems in your personal life and your professional development. (Quest 2) **Assessments:** final paper

V. Quest Learning Experiences

1. Details of Experiential Learning Component

This course will incorporate two experiential learning components: the public education project and the scientist interview project. For the public education project, you will work with a team to develop an activity, game, or demonstration that will help the public at the Nature Coast Biological Station Open House learn about human impacts on the ocean. Class time will be given to work on these projects and

allow other students to test them out. This experience will culminate with an optional field trip to the Nature Coast Biological Station Open House where you will present your projects to the public with help from marine biology students.

2. Details of Self-Reflection Component

You will have the opportunity to reflect on your own impacts on the ocean, how it impacts you, and how you can improve your impacts each day in class as you answer assigned questions developed by your peers, lead a discussion, and participate in discussions. Self-reflection will also be the main purpose of the final paper. In the final paper you will write on an issue of your choice that relates to human impacts on the ocean. You will clearly explain and critically evaluate the issue; examine its impact on your life, those around you, and the broader world; and present both published and original ideas for solutions or mitigation.

VI. Course and UF Policies

What is expected of me during class?

PARTICIPATE. Did you notice how this course has NO exams? The learning environment that I value in this course is one in which everyone contributes to a **community of learners, bringing your unique perspective and background** into the mix! As such, it is important that you come to class every day prepared (having done the reading, answered any pre-class questions, and thought about what you most want to bring up in class), ready to contribute your thoughts in discussion or jump right in as a productive collaborator on group projects, and most of all with an enthusiastic attitude. YOU make or break this course! So be ready to BRING IT every day, and we'll have a lot of fun and learn so much more than you ever could from a series of lectures and exams.

Sensitive Discussion Topics and Classroom Community

A word about courtesy and diversity – We will often discuss sensitive topics in this course, topics that you might already (or may soon!) feel very passionate about. However, hearing from and considering all sides of an issue from as many voices as possible is what makes us informed citizens who make informed decisions that very much impact the ocean, our world, and our lives. Coming up with innovative solutions requires teamwork, and [research shows that the most creative teams vary considerably](#) in opinion, social class, culture, religion, sexual orientation, gender, race, ethnicity, and ability.

Always and unfailingly show respect for all members of our learning community, even when you disagree. That's not to say you shouldn't disagree and say so! Just be mindful of your language and keep it civil and remember that you are never going to change anyone's mind if you are relying on belittling comments and intimidation rather than facts to make your point. Anyone behaving in a disrespectful way will be asked to leave and will receive a zero for the discussion. Repeat offenders may be asked to leave the course.

Attendance Policy

This is a small class, and if you aren't here, I'll worry! Missed in-class discussion assignments and group project updates on the days we work on projects in class cannot be made up. If you have a planned conflict, discuss it with me in advance. If there is an unforeseen circumstance, please let me know as soon as possible. I know that special circumstances may come up, and we will stay in communication to ensure your success. Please see the UF policy for excused absences

here: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. [See the "Get Started With the DRC" webpage on the Disability Resource Center site.](#) It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Communication Courtesy and Netiquette

All members of the class are expected to follow [rules of common courtesy](#) in all email messages, discussions, chats, and other class-related communication. The linked document refers to online courses, but it is a great resource for all kinds of professional academic communication. I will respond to your email/messages within 24 hrs during the week. After 5 on Fri I will not respond until Mon. Be professional in tone and expectations. Please do not expect an immediate response.

Withdrawal Policy

The add/drop deadline and the last day to withdraw from a course with a W on your transcript are listed online here: Dates and Deadlines: <https://catalog.ufl.edu/UGRD/dates-deadlines/>

UF Evaluations Process

Students are 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 at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Academic Honesty Policy

Any acts of cheating, plagiarism, unauthorized or undisclosed use of generative AI, or other forms of academic dishonesty will result in, at minimum, a **0 grade for the assignment or test AND a reduction in the course grade by 1 letter**. Sharing information about tests or homework answers with students in past, current, or future classes, or posting on social media information about same, is a serious act of academic dishonesty. Sharing answers for homework, exams, etc. with others (ex. Groupme, Course Hero) or receiving same is cheating. Turing in assignments that match classmates' is plagiarism. **Unauthorized or undisclosed use of generative AI is plagiarism.**

UF students are bound by The Honor Pledge which states “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. [See the UF Conduct Code website for more information](#). If you have any questions or concerns, please consult with the instructor or TAs in this class.

In-Class Recordings

Please see the policy here: <https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/>

Critical Thinking

Students are encouraged to employ critical thinking and to rely on data and verifiable sources to interrogate all assigned readings and subject matter in this course as a way of determining whether they agree with their classmates and/or their instructor. No lesson is intended to espouse, promote, advance, inculcate, or compel a particular feeling, perception, viewpoint or belief.

VII. Getting Help – Resources for Success

Technical Difficulties

E-learning technical support: Contact the [UF Computing Help Desk](#) at [352-392-4357](tel:352-392-4357) or via e-mail at helpdesk@ufl.edu.

Any requests for extensions due to technical issues must be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You should e-mail your instructor within 24 hours of the technical difficulty if you wish to request an extension.

Health & Wellness

- **U Matter, We Care:** ASKING FOR HELP IS A SIGN OF STRENGTH. If you or someone you know is in distress, please contact counseling 24/7 352-392-1575, email umatter@ufl.edu, or visit umatter.ufl.edu to refer or report a concern and a team member will reach out to the student in distress.
- **Counseling and Wellness Center:** Visit counseling.ufl.edu or call 352-392-1575 for information on crisis services as well as non-crisis services. 4th floor of Peabody Hall.
- **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.
- **University Police Department:** Visit police.ufl.edu or call 352-392-1111 (or 9-1-1 for emergencies).
- **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; ufhealth.org/emergency-room-trauma-center.
- **UF Whole Gator Resources:** Visit <https://one.ufl.edu/whole-gator/discover> for resources that are designed to help you thrive physically, mentally, and emotionally at UF.

Academic & Student Support

Current links to additional academic resources such as career counseling, library support, and the writing studio can be found here: <https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/>