

Principles of Marine Biology (BSC 3312) Fall 2023 Monday/Wednesday 3:00-4:20 pm Classroom Building 2 (CB2), Room 201

Instructor: Dr. Christa Diercksen



Teaching Assistant: Alexandria Lacoursière





christa.diercksen@ucf.edu



Wed: 9:30-11:00 am (BIO 201A)
Thur: Zoom by appointment
Fri: 1:30-3:00 pm (BIO 201A)



ai565699@ucf.edu



Wed: 2:00-3:00 pm in hallway

outside CB2-201

Thur: 12:00-1:30 pm (BIO 201)

Communication

- E-mail is the fastest and preferred way for communication. Please do NOT use Webcourses messages!
- The goal is to answer emails within a 24-hour time period, M-F, but due to high email volumes, occasionally an email will be missed so if you do not receive a response after 48 hours, please email again.
- Faculty and teaching assistants can ONLY communicate by email with students via their official UCF email.
- When sending emails, please **include BSC 3312 in the subject line** and sign off your email with your **full name and UCF ID#**.
- Students can direct emails to Alexandria on topics of general course content, case study information and for peer mentoring. Concerns about grades, accommodations and undergraduate advising should be sent to Dr. Diercksen.
- Emails should be written in a professional and respective manner. Florida has a very broad open records law (F.S. 119) so all emails may be subject to public disclosure.

Course Description

- *Credit hours*: 3
- Course Prerequisites: Biology 1 (BSC 2010) and Biology 2 (BSC 2011)
- Purpose of the course: BSC 3312 is an introductory exploration of the marine
 environment that will provide students with an initial understanding of the different
 marine ecosystems and the organisms that occupy those ecosystems. This course can
 provide the foundation for more advanced classes in topics of marine science as well as
 giving students the knowledge and skills to understand the connections between the
 marine environment and human society.

General Course Objectives

- Learn basic oceanography and the physical marine environment as it relates to the organisms that live in the ocean.
- Learn about the different types of marine ecosystems and their specific characteristics that shape those environments and the organisms that live there.
- Explore the organisms that live in the marine environment with focus on their unique adaptations that allow them to live in their different habits.
- Investigate and question the impact of humans on the world's oceans.

General Course Topics

- Basic saltwater chemistry and oceanography
- Basic concepts in marine ecology
- Marine organisms' adaptations
- Community structure of different ocean ecosystems (deep sea, coral reefs, coastal, etc.)
- Human impact on oceans

Course Materials

Textbook:

• "Marine Biology, A Very Short Introduction, 2nd edition" by Philip V. Mladenov, ISBN 978-0-19-884171-5





 Other readings or background information and/or links will be provided on Webcourses.

Computer access:

• While this is not an online course, students are expected to have online access to the Webcourse materials when necessary as well as a Wi-Fi enabled device (e.g. smartphone, tablet, laptop) for use in lecture at times.



- Access Webcourses: https://webcourses.ucf.edu and enter your NID and NID password.
- For technical support, please contact Online@UCF Support:
 - o https://cdl.ucf.edu/support/ or call 407-823-0407 or email: webcourses@ucf.edu
- Important: Please adjust your Webcourses' settings to allow notification of Webcourses' Announcements and/or check the Announcement section regularly.
- Students will need the ability to access the internet on a regular and reliable manner to access some course materials and assessments.
- It is recommended students access Webcourses through the Google Chrome browser for the best experience.

Important Information for Financial Aid Students!

Academic Activity Assignment/3-Words Reflection: Due date: Friday, Aug. 25, 2023 at 5:00 pm

- Faculty members are required to document students' academic activity at the beginning of each course for proper distribution of financial aid.
- To document that you began this course, please complete the "3-Words Reflection" in Webcourses by the end of the first week of classes, or as soon as possible after adding the course. Failure to do so could result in a delay in the disbursement of your financial aid!
- Important: Even if you do not receive financial aid, this is still a required assignment!

Background Primers

- Biology 1 and Biology 2 are pre-requisites for this class and knowledge of the content covered in those courses is expected.
- If you wish to refresh your Bio 1 & 2 information, view the "Primer of Biological Principles and Ecology" and "Primer of the Properties of Water" Powerpoints (in the Course Information Page in Webcourses) which contain a basic review of background concepts and important vocabulary necessary for BSC 3312.
- Additionally, there is a link in our Webcourses to a free Khan Academy crash course for Bio 1 & 2 and Ecology that students can use to review this basic content if needed.



- The class will meet **in-person** during our scheduled course days unless indicated in the course schedule, conditions warrant a university approved change in course format or Dr. Diercksen is unable to attend lecture due to illness or other obligations.
- This course has been designated as a **Mixed Mode (M)** course as there will be occasional required online content to prepare for classroom activities, some recorded lectures and some assessments conducted online.
- **Group work will be required** for the various case studies during the lecture period when case studies are scheduled. Groups will be assigned by the second week of class.
- There are some lecture days (e.g. Marine Organism presentations) when attendance will be part of the assignment grade. To receive associated attendance points for those days, students must provide documentation for their absence.
- Regardless if you are in attendance or not, students will be expected to be fully aware of any information given in class.
- Pdf versions of Powerpoint slides used during lecture will be provided in Webcourses generally after a lecture or case study is presented. Slides "notes" will also be posted.

Make-up Exams & Assignments

- Per university policy, students are allowed to submit make-up work (or an equivalent, alternate assignment) for authorized university-sponsored activities, religious observances, or legal obligations (such as jury duty).
- All potential make-up work (assignments or assessments such as exams) will be handled on a case-by-case basis. Please contact Dr. Diercksen ASAP if you are unable to complete an assignment or assessment for any reason.
- Documentation (e.g. Doctor's note) will typically be required for make-ups and must be approved at Dr. Diercksen's discretion.

Quick Links to Resources





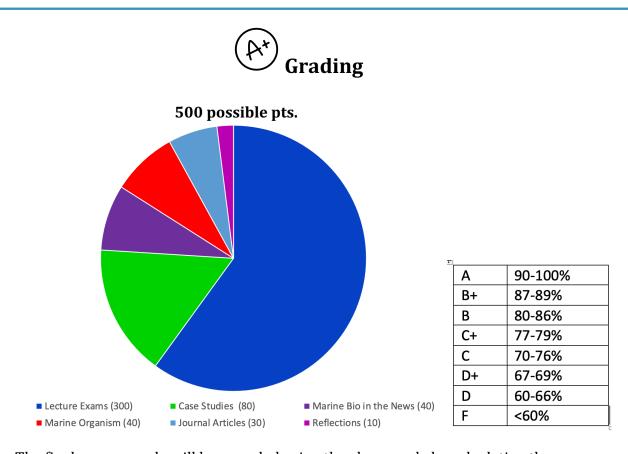






- There many offices and programs at UCF for dealing with different student issues. It can be confusing and overwhelming to know where to turn sometimes.
- UCF has an umbrella website, UCFCARES.com which provides students with information for help and support for ALL aspects of student lives.
- If you are dealing with any issues such as health concerns, coping with tragedy or crisis in
 your personal or family life, having trouble finding stable and safe housing, eating
 disorders or hunger issues, hazing and discrimination, sexual abuse or assault, in need of
 alcohol or drug treatment or ANYTHING that is affecting your health or well-being—your
 first step is to visit www.ucfc.area.com, 407-823-5607.
- You will be put in touch with the right resource for your needs in a caring, discreet manner.

When in doubt or trouble, please reach out to your UCF community & UCF resources!



• The final course grade will be awarded using the above scale by calculating the percentage of your total earned points during the semester **out of 500 possible points**. *Note: No minus grades, e.g. "A-" or NC grades.*

- Final grade percentages will be rounded up from 0.5 to the next highest whole number, e.g. An 89.6% would round to 90% and the letter grade would be an "A". An 89.4% would round to an 89%, and the letter grade will be a "B+". There are NO exceptions to this rounding scheme.
- Withdrawal Date: Friday, October 27, 2023 at 11:59 pm
 - o Please refer to the Undergraduate Catalog for detailed information about the implications of the withdrawal date.
 - o Students must initiate withdrawal themselves. Dr. Diercksen will NOT automatically withdraw any student from the course.
 - o Late and Medical Withdrawals and Incompletes are granted for only very compelling and documented reasons.
- Grades will be posted in Webcourses as available.
- No grades will be given over the phone or by email according to Federal law (FERPA regulations).
- Grades will NOT be routinely curved unless warranted by Dr. Diercksen's discretion.
- Extra Credit: Extra credit is NOT routinely available although opportunities *mav* arise throughout the semester.

Grade Details



3-Words Reflections (5 pts.)

- Due: Friday, August 25 at 5:00 pm
- As described above, this reflection will serve as the Academic Activity and will be scored for completion only.
- ALL students should complete the assignment regardless of financial aid.
- Be prepared to share your "3-words" with your case study group during lecture.

Three (3) Exams (100 pts. each; 300 pts. total)

- Three multiple choice lecture exams (2 during the semester, 1 during the final exam period) will be given on course content that is covered in readings and lectures as well as information from case studies.
- More information on specific exam content will be given closer to the exam dates shown in the course schedule.
- Exams 1 & 2 will be administered in-person. Exam 3 will be administered in Webcourses.

For in-person exams (Exam 1 & 2):

- Exams 1 & 2 are NOT considered open notes.
- Students arriving late for an exam will not automatically receive extra time and must turn in their exam at the end of the regular class period.
- Please bring a **#2 pencil and valid photo UCF Student ID card** on exam days. Scantrons will be provided to students. Do NOT bring your own scantron to the exams.
- Students who receive approved accommodations for exams are required to arrange to take their exams at Student Accessibility Services (SAS) on the same day exams 1 & 2 are

given to the class. Please reach out to Dr. Diercksen for confirmation of your accommodations to ensure an exam will be available to you at the SAS office.

• Reviewing in-person lecture exams:

- o Scantrons and exams will not be automatically returned to students.
- If a student wishes to view and/or receive a printed copy of their individual exam report sheet (with all correct and incorrect responses indicated), they must request it in person from Dr. Diercksen or the teaching assistant during their office hours.
- Students must resolve any grade concerns within two weeks of when grades are posted.
- Copying and/or photographing information from the exams is prohibited during post-exam viewing.

For Exam 3 (online):

- This exam will be administered and graded through Webcourses, available to take on the date of our Final Exam per the UCF Official Final Exam schedule for the Fall 2023 semester (please see course schedule).
- The exam will be available to take from **12:01** am to **11:59** pm on the given date.
- Once a student begins the exam, they will have **80 minutes to complete the exam** and submit. Documented SAS students will receive their time accommodations automatically.
- Only ONE attempt will be allowed per exam.
- Exam 3 is considered **open notes**. Students are expected to complete their exam entirely on their own however and not in coordination with other students in the course.
- Students do not need to use the Respondus Lockdown browser, Proctor Hub, Honor Lock or any other exam monitoring software.
- It is a student's responsibility to take their online exam using reliable technology and Wi-Fi access. It is strongly encouraged that students take their exams while on campus, preferably in one of the student computer centers if at all possible.
- If a student has technical difficulty during the exam, they must document the issue for possible redress and contact Dr. Diercksen ASAP.

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Case Studies (10 pts. each; 80 pts. total; 2 lowest case studies dropped)

- Ten (10) case studies exploring course content in more "real-life" applications will be discussed throughout the semester.
- Some case studies may have assigned pre-class reading/videos (available in Webcourses) with additional content provided during the lecture period the case study is discussed.
- Students will work together in groups on the case studies in class. Groups will be assigned randomly at the beginning of the semester.
- There will be an identified "deliverable" per each group at the end of each case study day which earns **everyone** in the group that is in attendance a maximum of 10 points.
- Students must be present during case study days to receive any points for the deliverable.
- If a student misses a case study day, they must provide appropriate documentation to Dr. Diercksen within 2 weeks for possible exemption/makeup (similar to missing an exam).

- Students can miss up to 2 case study days with no penalty (2 lowest scores dropped and a missed day will score a "0" for that student.).
- Important: Exams will have some questions about the case studies therefore students are responsible for all of the content of any missed case study.



Journal articles (15 pts. each; 30 pts. total)

- Due: Journal Article #1 on September 13; Journal Article #2 on October 18
 - o No late submissions will be accepted unless approved by Dr. Diercksen.
- More details for this assignment will be in the individual assignment's instructions but overall, students will be asked to read two (2) current peer reviewed journal articles concerning the marine environment and take a short online assessment about the articles.



Marine Biology in the News (40 pts.)

- Due: November 8 at 11:59 pm
 - o No late submissions will be accepted unless approved by Dr. Diercksen.
- More details for this assignment will be in the individual assignment's instructions but overall, students will be assigned a timely topic concerning the marine environment to research. Students will submit a brief summary of their topic to Webcourses.
- **Ten (10) of the 40 points** will be awarded for presenting the information to other students in small groups in class on 11/8.
 - o Approved documentation to waiver the presentation points is required if a student is unable to present on 11/8.



Marine Organism (40 pts.)

- Due: November 29 at 11:59 pm
 - o No late submissions will be accepted unless approved by Dr. Diercksen.
- More details for this assignment will be in the individual assignment's instructions but overall, students will be assigned a marine organism to research and create a single Powerpoint slide summarizing the information. This slide will be submitted in the appropriate Assignment in Webcourses.
- **Ten (10) of the 40 points** will be awarded for presenting the organism to other students in small groups in class on 11/29.
 - o Approved documentation to waiver the presentation points is required if a student is unable to present on 11/29.



Final Reflection (5 pts.)

- Due: Wednesday, November 29 at 11:59 pm
 - o No late submissions will be accepted unless approved by Dr. Diercksen.
- The reflection will be scored for completion only.

Fall 2023 Schedule (subject to change)







Case Study



Assignment



Exam

All due date times 11:59 pm unless noted otherwise.

Week 1: August 21 & 23





Chapter 1: Ocean Environment Chapter 7: Intertidal Life (pages 135-136)



3-Words Reflection due 8/25 at 5:00 pm

Week 2: August 28 & 30





Chapter 2: Marine Biological Processes



#1 Plastics Case Study (8/30)

Week 3: September 4 & 6 No class (Labor Day, UCF Closed) on Mon, 9/4 & we will also NOT meet in-person on Wed, 9/6.





Chapter 3: Life in the Coastal Ocean (pgs 38-50) Chapter 7: Intertidal Life (pgs 136-146)



Chapter 3 recorded lecture

Week 4: September 11 & 13





Chapter 3: Life in the Coastal Ocean (pgs 38-50) Chapter 7: Intertidal Life (pgs 136-146)

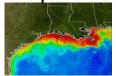


#2 Ocean Acidification Case Study (9/13)



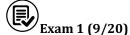
Journal Article #1 quiz due (9/13)

Week 5: September 18 & 20





#3 Dead Zone Case Study (9/18)



Week 6: September 25 & 27





Chapter 4: Polar Marine Biology



#4 Missing Sea Otters Case Study (9/25)







Chapter 5: Marine Life in the Tropics

Week 8: October 9 & 11





Chapter 6: Deep Ocean Biology



#5 COTS Case Study (10/9)

Week 9: October 16 & 18





Open Oceans—reading in Webcourses



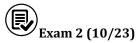
#6 Apo Island Case Study (10/18)



Journal Article #2 quiz due (10/18)

Week 10: October 23 & 25







Human Impacts on Ocean Pgs. 61-70; 84-86; 102-110 & 113-114; 132-134;143-146

Week 11: October 30 & November 1





#7 Marine Iguanas Case Study (10/30)



Guest speaker (11/1)

Week 12: November 6 & 8





#8 Cape Cod Sharks Case Study (11/6)



Marine Bio News Presentations (11/8)

Week 13: November 13 & 15





#9 Horseshoe Crabs Case Study (11/13)



/ Guest speaker (11/15)

$\begin{tabular}{ll} \it Week~14:~November~20~\&~22\\ \it We~will~NOT~meet~in-person~on~Monday,~11/20~or~11/22!!\\ \end{tabular}$





Reading in Webcourses



Marine Organisms' Adaptations recorded lecture

Week 15: November 27 & 29





#10 Fisheries Case Study (11/27)



Marine Organism Presentations (11/29)



Final Reflection due 11/29







Exam 3 on 12/6, available from 12:01 am-11:59 pm

UCF Official Policy Statements

Code of Conduct:

- Students should familiarize themselves with <u>UCF's Rules of Conduct</u>. According to Section 1, "Academic Misconduct," students are prohibited from engaging in:
- Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
- Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.
- Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
- Falsifying or misrepresenting the student's own academic work.
- *Plagiarism*: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.
- *Multiple Submissions*: Submitting the same academic work for credit more than once without the express written permission of the instructor.
- *Helping another violate* academic behavior standards.
- For more information about Academic Integrity, students may consult <u>The Center for Academic Integrity</u>.
- For more information about plagiarism and misuse of sources, see "<u>Defining and Avoiding Plagiarism</u>: The WPA Statement on Best Practices".

Responses to Academic Dishonesty, Plagiarism, or Cheating:

• Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, The Golden Rule. UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary, respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see http://goldenrule.sdes.ucf.edu/zgrade.

Course Accessibility Statement

• The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need access to course content due to course design limitations should contact the professor as soon as possible. Students should also connect with Student Accessibility Services (SAS) http://sas.sdes.ucf.edu/ (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). For students connected with SAS, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential course access and accommodations that might be necessary and reasonable. Determining reasonable access and accommodations requires consideration of the course

design, course learning objectives and the individual academic and course barriers experienced by the student. Further conversation with SAS, faculty and the student may be warranted to ensure an accessible course experience.

Title IX Policy:

- Title IX prohibits sex discrimination, including sexual misconduct, sexual violence, sexual harassment, and retaliation. If you or someone you know has been harassed or assaulted, you can find resources available to support the victim, including confidential resources and information concerning reporting options at www.shield.ucf.edu and http://cares.sdes.ucf.edu/.
 - This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.
 - During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need not make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identity-sensitive information. If you have any concerns about this, please contact your instructor.

Campus Safety Statement:

Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide's physical location and review the online version at https://centralflorida-prod.modolabs.net/student/safety/index.
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see https://ehs.ucf.edu/automated-external-defibrillator-aed-locations>.
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to < www.getrave.com/login/ucf and logging in. On the "My Account" tab, fill out the information, including e-mail address and cell phone number.
- Students with special needs related to emergency situations should speak with their instructors outside of class.

• To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (https://youtu.be/NIKYajEx4pk).

Deployed Active Duty Military Students

• Students who are deployed active-duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

Make-Up Assignments for Authorized University Events or Co-curricular Activities

• Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at https://policies.ucf.edu/documents/4-401.pdf>

Religious Observance:

• Students must notify their instructor in advance if they intend to miss class for a religious observance.

AI Tools:

- The use of Artificial Intelligence (AI) tools, via website, app, or any other access, is not permitted in this class. Representing work created by AI as your own is plagiarism, and will be prosecuted as such.
- OR:
- This class will make use of Artificial Intelligence (AI) in various ways. You are permitted to use AI only in the manner and means described in the assignments. Any attempt to represent AI output inappropriately as your own work will be treated as plagiarism.

In-class Recording:

- Students may, without prior notice, record video or audio of a class lecture for a class in which the student is enrolled for their own personal educational use.
- A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach enrolled students about a particular subject.
- Recording class activities other than class lectures, including but not limited to lab
 sessions, student presentations (whether individually or part of a group), class discussion
 (except when incidental to and incorporated within a class lecture), clinical presentations
 such as patient history, academic exercises involving student participation, test or
 examination administrations, field trips, private conversations between students in the
 class or between a student and the faculty member, and invited guest speakers is
 prohibited.
- Recordings may not be used as a substitute for class participation and class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct as described in the Golden Rule.