

# Principles of Marine Biology (BSC 3312) Fall 2022 Monday/Wednesday 3:00-4:20 pm Classroom Building 2 (CB2), Room 206

Instructor: Dr. Christa Diercksen





### **Communication**

- E-mail is the fastest and preferred way communicate with Dr. Diercksen. Please do NOT use Webcourses messages!
- All attempts will be made to answer emails within a 24-hour time period, M-F and Sun. *Note: Dr. Diercksen tries to be off-line on Saturdays.*
- Faculty can ONLY communicate by email with students via Knightsmail. Students must set up a Knights account at www.knightsemail.ucf.edu and check it regularly.
- Please include the course name and sign off the email with your full name and UCF ID# in your email.
- Emails should be written in a professional and respective manner. Florida has a very broad open records law (F.S. 119) so all emails sent to UCF email may be subject to public disclosure.

# Official Class GroupMe:

• Use this link <a href="https://groupme.com/join group/87902559/IuFq5HSb">https://groupme.com/join group/87902559/IuFq5HSb</a> Or scan the QR code below to join



- Use this GroupMe to talk to other students in the class, ask questions about course content, set up study sessions or anything else you want to talk about! It should NOT be used to share any information pertaining to assessments or anything related to academic dishonesty and violations will be reported to the Office of Student Conduct!
- When posting in the GroupMe, students are expected to treat others with respect in accordance to the Inclusion, Safety and Disability Accommodation at UCF statement found below. Violators of this policy will be removed from the GroupMe and face potential disciplinary action.

# **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 major classes of 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
- Survey of marine organisms
- Community structure of different ocean ecosystems (deep sea, coral reefs, coastal, etc.)
- Human impact on oceans

#### **Course Materials**

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





- Note: The first edition of "Marine Biology, A Very Short Introduction" would be ok as well but keep in mind that page numbers are different between the editions.
- Other readings or background information and/or links will be provided on Webcourses.
- While not a requirement, it would be helpful to have a WiFi capable device (smartphone, tablet, laptop) during class on case study days.

# webcourses@UCF

- Access Webcourses: <a href="https://webcourses.ucf.edu">https://webcourses.ucf.edu</a> 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: Reflection #1: Due date: Friday, Aug. 26, 2022 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 "Reflection #1" 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**

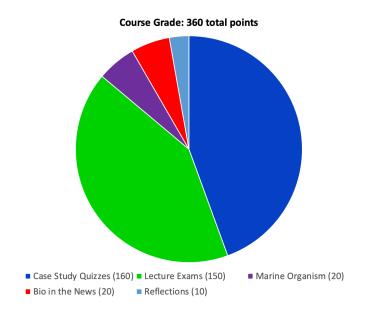
- Biology 1 and Biology 2 are pre-requisites for this class and knowledge of the content covered in those courses is expected.
- If you wish to refresh your Bio 1 & 2 information, view the "Primer of Biological Principles and Ecology" and "Primer of the Properties of Water" Powerpoints (in the Course 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.



# Attendance Policy & Class Structure

- The class will meet **in-person** during our scheduled course days and time unless conditions warrant a university approved change in course format, or Dr. Diercksen is unable to attend lecture due to Covid related illness and/or exposure or other health issues.
- Attendance is not mandatory for lecture but encouraged for healthy students. Students who are experiencing medical symptoms of any kind or who suspect they have been exposed to COVID-19 should strongly consider not attending class until medically cleared.
- There are a few lecture days (e.g. Marine Bio in the News presentations) when attendance will be part of the assignment grade. Please see the course schedule for those days. To receive associated attendance points for those days, students must provide documentation for their absence.
- Dr. Diercksen may choose to wear a mask during lecture based on transmission levels in the community. Students can wear a mask or not based on their personal decision and risk analysis.
- Regardless if you are in attendance or not, students will be expected to be fully aware of any information given in lecture.
- Generally, Monday lecture will be for reviewing course content while the Wednesday lecture period will involve case studies, presentations or guest speakers.
- For unusual absences that are documented, students may be provided with Zoom lecture recordings from previous semesters if requested and approved by Dr. Diercksen.
   Students who are permitted to watch these recordings should be aware there could be minor changes to the content covered and the depth of that coverage from previous semesters.





F.		
	Α	90-100%
	B+	87-89%
	В	80-86%
	C+	77-79%
	С	70-76%
	D+	67-69%
	D	60-66%
	F	<60%

- 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 300 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 28, 2022
  - Please refer to the Undergraduate Catalog for detailed information about the implications of the withdrawal date.
  - Students must initiate withdrawal themselves. Dr. Diercksen will NOT automatically withdraw any student from the course.
  - Late and Medical Withdrawals and Incompletes are granted for only very compelling and documented reasons.
- Grades will be posted in Webcourses as available but are NOT to be considered official grades at any one given moment.
- 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 *may* arise throughout the semester.
- **Make-up work:** Make-ups for missed exams, quizzes or other due dates must be approved at the discretion of Dr. Diercksen and *will require documentation*.

#### **Grade Details**



# Reflection #1 (5 pts.)

- Due: Friday, August 26 at 5:00 pm
- As described above, this reflection will serve as the Academic Activity and will be scored for completion only.
- It is very important for Financial Aid students to complete this assignment in order to have their financial funds distributed properly.
- ALL students should complete the assignment regardless of financial aid.

# $^{\prime\prime}$ Three (3) Exams (50 pts. each; 150 pts. total)

- Three lecture exams will be given on course content that is covered in readings and lectures. More information on exam content will be given closer to the exam dates.
- These lecture exams will be taken and graded through Webcourses and available to take on the exam days (see schedule below) from 12:01 am to 11:59 pm.
- Once a student begins the exam however, 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.
- Exams are considered **OPEN NOTES**. Students are expected to complete their exams 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.
- Lecture Exams will consist of mostly multiple-choice questions but will also have possible short response questions so students are strongly encouraged to take their exams on a device that enables efficient writing (e.g. Laptop or desktop but not a smart phone.).
- 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 an exam, they must document the issue for possible redress and contact Dr. Diercksen ASAP.
- Important: The class will NOT meet in-person on exam days.

#### **Exam Days:**

o **Exam 1** (Chapters 1-3) October 5 o **Exam 2** (Chapters 4-6 + Open Ocean, Human Impact) November 21 o Exam 3 (Final Exam) **December 9** 



### Case Studies (20 pts. each; 160 pts. total; Lowest Case Study Quiz dropped)

- Nine (9) 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 or 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.
- Assessment of the case studies will be **individual guizzes conducted in Webcourses**.
- The quizzes will be a mixture of multiple-choice and short response questions.
- Case Study quizzes will be available in Webcourses the day after the case study is **discussed in class** and **available for 1 week** (see due dates on the Course Schedule).
- Attendance on case study days is NOT considered mandatory however working on case studies in groups and participating in larger classroom discussion about the case studies will give students a higher degree of potential success on the case study assessments.
- Case study quizzes will have an **80-minute time limit** once a student begins the quiz and only **one attempt** will be allowed per quiz.
- Quizzes are considered **OPEN NOTES**, but students should not complete quizzes with other students or discuss guizzes with other students until the due date has passed.



## Marine Biology in the News (20 pts.)

- Due: October 19 at 3:00 pm (beginning of class)
  - NO late submissions will be accepted unless documentation is approved by Dr. Diercksen.
- Each student will be asked to share with the class one thing they learned about the ocean (outside of our class!) from a current online article.
- A link to the article will be submitted in our Webcourses Discussion board, but students will be asked to also verbally share the story in small groups during lecture on 10/19.
- **Five (5) of the 20 points** will be awarded for discussing the article in class.
- Approved documentation is required if a student is unable to attend lecture on 10/19.



# Marine Organism (20 pts.)

- Due: November 30 at 3:00 pm (beginning of class)
  - NO late submissions will be accepted unless documentation is approved by Dr. Diercksen.
- Students will be randomly assigned a marine organism to research around mid-semester.
- More details for this assignment will be in the individual assignment's instructions but overall, students will research their marine organism and create a single Powerpoint slide

- summarizing the information. This slide will be submitted in the appropriate Assignment in Webcourses.
- **Five (5) of the 20 points** will be awarded for presenting the organism to other students in small groups in class on 11/30. Students should be prepared to either print their slide for presentation or display it on a laptop or tablet. Color printing is not required but encouraged if possible.
- Approved documentation is required if a student is unable to present on 11/30.



# Final Reflection (5 pts.)

- Due: Wednesday, November 30 at 11:59 pm
- This reflection will ask students to think about the course as the semester is coming to a close.
- The reflection will be scored for completion only.

# **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.

### Fall 2022 Schedule (subject to change)





Reading





**Case Study** 



Assignment



Exam/Quiz Due

BOLD: REQUIRED CLASS ATTENDANCE All due date times 11:59 pm unless noted otherwise.

Week 1: August 22 & 24





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



Course Introduction
Introductory Oceanography



Reflection #1: Due 8/26 at 5:00 pm

Week 2: August 29 & 31





Chapter 1: Ocean Environment

Chapter 7: Intertidal Life (pages 125)

Chapter 7: Intertidal Life (pages 135-136)



Introductory Oceanography continued



Plastics in the Ocean Case Study (8/31)

Week 3: September 5 & 7 NO CLASS (LABOR DAY) ON MONDAY, 9/5!





Ocean Acidification Case Study (9/7)



Plastics in the Ocean CS Quiz due 9/7

Week 4: September 12 & 14





Chapter 2: Marine Biological Processes



Marine Primary Production



Dead Zone Case Study (9/14)



Ocean Acidification CS Quiz due 9/14

Week 5: September 19 & 21





In Webcourses



Survey of Marine Organisms



Dead Zone Case Study Quiz due 9/21

Week 6: September 26 & 28





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



**Coastal Communities** 



Missing Sea Otters Case Study (9/28)

Week 7: October 3 & 5





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



Coastal Communities continued



Exam 1 (Chapters 1, 2, Marine Organisms) on 10/5



Missing Sea Otters CS Quiz due 10/5

Week 8: October 10 & 12





Chapter 4: Polar Marine Biology



**Polar Environment** 



Horseshoe Crab Case Study (10/12)

Week 9: October 17 & 19





Chapter 5: Marine Life in the Tropics



Coral Reefs & Mangroves



Marine Bio in the News due 10/19 at 3:00 pm



Horseshoe Crab CS Quiz due 10/19





Chapter 5: *Marine Life in the Tropics* 



Coral Reefs & Mangroves continued



Crown of Thorns (COTS) Case Study (10/26)

Week 11: October 31 & November 2







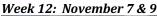
Open Ocean



Apo Island Case Study (11/2)



COTS Case Study Quiz due 11/2







Chapter 6: Deep Ocean Biology



Deep Ocean



Marine Iguanas Case Study (11/9)



Apo Island Case Study Quiz due 11/9

Week 13: November 14 & 16





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



Human Impacts on Ocean



Cape Cod Sharks Case Study (11/16)



Marine Iguanas CS Quiz due 11/16

Week 14: November 21 & 23 NO CLASS ON WEDNESDAY 11/23!





Exam 2 (Chap. 4-6 + Open Ocean, Human Impact) on 11/21.



Cape Cod Sharks CS Quiz due 11/23

Week 15: November 28 & 30





No reading



Guest Speakers



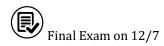
Marine Organism Presentation due 11/30, 3:00 pm



Final Reflection due 11/30 at 11:59 pm

#### Final Exam Period





# **Important Dates & Quick Links to Resources**

• October 28 at 11:59 pm: Withdrawal Date

• December 2 at 11:59 pm: Grade Forgiveness Date











- 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 <a href="https://www.ucfc.ares.com">www.ucfc.ares.com</a>, 407-823-5607.
- You will be put in touch with the right resource for your needs in a caring, discreet manner.

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

# **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:
  - O 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.
  - o *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.
  - o *Multiple Submissions*: Submitting the same academic work for credit more than once without the express written permission of the instructor.
  - o *Helping another violate* academic behavior standards.
  - o For more information about Academic Integrity, students may consult <u>The Center</u> for Academic Integrity.
  - o For more information about plagiarism and misuse of sources, see "<u>Defining and Avoiding Plagiarism: The WPA Statement on Best Practices</u>".

#### 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.

#### Inclusion, Safety, and Disability Accommodation at UCF

• The University of Central Florida considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. UCF expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. Dimensions of diversity can

- include sex, race, age, national origin, ethnicity, gender identity and expression, intellectual and physical ability, sexual orientation, income, faith and non-faith perspectives, socio-economic class, political ideology, education, primary language, family status, military experience, cognitive style, and communication style. The individual intersection of these experiences and characteristics must be valued in our community.
- 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 <a href="http://cares.sdes.ucf.edu/">http://cares.sdes.ucf.edu/</a>.
- If there are aspects of the design, instruction, and/or experiences within this course that result in barriers to your inclusion or accurate assessment of achievement, please notify the instructor as soon as possible and/or contact Student Accessibility Services.
- For more information on diversity and inclusion, Title IX, accessibility, or UCF's complaint processes contact:
- Title IX EO/AA <a href="http://www.eeo.ucf.edu/">http://www.eeo.ucf.edu/</a> & <a href="mailto:askanadvocate@ucf.edu">askanadvocate@ucf.edu</a> Disability Accommodation Student Accessibility Services <a href="http://sas.sdes.ucf.edu/">http://sas.sdes.ucf.edu/</a> & <a href="mailto:sas@ucf.edu/">sas@ucf.edu</a>
- Diversity and Inclusion Training and Events <u>www.diversity.ucf.edu</u>
- Student Bias Grievances Just Knights response team <a href="http://jkrt.sdes.ucf.edu/UCF">http://jkrt.sdes.ucf.edu/UCF</a> UCF Compliance and Ethics Office
  - <a href="http://compliance.ucf.edu/">http://compliance.ucf.edu/</a> <a href="mailto:compliance.ucf.edu/">compliance.ucf.edu/</a> <a href="mailto:compliance.ucf.edu/">http://compliance.ucf.edu/</a> <a href="mailto:compliance.ucf.edu/">compliance.ucf.edu/</a> <a href="mailto:c
- Ombuds Office <a href="http://www.ombuds.ucf.edu">http://www.ombuds.ucf.edu</a>
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <a href="https://my.ucf.eduLinks">https://my.ucf.eduLinks</a> to an external site. and logging in. Click on "Student Self Service" located on the left side of the screen in the toolbar, scroll down to the blue "Personal Information" heading on the Student Center screen, click on "UCF Alert", fill out the information, including e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."
- Students with special needs related to emergency situations should speak with their instructors.
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <a href="https://my.ucf.eduLinks">https://my.ucf.eduLinks</a> to an external site. and logging in. Click on "Student Self Service" located on the left side of the screen in the toolbar, scroll down to the blue "Personal Information" heading on the Student Center screen, click on "UCF Alert", fill out the information, including e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."
- 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.
- 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.

#### **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.