

Principles of Marine Biology (BSC 3312)

Fall 2017

Classroom Building 1 (CB1); Room 307

Tu/Th 12:00-1:15 PM

Instructor: Dr. Christa Diercksen
Office: Biology 201A
Email: christa.diercksen@ucf.edu

- E-mail is the fastest and best way to communicate with Dr. Diercksen. Students must use their Knightsmail account to communicate with faculty.
- All reasonable attempts will be made to answer emails within a 24 hour time period, M-F and Sun. *Note: Dr. Diercksen is offline on Saturdays.*
- Emails must be written in a professional manner! Please indicate that you are a **Marine Biology** student and include a brief description of your issue/question in the subject line and sign off your email with your FULL name and UCF ID number.

Office Hours (BIO 201A):

- Monday: 12:30-2:30 PM
- Tuesday: 10:30-11:30 AM
- Wednesday: 11:00 AM-12:00 PM
- Thursday: 2:00-3:30 PM
- Friday: 12:00-1:00 PM

Course Description:

- *Credit hours:* 3
- *Course Prerequisites:* BSC 2010C and BSC 2011C
- *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.
- *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 salt water chemistry and oceanography
 - Basic concepts in marine ecology
 - Community structure of the different ocean ecosystems (deep sea, coral reefs, intertidal, etc.)
 - Major animal and plant groups that live in marine environments (algae, phytoplankton, marine invertebrates, marine mammals, etc.)
 - Human impact on oceans and marine conservation with a particular focus on the effect of global warming on the ocean and its inhabitants

Required books/materials:

- *Introduction to the Biology of Marine Life, 11th edition* by John Morrissey, James L. Sumich and Deanna R. Pinkard-Meier; ISBN: 9781284090505

Important Information for Financial Aid Students:

- For financial aid reasons, document your engagement in this course by completing the academic activity described below by **Friday, August 25, 2017**. Failure to do so will result in a delay in the disbursement of your financial aid.

Academic Activity Assignment: Why the Oceans Matters Video/Quiz

- Through the link in our Course Information Module, watch the short National Geographic video titled “*Why the Ocean Matters*” and then answer the **5 question quiz titled “Academic Activity: Why the Ocean Matters Quiz”** in the Quiz section (also accessible in the Course Information Module).
- Only COMPLETION counts so do not be concerned with your score since it will not affect your grade.
- Due date for quiz: **Friday, August 25, 2017 at 5:00 PM**
- The quiz will remain open the whole semester. Your score will remain in Webcourses so that it can be assessed by Financial Aid if necessary.

Primer of Biological and Ecological Principles and Properties of Water:

- Enrollment in BSC 3312 requires the successful completion of BSC 2010 (Biology I) and 2011 (Biology II) and therefore students are expected to have a fundamental knowledge of basic biological and ecological principles.
- Students are strongly encouraged to view the provided Powerpoints in Webcourses titled “Primer of Biological Principles and Ecology” and “Properties of Water” which contain a basic review of background concepts necessary for our course as well as important course vocabulary words.
- Additionally, Chapter 3 from our textbook covers basic biological and ecological topics. We will not cover this chapter directly in class so students are encouraged to read Chapter 3 on their own.
 - If students have any questions about this content, please contact Dr. Diercksen.

Grading:

- There will be a total of **525 points** available throughout the semester, earned from the following assessments:
 - 2 Lecture Exams: 100 pts. each (200 pts. total)
 - 1 Final Exam: 100 pts.
 - 1 Group Presentation: 100 pts.
 - 5 Summaries of Group Presentations 10 pts. each (50 pts. total)
 - 5 Case studies/Critical Thinking ?'s: 10 pts. each (50 pts. total)
 - 1 “Speed Date” Organism: 25 pts.
- Your final course grade will be awarded using the following scale with your point total out of 425:
 - **Grade Scale:** A=90-100%; B+=87-89%; B=80-86%; C+=77-79%; C=70-76%; D+= 67-69%; D=60-66%; F<60%
 - *Note: No minus grades, e.g. “A-”, are given in this class.*

Other important grade information:

- The withdrawal date for the Fall 2017 semester is **Monday, October 30, 2017 at 11:59 PM**.
- There is no NC grade for this class.

Lecture Exams:

- Lecture exams will be a mixture of short answer, multiple choice (scantrons are NOT necessary), fill in the blank, matching, short answer, free response, etc.
- Make-Up Exams will be handled on a case by case basis and will only be arranged for legitimate **documented and approved** reasons at the discretion of Dr. Diercksen.

Final Exam:

- The Final exam will be given during Final Exams week.
- The Final exam will cover material post Exam 2 as well as addressing major concepts from the whole semester.

Group Presentation:

- Students will work in groups of 4 students on an oral presentation that will be given to the class on a topic relevant to marine biology.
- All students in a group will receive the same score for the group presentation except for a small peer evaluated part that will be individually tallied.
- Group assignments, details of this presentation and possible topics will be given in a separate document in Webcourses.
- There will be 5 different days for the presentations available. Groups will be randomly assigned their presentation day by the end of the first week of class and are expected to present on their assigned day unless they make a pre-approved, mutually agreed upon switch with another group.
 - Please notify Dr. Diercksen if a group presentation day is switched.

Summaries of other Group Presentations:

- Students will be expected to attend all of the class periods when presentations are given.
- To ensure attendance, students will be required to complete a brief summary of one (1) other group's presentation per presentation day (including the day their group presents).
- Each summary will be worth **12.5 points** (50 points total).
- Summaries will be submitted **online by document upload or direct text input**.
 - The necessary information and due dates for each submission can be found in the assignments section in Webcourses as well as a document that students can print out and bring to each presentation day to take notes on during the presentations. This document can also be used for the online submission after filling in the required information, re-saving and uploading.
 - Summaries will be **due two days (by 11:59 PM) after the presentations** are given. Check Webcourses for the exact due dates for each summary.
- If a student is unable to attend any of the presentation days (October 17, October 31, November 7, November 16), they must provide Dr. Diercksen with a documented excuse and discuss makeup arrangements or they will lose the entire point value (12.5 points) for the summary.
- Late submissions will be **penalized 20% of the assignment's point value (2.5 points) each day late**.

Case studies/Critical Thinking Questions:

- Each chapter in the textbook contains a case study that investigates an application of the chapter's content.
- Associated with each case study are 2-3 critical thinking questions.
- Students are required to answer the critical thinking questions from **5 total** chapters out of the 14 available
 - 3 chapters must be completed BEFORE October 5th (from Chapters 1-8)
 - *Note: While we are not going over Chapter 3 directly in class, there is a possible case study in Chapter 3.*
 - The remaining 2 chapters will be due BEFORE November 30th (from Chapters 9-14).
 - NO submissions from Chapters 1-8 will be accepted **after October 5th at 11:59 PM**.
 - NO submissions from Chapters 9-14 will be accepted **after November 30th at 11:59 PM**.
- The critical thinking questions are worth **10 points for each chapter** (earning up to a total of 50 pts for completing all 5) and will be graded based on depth of completion and accuracy although thoughtfulness and creativity for some questions will also be assessed. Many of the questions do not necessarily have a "right or wrong" answer but how well statements are supported will be considered when grading.
- There are no exact word lengths requirements for answers but students should attempt to complete all of the questions for one chapter in under 2 typed (12 pt) pages.
- Be aware student answers will be analyzed using Turn It In and students may be penalized (e.g. loss of points for assignment and/or further disciplinary action) if sufficient plagiarism from other students or other sources is documented. If you do use outside sources to support your answers, please credit them appropriately.
- There will be NO extra credit for answering more than 5 case studies' questions.
- The questions (but not the case studies themselves) will be available in the Assignments section in Webcourses and **must be answered online within Webcourses** through document attachment or direct text input. If attaching documents, please use either Word (.doc) or PDF (.pdf) documents.

“Speed Date” Organism:

- Students will be randomly assigned a marine organism for a VERY BRIEF individual presentation.
- This presentation will be worth a **total of 25 pts.** and will be due at the beginning of class time (**12:00 PM**) on **Thursday, October 5th.**
- Details of the presentation will be given in a separate document found on Webcourses.
- If a student is unable to attend the Speed Date day (September 28), they must provide Dr. Diercksen with a documented excuse and discuss makeup arrangements.
- NO late assignments will be accepted without permission.

Classroom Conduct: By enrolling at UCF, all students have agreed to abide by the Golden Rule. Please become familiar with this document at: **<http://www.goldenrule.sdes.ucf.edu>**

- Students who fail to show respect for the instructor or fellow students by talking, texting, using their laptops for non-class related material, etc. will be asked to leave.

Academic Integrity:

- Cheating on lecture exams will not be tolerated.
- Plagiarism will also be monitored on all items turned in for any assignments.
- Penalties for cheating and plagiarism can include but are not limited to:
 - A failing grade on an assignment or in the course
 - Suspension or expulsion from the university
 - A "Z Designation" on a student's official transcript indicating academic dishonesty
 - For more information about the Z Designation, see <http://z.ucf.edu/>
- Students who are caught cheating will be immediately referred to the UCF Disciplinary Action Committee.

Disability Access Statement: The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities.

- Students who need accommodations must be registered with Student Accessibility Services (SAS), Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.
- Students are expected to schedule their own exams with SAS to be completed on the same day exams are given in the classroom but please let Dr. Diercksen know if you are taking your exams at SAS or wish to discuss other accommodations.

Fall 2017 Schedule (subject to change). *Note dates of lecture exams, group presentations and speed date assignment (mandatory attendance)!*

August 22	Course Introduction & Chapter 1: <i>Ocean Habitat</i>
August 24	Chapter 2: <i>Physical & Chemical Oceanography</i>
August 29	Chapter 4: <i>Marine Microbes</i> (Note: We are not covering Chapter 3 in class.)
August 31	Chapter 4: <i>Marine Microbes</i> continued (Note: We will end class at 1:00 due to Football Day.)
September 5	Chapter 5: <i>Marine Macroalgae & Plants</i>
September 7	XXXXXXXXXXXXXXXXXXXX
September 12	XXXXXXXXXXXXXXXXXXXX
September 14	XXXXXXXXXXXXXXXXXXXX
September 19	Chapter 5: <i>Marine Macroalgae & Plants continued</i>
	Chapter 6 <i>Marine Invertebrates</i>
September 21	Chapter 6: <i>Marine Invertebrates continued</i>
September 26	Chapter 7: <i>Marine Vertebrates I: Fishes & Reptiles</i>
September 28	Chapter 7: <i>Marine Vertebrates I: Fishes & Reptiles continued</i>
	Chapter 8: <i>Marine Vertebrates II: Seabirds & Marine Mammals</i>
October 3	Chapter 8: <i>Marine Vertebrates II: Seabirds & Marine Mammals continued</i>
October 5	"Speed Date" Organisms Chapter 1-8 Critical Thinking ?'s Due
October 10	Exam 1 (Covering Chapters 1-8)
October 12	Chapter 9: <i>Estuaries</i>
October 17	Group Presentations #1
October 19	<i>Chapter 10: Coastal Seas</i>
October 24	Chapter 11: <i>Coral Reefs</i>
October 26	Guest Speaker(s)
October 31	Group Presentations #2
November 2	Chapter 12: <i>Open Sea</i>
November 7	Group Presentations #3
November 9	Chapter 13: <i>Deep-Sea Floor</i>
November 14	Chapter 14: <i>Polar Seas</i>
November 16	Group Presentations #4
November 21	Exam 2 (Covering Chapters 9-14)
November 23	Thanksgiving Holiday
November 28	<i>Human Impact & Marine Conservation</i>
November 30	<i>Human Impact & Marine Conservation</i> continued Chapter 9-14 Critical Thinking ?'s Due
December 7	Final Exam: 10:00 AM-12:50 PM