

Principles of Marine Biology (BSC 3312)

Spring 2018

Psychology (PSY); Room 105

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: 2:00-3:00 PM
- Tuesday: 10:00-11:30 AM
- Wednesday: 9:00-10:30 AM
- Thursday: 2:00-3:00 PM
- Friday: 8:30-9:30 AM

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, January 12, 2018**. Failure to do so may result in a delay in the disbursement of your financial aid.

Academic Activity Assignment: Bio 1 & 2 Foundation

- Due date for quiz: **Friday, January 12, 2018 at 5:00 PM**
- Please complete the “quiz” titled Bio 1 & Bio 2 Foundation 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 and the points earned for this quiz are NOT used for calculation of your final grade in any way.
- You are encouraged to take the quiz without any preparation so that you can gauge a true level of your Bio 1/2 knowledge.
- The quiz will remain open the whole semester. Your score will remain in Webcourses only 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.
- Particularly if you did not score well on the Bio 1 & 2 Foundation quiz for the academic activity, you 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 **400 points** available throughout the semester, earned from the following assessments:
 - 2 Short Answer Exams: 50 pts. each (100 pts. total)
 - 5 Multiple Choice Quizzes 20 pts. each (Lowest grade drops, 80 pts. total)
 - 1 Final Exam: 50 pts.
 - 1 Group Presentation: 50 pts.
 - 4 Summaries of Group Presentations 10 pts. each (40 pts. total)
 - 4 Textbook Case studies/Critical Thinking ?'s: 10 pts. each (40 pts. total)
 - Sustainability case study 20 pts.
 - 1 “Speed Date” Organism: 20 pts.
- Your final course grade will be awarded using the following scale with your point total out of 400:
 - **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 Spring 2018 semester is **Wednesday, March 21, 2018 at 11:59 PM**.
- There is no NC grade for this class.
- For all missed exams, quizzes, presentation or other required attendance days, makeup exams or alternative options must be approved at the discretion of Dr. Diercksen and will require documentation.

Short Answer Exams (100 pts total):

- These exams will be short answer, free response style questions.
- *Exam 1* (50 pts) on **February 22** will cover Chapters 1-8 (Ocean Habitat, Physical & Chemical Oceanography + Organisms).
- *Exam 2* (50 pts) on **April 19** will cover Chapters 9-15 (Marine Ecosystems + Human Impact)

Multiple Choice Quizzes (80 pts. total after dropping lowest)

- Five (5) multiple choice quizzes of 10 questions each will be given approximately every 2 weeks (see course schedule below).
- The lowest score of the 5 quizzes will be dropped from the final course grade calculation.
- The content each quiz will cover will be clarified in lecture and through Webcourses' Announcements.
- Scantrons will be provided for these quizzes.

Final Exam (50 pts):

- Our Final Exam is scheduled for **April 26 from 10:00 AM-12:50 PM**
- The Final Exam is not a classic cumulative exam but will address major concepts from the whole semester. More information will be given as the Final Exam period approaches.

Group Presentation (50 pts):

- 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 4 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.

Summaries of other Group Presentations (40 pts. total):

- *Presentation Day #1:* Due **March 9 at 11:59 PM**
- *Presentation Day #2:* Due **March 23 at 11:59 PM**
- *Presentation Day #3:* Due **March 30 at 11:59 PM**
- *Presentation Day #4:* Due **April 6 at 11:59 PM**
- 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 **10 points** (40 points total).
- Summaries will be submitted online in Webcourses by document upload or direct text input in the appropriate assignment.
 - 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 on a computer, re-saving and uploading.
 - Summaries will be **due one day (by 11:59 PM) after the presentations** are given (see above for due dates)
- If a student is unable to attend any of the presentation days (March 8, March 22, March 29 and April 5), they must provide Dr. Dierksen with a documented excuse and discuss makeup arrangements or they will lose the entire point value (10 points) for the summary.
- Late submissions will be **penalized 20% of the assignment's point value (2 points) each day late.**

Textbook Case studies/Critical Thinking Questions (40 pts total):

- *Chapter 3* (page 73): Due **January 18 at 11:59 PM**
- *Chapter 9* (page 249): Due **March 8 at 11:59 PM**
- *Chapter 11* (page 316): Due **March 22 at 11:59 PM**
- *Chapter 13* (page 365): Due **April 5 at 11:59 PM**
- Each chapter in the textbook contains a case study that investigates an application of the chapter's content. There are 2-3 critical thinking questions associated with each case study that must be answered for the assigned chapters.
- While students are encouraged to look at all of the case studies for interest, only **FOUR** of them will be assessed for a grade (see above for which chapter and due dates).

- The critical thinking questions for each case study are worth up to **10 points for each chapter** (earning up to a total of 40 pts for completing all 4) 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.
- 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 in the appropriate assignment area.
- There will be NO extra credit for answering more than 4 case studies’ questions.
- Due dates for each chapter can be seen above and in the course schedule.
- Late submissions will be **penalized 20% of the assignment’s point value (2 points) each day late.**

Sustainability Case Study (20 pts):

- Due on **Tuesday, April 17th at 11:59 PM**
- Students will be assigned a short video to watch outside of class and will be required to submit a written analysis of the case study submitted online in Webcourses in the appropriate assignment section.
- Late submissions will be **penalized 20% of the assignment’s point value (4 points) each day late.**

“Speed Date” Organism:

- Due on **March 1 at beginning of class time (12:00 PM)**
- Students will be randomly assigned a marine organism for a VERY BRIEF individual presentation.
- This presentation will be worth a **total of 20 pts.**
- 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 (March 1), they must provide Dr. Diercksen with a documented excuse and discuss makeup arrangements.
- **Important:** NO late submissions will be accepted without permission from Dr. Diercksen. Students failing to submit their presentation by the due date and time will lose ALL point value of the assignment.

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:

- 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.

Spring 2018 Schedule (subject to change). Note dates of lecture quizzes, exams, group presentations and speed date assignment (mandatory attendance)!

January 9	Course Introduction & Chapter 1: <i>Ocean Habitat</i>
January 11	Chapter 2: <i>Physical & Chemical Oceanography</i>
January 16	Chapter 4: <i>Marine Microbes</i>
January 18	Chapter 4: <i>Marine Microbes continued</i>
January 23	Quiz #1 (Content announced in Webcourses) Chapter 5: <i>Marine Macroalgae & Plants</i>
January 25	Chapter 5: <i>Marine Macroalgae & Plants continued</i>
January 30	Chapter 6 <i>Marine Invertebrates</i>
February 1	Chapter 6: <i>Marine Invertebrates continued</i>
February 6	Quiz #2 (Content announced in Webcourses) Chapter 7: <i>Marine Vertebrates I: Fishes & Reptiles</i>
February 8	Chapter 7: <i>Marine Vertebrates I: Fishes & Reptiles continued</i>
February 13	Chapter 8: <i>Marine Vertebrates II: Seabirds & Marine Mammals</i>
February 15	Chapter 8: <i>Marine Vertebrates II: Seabirds & Marine Mammals continued</i>
February 20	Quiz #3 (Content announced in Webcourses) Guest speaker
February 22	Exam 1 (Covering Chapters 1-8)
February 27	Chapter 9: <i>Estuaries</i>
March 1	"Speed Date" Organisms
March 6	<i>Chapter 10: Coastal Seas</i>
March 8	Group Presentations #1
SPRING BREAK!!!	
March 20	Quiz #4 (Content announced in Webcourses) Chapter 11: <i>Coral Reefs</i>
March 22	Group Presentations #2
March 27	Chapter 12: <i>Open Sea</i>
March 29	Group Presentations #3
April 3	Quiz #5 (Content announced in Webcourses) Chapter 13: <i>Deep-Sea Floor</i>
April 5	Group Presentations #4
April 10	Chapter 14: <i>Polar Seas</i>
April 12	Chapter 15: <i>Human Impact & Marine Conservation</i>
April 17	Chapter 15: <i>Human Impact & Marine Conservation continued</i>
April 19	Exam 2 (Covering Chapters 9-15)
April 26	Final Exam: 10:00 AM-12:50 PM

“Cheat” Sheet for Due Dates and Quizzes/Exams

- Please note your own group’s presentation day when assigned

January 18: Chapter 3 Case Study
January 23: Quiz 1
February 6: Quiz 2
February 20: Quiz 3
February 22: Exam 1
March 1: Speed Date (by noon)
March 8: Chapter 9 Case Study
March 9: Presentation Day #1 Summary
March 20: Quiz 4
March 22: Chapter 11 Case Study
March 23: Presentation Day #2 Summary
March 30: Presentation Day #3 Summary
April 3: Quiz 5
April 5: Chapter 13 Case Study
April 6: Presentation Day #4 Summary
April 17: Sustainability Case Study
April 19: Exam 2