OCB2000: Introductory Marine Biology

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Course Description and Purpose

Students attending this course already live in a globalized society, where the marine environment is an essential part of their lives directly or indirectly even if they don’t comprehend how this happens. Many countries around the world are strongly utilizing the sea for their basic needs including food, shelter, entertainment, and health. These marine ecosystems also provide valuable services to local and global interests. Humans have a great influence on the oceans, usually in a negative manner, and in many cases cause irreversible changes. In this class, students will be introduced to the basic principles of marine biology, spanning from organisms to ecosystems. They will learn about the ways that humans depend upon the ocean for their survival, how they impact and attempt to protect marine resources. This course will enhance students’ interest in studying marine biology.

In the first third of the semester, students will learn about Marine biology, algae, oceans, currents, and some general concepts of geology. The second portion of the semester will be dedicated to understanding vertebrates and invertebrates, animal evolution, and what tools these animals have to interact with their surroundings. The last part of the semester will encompass ecology, ecosystems, and human interaction. These concepts will allow students to have the necessary knowledge to actively participate in decisions that may affect marine organisms, as well as coastal and oceanic ecosystems.

The instructor will also help students understand global sustainability. This course is strongly based on case studies the examples of human/marine interactions and trying to find solutions to short- and long-term problems of conservation. For example, a small decision like what fish to buy in the supermarket might drive sustainability and
consequently, this local decision might cause large effects on the world scale due to global interactions. By situating students in this global scenario, it will increase their engagement in marine conservation.

Course Objectives
Upon completing this course, students will be able to:

- Articulate the interrelatedness among increasing world populations, intensified human activities, and limited marine biological resources.
- Assess the effect of different regional stakeholders on regulating fisheries and other marine resources in international waters.
- Formulate possible solutions for problems, such as conserving endangered species, pollution, considering various national, regional, and global interests.

Major and Curriculum Objectives Targeted
This course satisfies both UCC (University Core Curriculum) and Global Learning requirements for non-science major students.

Global Learning Course Outcomes
Students will be able to demonstrate knowledge of the interrelatedness of local, global, international, and intercultural issues, trends, and systems. Students will be able to conduct a multi-perspective analysis of local, global, international, and intercultural problems. Students will be able to demonstrate a willingness to engage in local, global, international, and intercultural problem-solving.

Important Information
Before starting this course, please review the following pages:
- Policies
- Technical Requirements and Skills
- Accessibility and Accommodation
- Academic Misconduct Statement

Course Prerequisites
There are no prerequisites for this course.

Proctored Exam Policy

The Exam 1-3 are online exams, but the Final Exam is on-campus. For students who cannot attend the Final Exam physically, an online alternative will be provided via Honorlock. However, the user of Honorlock (student) will be responsible for the cost.

This course also requires an on-campus meeting for the group project presentation. Adobe Connect can be used as an online alternative (the only alternative) for students who cannot come to campus. Details are given below.

Please visit our Student Proctored Exam Instructions webpage for important information concerning proctored exams, proctoring centers, and important forms.

Textbook

**Marine Biology (Recommend, but not required)**
Peter Castro, Michael Huber
McGraw-Hill Education; 11th edition; 2018
ISBN-10: 1260085104
You may purchase your textbook online at the FIU Bookstore. (An old version can be found: [https://archive.org/details/Marine_Biology_by_Peter_Castro](https://archive.org/details/Marine_Biology_by_Peter_Castro))

Other Course Materials

Books:


Cartoons and Movies:
Expectations of this Course

This is an online course, which means most (if not all) of the course work will be conducted online. Expectations for performance in an online course are the same for a traditional course. In fact, online courses require a degree of self-motivation, self-discipline, and technology skills which can make these courses more demanding for some students.

Students are expected to:

- Review how to get started information located in the course content
- Introduce yourself to the class during the first week by posting a self-introduction in the appropriate discussion forum
- Take the practice quiz to ensure that your computer is compatible
- Interact online with instructor/s and peers
- Review and follow the course calendar
- Log in to the course at least 2 times per week
- Respond to discussion boards, blogs and journal postings within 7 days
- Respond to emails within 7 days
- Submit assignments by the corresponding deadline

The instructor will:

- Log in to the course at least 2 times per week
- Respond to discussion boards, blogs and journal postings within 3 days
- Respond to emails within 3 days
- Grade assignments within 15 days of the assignment deadline

Course Communication

The communication in this course will take place via email.

Discussion Forums
For all general questions and comments related to course content, organization, and course material, communication will take place via the discussion board. The same applies to any specific questions in lectures, assignments, and quizzes. Students are encouraged to follow and actively engage in the discussion board. This form of communication will benefit most of the students by making them think about the problems posted by other fellow students. Answering posted questions/comments will enhance students’ communication with other students. In addition, some students might not realize the depth of the problem until they see it on the discussion board. Keep in mind that your discussion forum postings will likely be seen by other members of the course. Care should be taken when determining what to post.

Assessments

Exams

3 online exams (open-book) will be given during class time: Exam 1, Exam 2, and Exam 3. Each exam is composed of 50 multiple-choice test questions that randomly selected from the test bank. You will have 50 minutes to complete each exam (1 minute to answer each question).

Quizzes

The instructor will also give the students 11 online quizzes (multiple-choice questions, too). The purposes are 1) to check if the students fully understand lecture content, and 2) to give the students some question examples about the exams. At the end of the semester, the instructor will summarize every student’s class performance based on the quiz answers. If the students couldn’t answer half of the questions correctly, they wouldn’t have their final grades curved.

Paper Discussion

There are 3 paper discussions. For each paper discussion, students will be assigned 1 paper to read, and given several questions to test if the students have understood the paper. Students who answered more than 50% of questions correctly in the paper discussion will get 1-point bonus credit in their final grades.

Pre/Post Survey

In addition, students will be evaluated in a pre/post-survey to assess Global Learning. Students need to read some materials and answer several questions at both the beginning of the semester and then have a chance to improve their answers at the end of the semester. Students who complete both surveys and improve their answers get full credit.

All the above online assessments MUST be completed within ONE sitting. They CANNOT be saved and resumed at a later day/time. In order to mitigate any issues with your computer and online assessments, it is very important that you take the Practice Quiz from each computer you will be using to take your graded
Final Exam

In addition to the 3 open-book online exams, there is also 1 Final Voluntary Exam (closed-book). The final exam is a comprehensive exam (also 50 minutes for 50 multiple-choice questions). Most questions come from the online exams. The Final Exam may be held on campus (please bring your Panther ID, a 2B pencil, and an eraser), but an online alternative is acceptable (Honorlock).

Your exam grade will be based on three of the four exams. If students took all four exams, the lowest exam grade would be dropped. Students are encouraged to take all exams, as it is an option for students who want a chance to improve their grades. If an exam was missed, for whatever reason, the student must take the next three exams. Remember, there is no makeup exam.

For assessment duration, grading criteria, and feedback response time, please review the important information about the assessments page.

Assignments

Final Project
All students need to participate in a group-based project (3-5 students in each group). Each group will submit a report and give a presentation in the 15th week to introduce an “endangered” marine species. Students can check the International Union for Conservation of Nature (IUCN) Red List (must be “endangered”, not “least concern”, “vulnerable”, “near threatened”, “endangered”, “critically endangered”, “extinct in the wild”, or “extinct”). The main content of the report is limited to 3-5 pages, 12-font, single-space, 1-inch margin. The presentation is limited to 12-15 minutes. Each student will give 3-4 minutes Pecha Kucha (Show 6-9 slides, each for 20-30 seconds. Please check the youtube video: A Pecha Kucha about Pecha Kucha). After the presentation, the presenters need to answer questions asked by the audiences.

In the report and presentation, students need to cover the following questions:
What is the life history of this species? Any interesting biology about this species that you want to share with your classmates? What kind of habitat does the species live in? Interaction with other species? What are the causes of endangerment (e.g. habitat loss, pollution, competition from other species, disease, predation, unregulated or illegal killing, and/or introduced species)? What were/are the efforts to protect those species? Are those efforts effective? What are the consequences that the species go extinct? Any solutions you can do to help this species recover?

For students who cannot come to campus to give their presentation, Adobe Connect (and only Adobe Connect) can be used as the only alternative to conduct the presentation and discussion.
Please review the important information about the assignments page.

Adobe Connect

Adobe Connect is an online meeting room where you can interact with your professor and fellow students by sharing screens, sharing files, chatting, broadcasting live audio, and taking part in other interactive online activities.

Requirements for using Adobe Connect:

• Disable any window pop-up blocker.
• Adobe Flash Player is required to successfully run your Adobe Connect meeting. You can test your computer to make sure your computer and network connections are properly configured to provide you with the best possible Adobe Connect meeting experience.
• The use of a combination headset and microphone with a USB connection is recommended to ensure quality sound and reduce technical difficulties.

Reference Adobe Connect (Tutorials & Help) to learn about the tool, how to access your meeting rooms and recordings.

Grading

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<td>Quizzes (highly recommended, will help boost your grade)</td>
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