Marine Ecology BIOL 4436  
Department of Life Sciences  
Spring 2019

A. COURSE INFORMATION

Course number/section: BIOL 4436.001 (lecture), BIOL 4436.101 & 4436.102 (lab)
Class meeting time: T/R 9:30-10:45 (lecture), T 12:30-3:20 (lab)
Class location: CS 112 / ECMS 210 (lecture / lab)
Course Website: https://bb9.tamucc.edu/

B. INSTRUCTOR INFORMATION

Instructor: Dr. Jennifer Pollack
Office location: Science Lab 2 (low tan building between Blucher Institute and boat barn)
Office hours: T/Th/F 7:50-9:30 or by appointment (let me know you are coming)
Telephone: 825-2041
E-mail: Jennifer.pollack@tamucc.edu
TA: Polly Hajovsky (polly.hajovsky@tamucc.edu)
Office hours: 8-9 am TR at the tables in front of CS 240 (2nd floor CS building)
Appointments: Email us to schedule. If you have problems with the material or anything else that might influence your performance in the class, come see us as soon as possible.

C. COURSE DESCRIPTION

Catalog Course Description
This course will introduce student to habitats and community structure in marine environments, and biotic and abiotic factors governing the distribution of marine organisms. Prerequisite: BIOL 3428. Safety training is required for continued participation in this course.

Extended Course Description
This course will discuss topics ranging from marine ecological processes and systems to the ecological effects of human activities on the marine environment.

D. PREREQUISITES AND COREQUISITES

Prerequisites
BIOL 3428

Corequisites
None
E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)

*Marine Biology: Function, Biodiversity, Ecology.* Fifth Edition. By Jeffrey S. Levintoon. Lectures will cover material from the book and will be supplemented by the instructor with material from the primary literature and other sources, as appropriate.

Optional Textbook(s) or Other References

Supplemental material will be provided by the instructor.

Supplies

You will need a calculator for some exams. This calculator needs to be able to calculate standard mathematical operations, including exponents and logarithms (natural and base 10). You will need to have a notebook to record data and observations from laboratory and field exercises. The diurnal sampling event occurs overnight and headlamps and waders are strongly encouraged. The instructor will provide specific guidance in advance of each sampling event.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the end of this course, students should be able to:

1. Describe processes, ecosystems, and habitats that shape the marine environment as well as current issues and future challenges.
2. Formulate ecological research questions and use the scientific method to answer them including collection and analysis of data.
3. Prepare and deliver written and oral scientific presentations.
4. Demonstrate critical thinking and communication skills through class discussions and critiques of articles from the primary literature.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

Course topics will be covered in instructor-led lectures, interactive and written activities, assigned readings, group projects, and field/laboratory activities.

H. MAJOR COURSE REQUIREMENTS AND GRADING
**ACTIVITY** | **Proportion of FINAL GRADE (in points)**
---|---
Exams (3 @ 150 pts each) | 450
Final Exam (Comprehensive) | 150
Lab (Reports, Quizzes, Presentations) | 400
**TOTAL POINTS** | **1000**

**GRADING SCALE:**
- >900 pts = A
- 800-899 pts = B
- 700-799 pts = C
- 600-699 = D
- <600 = F

*Forgiveness final policy: I will replace your lowest exam score with your Final Exam grade if the Final Exam grade is higher.

**I. COURSE CONTENT/SCHEDULE**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>Thurs 7&lt;sup&gt;th&lt;/sup&gt; February</td>
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<tr>
<td>Diurnal</td>
<td>Fri-Sat 15&lt;sup&gt;th&lt;/sup&gt;-16&lt;sup&gt;th&lt;/sup&gt; February</td>
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<tr>
<td>Exam 2</td>
<td>Thurs 7&lt;sup&gt;th&lt;/sup&gt; March</td>
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<tr>
<td>Exam 3</td>
<td>Thurs 11&lt;sup&gt;th&lt;/sup&gt; April</td>
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<tr>
<td>Final Exam</td>
<td>Thurs 9&lt;sup&gt;th&lt;/sup&gt; May 8:00-10:30am</td>
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Other important dates:
- 22 January – Last day to register or add a class
- 11-15 March – Spring Break
- 5 April – Last day to drop a class
- 30 April – Last day to withdraw from the University

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

**J. COURSE POLICIES**

**Attendance/Tardiness**

*Attendance is mandatory.* All students are expected to attend all classes and labs. Should you miss a lecture or lab session, it is YOUR RESPONSIBILITY to find out what you
missed, get notes, learn about changes in the syllabus, etc. There are no excused absences. Additionally, routinely being tardy to class is inconsiderate to me and to your classmates. Repeated lateness can result in dismissal from class. On time means being in your seat and being prepared to take notes, quizzes, or exams promptly at the starting time. **No student is admitted to an exam after the first exam-taker has left.**

**Late Work**
A missed grade due to an unexcused absence or lateness will result in a score of ‘0’ for that assignment. Late work will not be accepted.

**Extra Credit**
There will be opportunities for extra credit throughout the semester. With prior permission from the instructor, students may choose to participate in approved marine ecology related activities for a maximum of 4 extra credit points on the semester grade.

**Cell Phone Use**
Cell phones must be placed in silent mode during class. PHOTOS AND VIDEOS of lectures and PowerPoint slides **may not be taken** without prior permission of the Instructor.

**Laptop Use**
Laptops may be used in class as long as they are primarily used for note-taking and course-related work. Disruptive or disrespectful use of any technology (laptops, phones, tablets, etc.) may result in dismissal from class.

**Missed Exams**
Students with a university-approved scheduled absence (athletics, military duty, etc.) must contact the lecture and lab instructor well in advance of a scheduled absence. Exams may be taken at an alternate date in those specific cases. Students who do not arrange to take exams on alternate dates ahead of time will not be eligible for this special consideration. A written excuse from the university department involved is required.

**K. COLLEGE AND UNIVERSITY POLICIES**

- **Academic Integrity (University)**
  University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- **Classroom/Professional Behavior**
  Texas A&M University-Corpus Christi, as an academic community, requires that each
individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Statement of Civility**
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- **Deadline for Dropping a Course with a Grade of W (University)**
  I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar ([http://www.tamucc.edu/academics/calendar/](http://www.tamucc.edu/academics/calendar/)) for the last day to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html), and the College of Science and Engineering Grade Appeals webpage at [http://sci.tamucc.edu/students/GradeAppeal.html](http://sci.tamucc.edu/students/GradeAppeal.html). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the
Office of the Provost.

- **Disability Services**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

[http://disabilityservices.tamucc.edu/](http://disabilityservices.tamucc.edu/)

- **Statement of Academic Continuity**
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

**L. OTHER INFORMATION**

- **Academic Advising**
The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

**GENERAL DISCLAIMER**
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.
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<th>Readings</th>
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<td>17-Jan Principles of Marine Ecology</td>
<td>Chap 2</td>
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<td>Tue</td>
<td>29-Jan Case Study 1 – Iron Fertilization</td>
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<td>Thr</td>
<td>31-Jan Case Study 1 – Iron Fertilization</td>
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<td>Tue</td>
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<td>Chap 5</td>
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<td>14-Feb Marine Organisms, Function, and Environment</td>
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<td>19-Feb Marine Organisms, Function, and Environment</td>
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<td>21-Feb Case Study 2 – Gulf of Mexico Dead Zone / OA</td>
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<td>Tue</td>
<td>12-Mar SPRING BREAK – NO CLASS</td>
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<td>14-Mar SPRING BREAK – NO CLASS</td>
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<td>19-Mar Secondary Production</td>
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<td>28-Mar Marine Environments – Polar Regions</td>
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<td>2-Apr Marine Environments – Deep Sea</td>
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<td>4-Apr Case Study 3 – Invasive Species</td>
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<td>11-Apr Exam 3</td>
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<tr>
<td>Tue</td>
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<tr>
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<td>23-Apr Case Study 4 – Dredge Restoration</td>
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<tr>
<td>Tues</td>
<td>30-Apr Final Exam review</td>
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<tr>
<td>THR</td>
<td>9-May Final Exam – 8:00-10:30 PM</td>
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