Marine Organisms and Processes (MARB 6340)
Department of Life Sciences
Fall 2019

A. COURSE INFORMATION
   Course number/section: MARB 6340
   Class meeting time: Tuesday/Thursday 9:35-10:45 a.m.
   Class location: TBA (and via video conference to Galveston)
   Course Website: Refer to Blackboard course website

B. INSTRUCTOR INFORMATION
   Instructor: Dr. Brandi Kiel Reese
   Office location: 136 Tidal Hall
   Office hours: T/TH 11:00-12:00 and 1:00-2:30
   Telephone: 361-825-3022
   e-mail: brandi.reese@tamucc.edu
   Appointments: By email or personal communication

C. COURSE DESCRIPTION
   Catalog Course Description
   This course will introduce students to the biology of major plant and animal groups in the
   ocean. Students will also learn about important physical and chemical features of the oceans,
   and how these interact with marine life to regulate marine ecosystem function.

   Extended Course Description
   Advanced study of ecological processes in marine environments, with an emphasis on the
   investigation of the interactions between organisms and physical processes that regulate
   marine ecosystem functions

D. PREREQUISITES AND COREQUISITES
   Prerequisites
   Graduate student status

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
   Required Textbook(s)
   None.

   Readings will be assigned by the instructors from peer-reviewed literature and book chapters
   throughout the semester.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT
   At the conclusion of this course, the student should be able to:
1. Describe and predict the distribution of organisms based on physical and chemical hydrographic data from the world ocean.
3. Exhibit the ability to apply basic ecosystem process concepts to research design.
4. Demonstrate proficiency in professional skills such as proposal development, and conducting and responding to peer reviews.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

Proposed topics will be covered in weekly instructor-led lectures and class discussions of the primary literature.

H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Point Value</th>
<th>Overall Grade Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-term exam</td>
<td>100</td>
<td>25%</td>
</tr>
<tr>
<td>Final exam</td>
<td>100</td>
<td>25%</td>
</tr>
<tr>
<td>Proposal Draft + Peer review</td>
<td>80</td>
<td>20%</td>
</tr>
<tr>
<td>Proposal 2 + Peer review</td>
<td>80</td>
<td>20%</td>
</tr>
<tr>
<td>Participation/Attendance</td>
<td>40</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>400</strong></td>
<td><strong>100%</strong></td>
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Participation grade will be based on attendance, in-class discussions, mid-term, and final exams. Two proposals will be due throughout the semester (see below) and the instructors will grade each proposal using a provided rubric. Your peers will evaluate your proposal, using guidance provided by the National Science Foundation. You will be graded on the peer-review document you provide, but your peer’s review will not be factored in the final proposal grade. Exams in this course will be take-home and due by 5:00 pm on the date listed in the schedule below. Assignments must be submitted on Blackboard using the plagiarism checker, Turnitin.

I. COURSE CONTENT/SCHEDULE

Important marine microbes, plants, and animals will be described, as will a range of marine ecosystems including estuarine, coastal, pelagic, and benthic environments. The organization of marine systems from biological, chemical, geological, and physical perspectives will be investigated. The interactions between the biotic and abiotic realms of marine systems will be studied. There will be examples describing the habitats and biogeochemical processes of many different marine systems, including the Gulf of Mexico.
Approximate Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Topic</th>
<th>Assignment Due</th>
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<tbody>
<tr>
<td>1-3</td>
<td>Introduction to ocean systems (physical, chemical, geological)</td>
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<tr>
<td>4-5</td>
<td>Marine Prokaryotes, Viruses, Picoeukaryotes</td>
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<tr>
<td>6</td>
<td>Proposals and peer reviews</td>
<td>Proposal 1 for peer review: Oct 2</td>
</tr>
<tr>
<td>7-9</td>
<td>Marine algae, plants, invertebrates, vertebrates</td>
<td>Midterm: Oct 15</td>
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<tr>
<td>10-11</td>
<td>Marine habitats and ecosystems</td>
<td>Proposal 1: Oct 17</td>
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<tr>
<td>12-13</td>
<td>Living in the Anthropocene: current topics</td>
<td>Proposal 2 for peer review: Nov 22</td>
</tr>
<tr>
<td>13-14</td>
<td>Proposals and peer reviews</td>
<td>Final Exam: Dec 10</td>
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<tr>
<td>14-15</td>
<td>Wrap-up and Final Exam</td>
<td>Proposal 2: Dec 10</td>
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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 and participation in class discussions is mandatory. Students are expected to attend all classes; unexcused absences will result in a reduction of the participation/attendance grade. Should you miss a lecture, it is YOUR responsibility to find out what you missed, get notes, learn about changes in the syllabus, etc. A missed grade will result in a score of ‘0’ for that assignment, with exceptions granted only in exceptional circumstances including illness (with doctor’s note), death in the family (with verification), university-sponsored event (with verification) or military deployment (with verification). Students with a university approved scheduled absence (athletics, military duty, etc.) MUST contact the lecture instructor well in advance of a scheduled absence.

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)**
The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that **must** be submitted. No student is eligible to receive a W without completing the official drop process by this deadline. 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/

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.

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.