ESCI 5340 and CMSS6340: Ocean Resources  
Department of Physical & Environmental Sciences  
Fall Semester 2015

A. COURSE INFORMATION
   Course number/section:  ESCI 5340.001 and CMSS6340.001  
   Class meeting time:  4:30 – 6:50 M  
   Class location:  CS 112  
   Course Website:  

B. INSTRUCTOR INFORMATION
   Instructor:  Dr. David Yoskowitz  
   Office location:  HRI 318C  
   Office hours:  M 3-4:15, W 1:30-3:30, and by appointment  
   Telephone:  361.825.2966  
   e-mail:  david.yoskowitz@tamucc.edu  
   Appointments:  To schedule an appointment contact me by email or phone

C. COURSE DESCRIPTION
   Catalog Course Description  
   Investigation of topics related to the discovery, distribution, and exploitation of marine resources of the ocean with a focus on the Gulf of Mexico, including the impact of resource exploitation on biological systems, and the development of marine policy.
   Extended Course Description  
   Exploration of the sea in search of marine resources including minerals, hydrocarbons, living resources, potential power generating resources, and other resources. Distribution of ocean resources. Exploration and methods for extraction of marine resources. Consequences of resource exploitation on abiotic and biotic systems in the sea. Ocean policies and regulations as they relate to human consumption and use of ocean resources in the past, present, and future.

D. PREREQUISITES AND COREQUISITES
   Prerequisites  
   None  
   Corequisites  
   None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
   Required Textbook(s)  
Optional Textbook(s) or Other References
None

Supplies
None

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. Identify and categorize various ocean resources that support human well-being.
2. Analyze principles for the distribution of marine resources.
3. Employ the methods for exploration and exploitation of marine resources.
4. Evaluate the need for and effectiveness of policies that govern exploitation of ocean resources.
5. Evaluate the effects of exploitation impacts on marine biological, chemical, geological, and physical systems of the sea.
6. Synthesize the current issues related to ocean resources in the Gulf of Mexico.

G. INSTRUCTIONAL METHODS AND ACTIVITIES
Traditional lectures via board demonstrations and power point presentations, classroom discussions, and student homework, reading, and projects.

Homework will consist of assigned readings and critical analysis of scientific papers from the primary literature. Students will make class presentations and lead discussions on their readings and analyses. All students will participate in the discussion. Each student will have an opportunity to lead a discussion twice in the semester. Students are expected to have read all the assigned reading and come to class prepared to pose questions to the class as a whole.

For the Discussion Lead assignment the student will pick from the assigned readings for that week, or a theme of the readings, and lead the class through the work by summarizing important points and posing questions to start discussions.

Projects are required that will entail reviewing scientific literature on a specific area of the student’s choosing from within the broad topic of ocean resources. Students will write a
prospectus listing a bibliography of materials to be reviewed, prepare a written project report, and present the results of the report orally in class.

H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Overall Grade Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion lead &amp; class presentations</td>
<td>30%</td>
</tr>
<tr>
<td>Test 1</td>
<td>17.5%</td>
</tr>
<tr>
<td>Project: bibliography, report, and oral presentation</td>
<td>35%</td>
</tr>
<tr>
<td>Test 2</td>
<td>17.5%</td>
</tr>
<tr>
<td>Total:</td>
<td>100%</td>
</tr>
</tbody>
</table>

I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>DATE (BY DAY OR WEEK)</th>
<th>TOPIC</th>
<th>PAGES</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to ocean resources</td>
<td>3-28</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>2</td>
<td>Institutions and Policy</td>
<td>29-50</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>3</td>
<td>Fisheries I</td>
<td>53-83</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>4</td>
<td>Fisheries II</td>
<td>84-98; 128-135</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>5</td>
<td>Fisheries III</td>
<td>99-127</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>6</td>
<td>Aquaculture</td>
<td>171-202; 226-242</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>7</td>
<td>Natural Resources I</td>
<td>245-273; 283-290</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>8</td>
<td>Natural Resources II</td>
<td>291-320</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>9</td>
<td>Test 1</td>
<td></td>
<td>Week 1-9 work</td>
</tr>
<tr>
<td>10</td>
<td>Marine Pollution I</td>
<td>326-360</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>11</td>
<td>Marine Pollution II</td>
<td>361-367; 376-393; 424-433</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>12</td>
<td>Climate Change I</td>
<td>479-516</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>13</td>
<td>Climate Change II</td>
<td>517-553</td>
<td>Read and discuss</td>
</tr>
<tr>
<td>14</td>
<td>Test 2 and student presentations</td>
<td></td>
<td>Week 10-13 work</td>
</tr>
</tbody>
</table>

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

Participation is a critical part of this course. Students are expected to come prepared to every class for discussion.

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 submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar.
• **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.