Fisheries
(BIOL4328)
Department of Life Sciences
Spring 2020

A. COURSE INFORMATION

Course number/section: BIOL 4328.001
Class meeting time: MW 3:30-4:45 PM
Class location: IH-157
Course Website: https://bb9.tamucc.edu/

B. INSTRUCTOR INFORMATION

Instructor: Dr. Simon Geist
Office location: TH 337
Office hours: MW 1:15-3:15, T 9:00-10:00
Telephone: 361 825 4164
E-mail: simon.geist@tamucc.edu
Appointments: Set up via phone or email at least 24 hrs in advance

C. COURSE DESCRIPTION

Catalog Course Description
3 sem. hrs. (3:0) A study of theory and techniques in fisheries science, including practical fisheries sampling designs and techniques, behavior of fisheries populations and application to resource management with emphasis in tide-influenced waters. Includes readings in the current literature. Prerequisite: BIOL 1407 - Biology II.

Extended Course Description

Major Areas of Study will include:
I. The World’s Fisheries
II. Fisheries Management Plans
III. Stock Assessment
IV. Fisheries Population Dynamics and Observing Fish Populations
V. Environmental Governance of the Sea
VI. Human Dimension of Fisheries Science
VII. Ecosystem-Based Management and Essential Fish Habitat
VIII. Fisheries Models - Ricker, B/H, VPA, and Catch-at-Age

D. PREREQUISITES AND COREQUISITES

Prerequisites
BIOL 1407 - Biology II
Corequisites
E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
None, but extensive reading will be required from journals, newspapers, magazines, and other library holdings.

Optional Textbook(s) or Other References
3. Students will be provided a list of further recommended readings at the beginning of the class.

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.

Goals for this Course include:

• Establish future professionals with an in-depth marine fisheries education
• Educate future fisheries professionals by teaching fundamentals of fisheries science with focus on management related topics
• Prepare future professionals to contribute to the profession with active involvement in presentations on collecting, interpreting, analyzing, and presenting scientific data both orally and written.

By the end of this course, students will have a good understanding of classic concepts and current topics of fisheries biology and management and be familiar with approaches and procedures relevant for stock assessment and fisheries management.
G. INSTRUCTIONAL METHODS AND ACTIVITIES

This course will be a combination of traditional lecture, discussion, and in class participation (including student presentations).

Students will be assigned to two types of in-class activities to supplement lectures:

1. **Topic Presentation** - A major focus of this course will be a review of the current literature and relevant concepts. Students will be assigned to present on selected topics and lead the discussion throughout the semester. Topics will be selected at the beginning of the semester and a key paper will be provided by the instructor. The presenters are expected to thoroughly investigate the topic by compiling the most current research and review journal articles concerning the issue and will give a presentation to lead into the topic. All other students are supposed to find, read and prepare the key findings of one paper related to the presented topic and contribute to the following discussion. Ideally, you give the general background of the topic area and then discuss major issues including differing viewpoints.

2. **Fisheries Management Case Study** - (group work in class and individual written essays) – The class will be divided into groups, that will work on fisheries management case studies provided by the instructor. Using the case study and consulting the most recent Fisheries Management plan for the respective species, students will individually prepare and submit a written essay related to your specific case study. Details on the format and content will be given in class.

H. MAJOR COURSE REQUIREMENTS AND GRADING

Two exams (Midterm and Final) will examine the learning success of topics presented in lectures and discussed in class.

A central part of the student’s assignments are the topic presentations and the case studies (see section G).

Active participation in class especially during discussions and during the fisheries simulation is expected and part of the grade, as well as general attendance.

Your grade will be calculated as a percentage of 1000 available points:

1. 2 lecture exams (150 pts. Each)  300
2. Topic Presentation  150
3. Case Study Essay  150
4. Oral Participation  150
5. Attendance  50

You will get 10 points subtracted from the final total for every two unexcused absence (negative attendance grade possible).

**GRADING SCALE (%)**:

<table>
<thead>
<tr>
<th>Grade Range</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.0 - 100.0</td>
<td>A</td>
</tr>
<tr>
<td>80.0 - 89.9</td>
<td>B</td>
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<tr>
<td>70.0 - 79.9</td>
<td>C</td>
</tr>
<tr>
<td>60.0 - 69.9</td>
<td>D</td>
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<tr>
<td>0.0 - 59.9</td>
<td>F</td>
</tr>
</tbody>
</table>
I. **COURSE CONTENT/SCHEDULE**

<table>
<thead>
<tr>
<th>DATE (BY DAY OR WEEK)</th>
<th>THEMES</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1 (1/22)</td>
<td>Introduction to Course</td>
<td></td>
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<tr>
<td>W2 (1/27 &amp; 1/29)</td>
<td>World Fisheries</td>
<td>TBD</td>
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<tr>
<td>W3 (2/3 &amp; 2/5)</td>
<td>Fish &amp; Environment</td>
<td>TBD</td>
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<tr>
<td>W4 (2/10 &amp; 2/12)</td>
<td>Fish &amp; Environment</td>
<td>TBD</td>
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<tr>
<td>W5 (2/17 &amp; 2/19)</td>
<td>Climate &amp; Fish</td>
<td>TBD</td>
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<tr>
<td>W6 (2/24 &amp; 2/26)</td>
<td>Fisheries Management</td>
<td>TBD</td>
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<tr>
<td>W7 (3/2 &amp; 3/4)</td>
<td>Midterm Exam &amp; Fisheries Management</td>
<td>Midterm Exam (3/2)</td>
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<tr>
<td>W8 (3/9 &amp; 3/11)</td>
<td>SPRINGBREAK</td>
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<tr>
<td>W9 (3/16 &amp; 3/18)</td>
<td>Stock Assessment Methods &amp; Stock Enhancement</td>
<td>TBD</td>
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<tr>
<td>W11 (3/29 &amp; 4/1)</td>
<td>Regulation and Enforcement</td>
<td>TBD</td>
</tr>
<tr>
<td>W12 (4/6 &amp; 4/8)</td>
<td>Fisheries Models</td>
<td>TBD</td>
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<tr>
<td>W13 (4/13 &amp; 4/15)</td>
<td>Fisheries Models</td>
<td>TBD</td>
</tr>
<tr>
<td>W14 (4/20 &amp; 4/22)</td>
<td>Case studies</td>
<td>TBD</td>
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<tr>
<td>W16 (5/4 &amp; 5/6)</td>
<td>Fisheries Simulation</td>
<td>TBD</td>
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<tr>
<td>W17 (5/11)</td>
<td>FINAL EXAM (1:45 - 4:15)</td>
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Notes:

a) Topic presentations, as described in section G (1) are typically given the second meeting day of every week with topics aligned to the general theme. Topics and presentation dates will be assigned in class.

b) The course schedule only provides a general overview of topics discussed in class. The actual dates when a specific topic is addressed may change during the semester 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.
Final Exam Day
https://registrar.tamucc.edu/Register%20for%20Classes/Final_Exams.html

J. **COURSE POLICIES**

**Attendance/Tardiness**
Students are **expected to attend every scheduled class**. It is the responsibility of the student to obtain any material missed during an absence from his/her classmates. You will get 10 points subtracted from the final total point count for each unexcused absence (negative attendance grade possible). **Three unexcused tardies (5 minutes or more) equals one unexcused absence.** The professor makes the decision as to what constitutes an unexcused absence, as defined by the Catalogue and the University Handbook. Please schedule routine personal events (e.g., vacations, weddings, reunions, non-emergency medical or dental visits, parent-teacher conferences, household or auto repairs) to avoid conflicts with your classes. Oversleeping is never an acceptable excuse.

**Submission of Assignments,**
Written Assignments should be submitted as a word (.docx) document through blackboard. The title of the submitted document needs to include information about class ID, semester and year, student’s first name initial and full last name and assignment title (i.e. BIOL4328_SP20_S_Geist_Case_Study).

**Late Work and Make-up Exams** Students will be given a Late Assignment Penalty for tardy work: 10% assignment grade deduction per class day late. However, after the 3rd day, late assignments will not be accepted. Tardiness is determined by the submission time noted in blackboard. Plagiarism checker in blackboard will be active for all submission, so please write your own texts. Files contaminated by viruses, spyware, and worms will not be accepted. Missed extra credit assignments cannot be made up for unexcused absences; approved University absences may be given alternative extra credit work which may NOT be identical to the missed assignment.

**Extra Credit**
No extra credit is given.

**Cell Phone Use**

**PLEASE DO NOT USE CAMERA PHONES IN LECTURE AND DO NOT SEND MESSAGES DURING CLASS.** Please turn off all cell phones, beepers, and Bluetooth devices, iPhones, Palm Pilots, Blackberrys, etc., before entering the classroom, or at least place them on silent or airplane mode. I would prefer that earpieces not be worn in lecture. Recording of lectures with tape recorders can only be done with permission of instructor. **The use of mobile devices may be permitted by instructor during specific class activities.**
Laptop Use
Laptop use in class may be allowed by the instructor on a day by day basis, depending on the topic and assignments in class.

Food in Class
Eating in class is permitted so long as it does not disrupt the learning environment or the health and safety of others in the class.

Missed Exam
Prior notice will be required to miss the scheduled exam date/time. If absence is caused by an emergency such as accident, illness etc. an alternative date for the exam may be arranged with the professor. A Grade of “0” will be assigned for any Missed Exam.

Participation
Students are expected to actively engage in discussions and other class work. See text on participation and attendance in sections above for details.

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 ([https://www.tamucc.edu/academics/calendar/2020_spring.html](https://www.tamucc.edu/academics/calendar/2020_spring.html)) 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.