FISHERIES ECOLOGY AND MANAGEMENT  
(FAMA 5328, MARB 6328)  
Department of Life Sciences  
FALL 2016

A. COURSE INFORMATION

Course number/section:  FAMA 5328.001, MARB 6328.001  
Class meeting time:  T & R, 12:30-1:45 PM  
Class location:  TBA  
Course Website:  https://bb9.tamucc.edu/ (Blackboard Sign In page)

B. INSTRUCTOR INFORMATION

Instructor:  Simon Geist, Ph.D.  
Office location:  Science Lab 1, #101  
Office hours:  10:15 – 12:00 am TWR and by appointment  
Telephone:  825-4164  
e-mail:  simon.geist@tamucc.edu  
Appointments:  Make at least 24 hrs in advance by phone or e-mail.

C. COURSE DESCRIPTION

Catalog Course Description  
3 sem. hrs.  (3:0)  Advanced study of theory and techniques in fisheries science including 
behavior of fisheries populations and applications to resource management with emphasis in 
tidal-influenced waters.  Includes readings in the current literature and a research project.  
Offered every fall.

Extended Course Description

Major Areas of Study will include:

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

D. PREREQUISITES AND COREQUISITES

Prerequisites  
None.
Corequisites
None

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 leaders and professionals with an in-depth marine fisheries education
- Educate future leaders and professionals with specialized skills by teaching methods of collecting, interpreting, analyzing, and presenting scientific data both orally and written
- Enable future leaders and professionals to contribute to the profession

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

1. Promote and conduct scientific research in support of fishery conservation and management.
2. Collect and share complete and accurate fishery stock assessment data.
4. Determine appropriate Stock Assessment Models for different species complexes.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

This course will be lecture only, without an accompanying Lab. Students will be assigned two in-class activities to supplement Lectures.

1. Fisheries Management Plan Amendment (written and presentation) – Using the guidelines presented in class prepare a Fisheries Management Plan or amend a current plan for a species or your choice. You will prepare an oral and written presentation of your Management Plan before the “Fisheries Management Council (Class)” (15 minutes, 5 minutes for Q&A). Ability to explain and defend your plan to the Mock FMC will be the major focus of the presentation.

2. Topic Presentation - A major focus of this course will be a review of the current literature. Students will be assigned to specific groups to address one of the discussion topics assigned during class. You are expected to thoroughly investigate the topic by compiling the most current research and review journal articles concerning the issue (preferably review papers). During class you will lead the discussion of the selected topic. Ideally, you give the general background of the topic area and then discuss major issues including differing viewpoints. Key articles must be provided to classmates two weeks prior to presentation.

H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (2 Lecture Exams)</td>
<td>60%</td>
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<tr>
<td>FMP (Plan and Presentation)</td>
<td>30%</td>
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<tr>
<td>Topic Presentation</td>
<td>10%</td>
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</tbody>
</table>

GRADING SCALE (%):  
90.0 - 100.0 = A  
80.0 - 89.9 = B  
70.0 - 79.9 = C  
60.0 - 69.9 = D  
0.0 - 59.9 = F

I. COURSE CONTENT/SCHEDULE

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. Last day to drop class is 11 Nov and must be done by student.
<table>
<thead>
<tr>
<th>Class #</th>
<th>Date</th>
<th>Topic</th>
<th>Readings/Assign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25 Aug</td>
<td>Introduction to Course</td>
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<tr>
<td>2</td>
<td>30-Sep</td>
<td>Fisheries Introduction</td>
<td>TBD</td>
</tr>
<tr>
<td>3</td>
<td>1-Sep</td>
<td>Fisheries Science 101</td>
<td>TBD</td>
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<tr>
<td>4</td>
<td>6-Sep</td>
<td>Fisheries Science 101</td>
<td>TBD</td>
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<tr>
<td>5</td>
<td>8-Sep</td>
<td>Tragedy of the Commons and MSY</td>
<td>TBD</td>
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<tr>
<td>6</td>
<td>13-Sep</td>
<td>Fisheries Management I</td>
<td>TBD</td>
</tr>
<tr>
<td>7</td>
<td>15-Sep</td>
<td>Fisheries Management II</td>
<td>TBD</td>
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<tr>
<td>8</td>
<td>20-Sep</td>
<td>Fisheries Management III</td>
<td>TBD</td>
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<tr>
<td>9</td>
<td>22-Sep</td>
<td>Climate and Fisheries</td>
<td>TBD</td>
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<tr>
<td>10</td>
<td>27-Sep</td>
<td>Fish Sampling Methods</td>
<td>TBD</td>
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<tr>
<td>11</td>
<td>29-Oct</td>
<td>TOPIC Presentation</td>
<td></td>
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<tr>
<td>12</td>
<td>4-Oct</td>
<td>Stock Assessment</td>
<td>TBD</td>
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<tr>
<td>13</td>
<td>6-Oct</td>
<td>Trophic Dynamics and Food Webs</td>
<td>TBD</td>
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<tr>
<td>14</td>
<td>11-Oct</td>
<td>MIDTERM</td>
<td></td>
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<tr>
<td>15</td>
<td>13-Oct</td>
<td>Age and Growth</td>
<td>TBD</td>
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<tr>
<td>16</td>
<td>18-Oct</td>
<td>TOPIC Presentation</td>
<td></td>
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<tr>
<td>17</td>
<td>20-Oct</td>
<td>Ecosystem-Based Management</td>
<td>TBD</td>
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<tr>
<td>18</td>
<td>25-Oct</td>
<td>TOPIC Presentation</td>
<td>TBD</td>
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<td>19</td>
<td>27-Oct</td>
<td>Human Dimension of Fisheries Science</td>
<td>TBD</td>
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<tr>
<td>20</td>
<td>1-Nov</td>
<td>Population Dynamics I</td>
<td>TBD</td>
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<tr>
<td>21</td>
<td>3-Nov</td>
<td>Stock Enhancement/Pop Dyn II</td>
<td>TBD</td>
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<tr>
<td>22</td>
<td>8-Nov</td>
<td>TOPIC Presentation</td>
<td></td>
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<tr>
<td>23</td>
<td>10-Nov</td>
<td>FMP Presentation / TOPIC Presentation</td>
<td></td>
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<tr>
<td>24</td>
<td>15-Nov</td>
<td>FMP Presentation / TOPIC Presentation</td>
<td></td>
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<tr>
<td>25</td>
<td>17-Nov</td>
<td>Fisheries Models I</td>
<td>TBD</td>
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<tr>
<td>26</td>
<td>22-Nov</td>
<td>Reading Day – no class</td>
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<td>27</td>
<td>24-Nov</td>
<td>HOLIDAY (Thanksgiving) - no class</td>
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<tr>
<td>28</td>
<td>29-Nov</td>
<td>Fisheries Models II</td>
<td>TBD</td>
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J. COURSE POLICIES

Attendance/Tardiness
Students are expected to be in attendance for all lectures and presentations, but no formal role call will be taken.

Late Work and Make-up Exams
Late work will only be accepted with prior approval from the Instructor. Make-up Exams, with prior approval, must be completed within the same calendar week as the original Exam date.

Extra Credit
No Extra Credit will be given.

Cell Phone Use
Phone conversations not allowed, but texting allowed. For courtesy, please place phones on silent during class.

Laptop Use
Allowed.

Food in Class
Allowed, except if building/room indicates otherwise.

Missed Exam
A Grade of “0” will be assigned for any Missed Exam.

Participation
Students are expected to be part of discussion of both in-class activities.

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 ([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
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.