Special Topics: Marine Chemical Ecology
MARB 6590.003
Department of Life Sciences
Spring 2016

A. COURSE INFORMATION
Course number/section: MARB 6590.003
Class meeting time: MW 2:00pm-3:15pm
Class location: OCNR-255
Course Website: [delete and insert Blackboard website]

B. INSTRUCTOR INFORMATION
Instructor: Dr. Lee Smee
Office location: CS-250
Office hours: MWF 12:00pm-2:00pm
Telephone: 361-825-3637
e-mail: Lee.Smee@tamucc.edu
Appointments: Please note that you are welcome to come by at any time, but scheduling an appointment (or calling or emailing ahead of time) will ensure that I will be available when you come by!

C. COURSE DESCRIPTION
The course will focus on understanding the chemical mechanisms involved in aquatic signaling, the types of ecological and evolutionary insights that understanding these signals provides, and the cascading effects of these chemically-mediated interactions on population regulation, community organization, and ecosystem function.

D. PREREQUISITES AND COREQUISITES
Prerequisites: None
Corequisites: None

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

Optional Textbook(s) or Other References

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.

G. **INSTRUCTIONAL METHODS AND ACTIVITIES**

The class will be primarily discussion driven with fewer lectures by me. You will be assigned readings prior to each class. Everyone must read the articles and participate in the in-class discussion. If the class fails to participate, I will lecture more and give pop quizzes on the readings. Please do the work and don’t make me grade you like that. Finally, a large part of your course grade is based on you leading a paper discussion in class and in your participation of in class discussions. If you are not leading the discussion, you should find an article that is related to the topic that day and be prepared to make a short mention of how that article relates to that days topic.

H. **MAJOR COURSE REQUIREMENTS AND GRADING**

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<th>GRADE COMPUTATION:</th>
<th>Possible</th>
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<tr>
<td>Points</td>
<td></td>
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<tr>
<td>1 page summary</td>
<td>100</td>
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<tr>
<td>2 Page Paper</td>
<td>100</td>
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<tr>
<td>3 Page Preproposal</td>
<td>100</td>
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<tr>
<td>NSF – Style Research Proposal</td>
<td>250</td>
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<td>Class Presentation of Research Topic</td>
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<td>Leading In-Class Discussion</td>
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<td>Participation in Class Discussions</td>
<td>100</td>
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<tr>
<td>Final Exam and Quizzes (Instructor’s option)</td>
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<td>Total</td>
<td>1000</td>
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**GRADING SCALE:**

<table>
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<tr>
<th>Points</th>
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<tr>
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<td>600 – 699 pts</td>
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<td>&lt; 600 pts</td>
<td>F</td>
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I. **COURSE CONTENT/SCHEDULE**

All writing should be in Times New Roman Font, with 1” margins, and singled spaced. All papers should be submitted to me electronically using Microsoft word. Page limits are given, and
page limits do not include references. Use the journal *Ecology*’s format for citations. PLEASE REMEMBER TO PUT YOUR NAME AND EMAIL ON EACH PAPER. I will grade these and return them to you electronically.

1. **One one-page summary (10%)** Select an article that deals with some aspect of marine chemical ecology. Write a 1 page summary, summarizing its findings. Be sure to point out its major strengths/contributions, and its major errors/limitations. Please turn in this first paper on or before Feb 6th.

2. **One two-page paper (10%)** (No more than 2 pages single spaced). For this assignment, select one of our lecture/discussion topics for the day or some other aspect of chemical ecology and summarize the field as you see it – covering strengths, limitations, the next steps that need to be taken, and the roadblocks to progress (methodological, intellectual, or data limitations?). This assignment is due by Feb 27th, but I’d advise you to complete it before then.

3. **One three-page summary (10%)** in which you review a topic of your choice (after getting approval from me). The paper is to be no more than 3 pages and should be a review of the topic you are planning to write about in your grant proposal. You should select a topic and get approval by February 19th, and the paper should be turned in by March 18th. It will take time to select a topic; you do not want to pick something you do not like. Get started now, read a lot and pick a topic that interests you and that has references available.

4. **One 10 page paper written as a NSF Style Grant Proposal (25%)** You will write a 10 page NSF-style research proposal complete with at least 30 references. Look at the NSF website for basic guidelines. I’ll post one of mine on the web as an example. You should give adequate background on relevant problems/questions in marine ecology and design a series of experiments to empirically test your question. You may visit with me about ideas. Clearly this will require a lot of background reading and work so get started now. You’ll need to let me know your topic by March 9th and the final paper is due May 8th.

5. **Presentation of Research Topic (15%)** Each student will give a 25 minute power point presentation about their research proposal. The presentation should provide background, detail the essential questions the research addresses, and provide a thorough description of the experiments to be performed. These will be scheduled in the upcoming weeks before the final paper is due so you can get feedback and make corrections to your paper. Will probably start these around April 15th.

6. **Leading of discussions/class participation/pop quizzes/examinations (10%).** Your “lead” of a discussion works like this – **everyone** reads the assigned paper and comes prepared to ask questions, discuss the ideas presented, and to play a significant role in class discussion on the assigned papers. Soon (the first or second day of class) we will assign/pick leaders for each class discussion. Beginning the second week of class, class members will be leading class discussions, following an initial overview of the topic that I will provide at the start of each
class. Some of you may do multiple presentations; these will be averaged to produce the 15% total.

(7) **Your participation in class (10%)** when you are not leading the discussion. If you sit like a lump and never make a mistake because you never open your mouth, you get 0 points. If you say enough and it is always insightful and brilliant, that gets full points. If you participate fully, asking insightful questions when you have them but also ones you think may be stupid (they probably are not - if you have such question, others probably do as well, but are afraid to speak up), that is MUCH closer to full points than to half points. If you talk incessantly until you find something worth saying that is closer to 0 points than full points. Also, you should bring in an article related to the days reading. If we read more than 1 paper, you need only select 1 article for that day, although more are certainly encouraged.

(8) **Final Examination and Quizzes (10%)** Comprehensive examination covering all papers read and presentations made in class. Exam will be during scheduled final exam time and will include a take home portion. This may be waived if the class as a whole participates in the discussion and does well on the writing assignments. The percentage may be increased to affect participation grades too if necessary.

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. **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.

K. **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.