

Chemical Ecology of Species Interactions

Time:

Location:

Instructor:

Course website: This course will post lecture handouts and powerpoints, assignments, course announcements, and grades. The site will be updated with changes in assignments or schedule.

Prereqs: BSC 2010/L, BSC 2011/L, CHM 1045C, CMH 1046C, or instructor permission

Text: Course packet (available at Target Copy)
Journal articles (available on Blackboard)

Course description: This course investigates the role of chemistry in mediating interactions among a variety of organisms. We will discuss the diversity of species interactions and chemical compounds in terrestrial and aquatic systems, and methods used to detect those compounds. We will cover defensive and offensive chemistry mediating antagonistic interactions; the evolution of defenses; chemicals mediating mutualisms, competition, and sociality; the physiology of chemical production and recognition; and how chemical ecology affects humans. This course will include paper discussions of relevant recent literature and exposure to laboratory techniques in chemical ecology.

Educational objectives: Upon completing this course, you will be able to explain the process by which two species interact via chemicals; identify the structure and function of major classes of biochemicals, and explain how structure and function are related; explain the physiological mechanisms of biochemical synthesis, acquisition, and reception; describe laboratory methodology and analytical techniques necessary to isolate and identify biochemicals; describe themes in the evolution of chemically mediated interactions; locate primary literature sources, summarize research in writing and verbally, and discuss primary literature in a group; describe major events and figures in the history of chemical ecology.

Course format: Class will meet 3 times per week for lectures, discussions and labs. Discussion and lab sections will be led by an instructor or TA and will take place at the same time as the lecture section, in a lab classroom, computer classroom, or other location as appropriate. Exams will be given in the lecture hall; written assignments will be turned in via Blackboard at the deadline as assigned.

Policies: It is each student's responsibility to read and understand the policies covered in this syllabus.

Attendance: Students are expected to attend each class, and arrive on time to hear course announcements and receive handouts. Each student will be responsible for any information presented during class and for obtaining any handouts. Attendance at discussion and lab sections will count as participation points. Accommodations can be made for religious holidays; please inform the instructor well in advance of these holidays.

Grading: 400 points will be assigned as follows:

75 points	midterm exam	18.75%
100 points	final exam	25%
60 points	3 written assignments	15% (5% each)
60 points	3 lab activities	15% (5% each)
30 points	3 in-class activities	7.5 % (2.5% each)
60 points	final paper	15%
15 points	discussion participation	3.75%
Total:	400 points	100%

Final exam will be cumulative. Written assignments will summarize and discuss assigned research papers.

Assignments: Assignments will be turned in online via Blackboard and will not be accepted late without prior instructor approval or signed, dated medical documentation. Medical documentation must be provided within two days of the assignment deadline. Late assignments will receive a 10-point deduction per day late, deadline at 5pm; weekends will count as one day. If you know you will miss an assignment deadline for any reason email the instructor immediately. Assignments must represent the original work of the student; when group work is allowed, students may discuss topics together but each student must write and turn in their own work. SafeAssign will be used to assess the originality of all assignments.

Exams: Exams will be given in the lecture room. Midterm and final exams will use multiple choice, short answer, and short essay questions. Questions on the exam may be presented in a slightly different format than given in class; in studying for exams students should understand the concepts rather than simply memorizing what was presented in class. The final exam will be cumulative but will emphasize materials covered after the midterm exam. Make-up exams will be allowed only in the event of an unavoidable illness, and signed dated documentation must be provided. Make-up exams may have different content and format than the original exam.

Cell phones, Blackberries, graphic calculators and similar text-compliant electronic devices are not allowed during exams.

Honor Policy:

Students are expected to uphold the Academic Honor Code published in The Florida State University Bulletin and the Student Handbook. The Academic Honor System of The Florida State University is based on the premise that each student has the responsibility (1) to uphold the highest standards of academic integrity in the student's own work, (2) to refuse to tolerate violations of academic integrity in the university community, and (3) to foster a high sense of integrity and social responsibility on the part of the university community.

Please see the following web site for a complete explanation of the Academic Honor Code.

<http://www.fsu.edu/Books/Student-Handbook/codes/honor.html>

<http://www.fsu.edu/Books/Student-Handbook/>

ADA Statement:

Students with disabilities needing academic accommodation should (1) register with and provide documentation to the Student Disability Resource Center and (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

For more information about services available to FSU students with disabilities, contact the

Student Disability Resource Center

97 Woodward Avenue, South

Florida State University

Tallahassee, FL 32306-4167

(850) 644-9566 (voice)

(850) 644-8504 (TDD)

sdrc@admin.fsu.edu

<http://www.fsu.edu/~staffair/dean/StudentDisability/>

This syllabus and other class materials are available in alternative formats (e.g., large font) upon request.