

Biology 343L Chemical Ecology Lab Spring 2008

Meeting Times: Monday 3:30 - 4:20pm; Tuesday 1:30 - 4:30pm

Location: HS 128

Instructor: Dr. Cynthia Kicklighter

Office: HS G36

Email: cynthia.kicklighter@goucher.edu

Phone: 410-337-6579

Attendance: Attendance at all class meetings is required. If you are sick and unable attend, you should inform me as soon as possible.

Cell Phones: Please make sure you turn off your phone before entering class.

Academic Honor Code: Suspected violations of the Honor Code will be referred to the Academic Honor Board. For a full description of the code and what constitutes a violation of the code, refer to the Goucher Handbook or online at www.goucher.edu/x1292.xml

Use of the Lab: You may have access to the lab outside of class time to finish lab experiments and to work on your independent projects. BIO 170 will be meeting in the lab on Wednesdays between 1:30 - 3:20pm, so you will not have access to the lab at this time.

Lab Reports: Lab reports are required for the plant defense lab and your independent project. These reports will include an abstract (no more than 300 words), introduction, results (with figures), discussion, and references. For each lab report, you must cite at least five primary literature references. Proper citations and reference list are expected.

Useful Journals: Journal of Chemical Ecology, Ecology, Ecology Letters, Ecological Monographs, Oecologia, Oikos, Marine Ecology Progress Series, Journal of Experimental Marine Biology and Ecology, and Animal Behaviour.

Independent Project: An important component of this course is the independent research project. You and your partner will design an experiment to investigate some aspect of chemical ecology in the model system of your choice. This could be an extension of one of the experiments conducted earlier in the semester, or some other project that you come up with. You must present the project to me for my approval before you begin work. At the end of the course, you and your partner will provide the class with an article relevant to your project and give a 30 minute presentation of your findings to the class. In addition, each partner will submit a lab report.

Grades:

- 10% Participation/subjective
- 15% Plant defense lab report
- 10% Independent project proposal
- 20% Independent project lab report
- 10% Independent project presentation
- 35% Other assignments

Date	Activity	Assignment Due
29 January (Tu)	Course introduction; prep for allelopathy lab	
4 February (M)	Allelopathy lab introduction, prep	
5 February (Tu)	Allelopathy lab	
11 February (M)	Food attraction lab introduction	
12 February (Tu)	Food attraction lab I	
18 February (M)	Food attraction lab statistics	Allelopathy results
19 February (Tu)	Food attraction lab II	
25 February (M)	Plant defense lab introduction	
26 February (Tu)	Plant defense lab I: whole plant assays	Food attraction results and discussion (or by 2/29)
3 March (M)	Plant defense lab statistics	
4 March (Tu)	Plant defense lab II: plant homogenate assays	
10 March (M)	Plant defense lab prep/discussion	
11 March (Tu)	Plant defense lab III: plant crude extract assay	
24 March (M)	Plant defense lab prep/discussion	
25 March (Tu)	Plant defense lab IV: plant chemical fraction assays	
31 March (M)	Crayfish aggression lab introduction	
1 April (Tu)	Crayfish aggression lab I	Plant defense lab report
7 April (M)	Crayfish aggression statistics	
8 April (Tu)	Crayfish aggression lab II	Independent project proposal
14 April (M)	Independent projects (proposal meetings)	
15 April (Tu)	Independent projects	Crayfish aggression results
21 April (M)	Independent projects (project meetings)	
22 April (Tu)	Independent projects	
28 April (M)	Independent projects (project meetings)	
29 April (Tu)	Independent projects	
5 May (M)	Independent projects (project meetings)	
6 May (Tu)	Project presentations	
9 May (Fri)		Independent project lab report