

Environmental Health Sciences 203: Ecotoxicology Graduate Seminar

Fall 2014
Wednesday 5-7 p.m.

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Description: The goal of the Ecotoxicology Graduate Seminar is to provide a forum, with active student participation, for discussion of important topics in ecotoxicology. Ecotoxicology is a significant area of environmental health sciences that draws on the areas of environmental chemistry, toxicology and ecology. This seminar will bring together interested students with EHS faculty working in areas related to ecotoxicology to discuss current topics and trends in the field, as well as classic ecotoxicology studies. Discussion will revolve around student presentations of the literature. This seminar will provide an opportunity for graduate students to critically evaluate the primary literature and make an organized presentation to their peers and faculty.

Specific topics for the seminar vary from year to year. For Fall 2014, the seminar will focus on the ecotoxicological aspects of the widespread decline of bees (often called colony collapse disorder), with specific focus on the role of neonicotinoid pesticides.

Learning Objectives and Competencies

Learning Objectives By the completion of this course, students should be able to:	ASPH Competencies
1. Understand the major ecotoxicological aspects related to specific environmental agents.	B.1. Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.
2. Understand the relationships between environmental exposure to toxic chemicals, toxicological responses of different species, and the ecological consequences of these responses.	B.1. Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents. B.2. Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards. B.6. Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures. B.8. Develop a testable model of environmental insult.
3. Critically evaluate a peer-reviewed ecotoxicology paper, including an evaluation of the methods used, results presents, and conclusions drawn.	A.9. Interpret results of statistical analyses found in public health studies. J.3. Apply evidence-based principles and the scientific knowledge base to critical evaluation and decision-making in public health.
4. Lead a discussion of a peer-reviewed scientific paper.	F.7. Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities. H.4. Engage in dialogue and learning from others to advance public health goals.

Course Readings: Readings will be drawn from the relevant peer-reviewed literature. The readings will be available electronically in advance of class through the course Moodle site (available through My UCLA or <https://ccle.ucla.edu/course/view/14F-ENVHLT203-1>; you can login to the course with your UCLA Logon ID and password, just as you would access your My.UCLA).

This course revolves around a discussion of the course readings, so it is **essential** that you do the reading before each class.

Schedule: The schedule for the quarter will be determined following the first class meeting, and posted on the course Moodle site.

Presentation: Each student will lead the discussion of one or more peer-reviewed papers. Specific readings for each week will be determined by the discussion leader in consultation with the instructors. The discussion leader should lead the other students in a critical evaluation of the paper. In addition, the discussion leader should provide a broader context for the paper, typically achieved by reading additional related papers.

Grading: S/U grading. Satisfactory performance requires (1) a presentation and leading the discussion for one or more peer-reviewed papers, and (2) active participation in the discussions for all papers.