

“Emerging Concepts in Environmental Health Science”**Faculty:** Bruce Draper, David Furlow and Judy Van de Water**Lecture Location/Time:** 4206 Meyer Hall, Wednesdays, 10:00–12:00 p.m.

Course Goal: This course will focus on a current topic in environmental health that is of significant scientific and public controversy and it is intended to provide the students with a unique opportunity to gain insight and understanding of the merits and weaknesses of both sides of these contentious issues. The overall goal is to teach trainees how to critically examine a particular problem and how to interact with colleagues from different disciplines to develop strategies for effectively communicating with each other to address a complex environmental health issue.

Course Topic: The relative advantages and disadvantages of alternative model systems for Environmental Health Science research.

Course Format: One to two hours of lecture/meeting per week.

Students will participate in an introductory discussion of the chosen topic, including basic concepts, current state of knowledge, what are the outstanding questions or problems, what are the controversial aspects and general considerations and what is the scientific translational aspect and application. Over the remainder of the class, students will be divided into two groups to develop proposals on how they plan to address the specific problem from their assigned perspective. Each group will meet separately with the faculty trainer to brainstorm and analyze relevant literature and discuss approaches for addressing outstanding questions and scientific approaches to support their position. These discussions and interactions will be used to develop a powerpoint presentation in support of their position. During the last class period, each of the two groups will have the opportunity to present and discuss their powerpoint presentation in support of their position on the topic. This will be followed by a discussion/debate between the two groups on the topic area, the presentations and supporting scientific evidence. The class will conclude with both groups developing a set of consensus points that outline the actual current state of knowledge regarding the controversial topic, the strength of the supporting scientific evidence on both sides of the issue, areas where critical information is lacking and future research is needed. The presentations, consensus points and overall conclusions will be combined into a final summary report.

Course Registration: The trainees will officially register for and receive credit for the course during the Fall 2016 quarter.

Course Grading: Grades will be based on class participation, the final presentation and final summary report.