

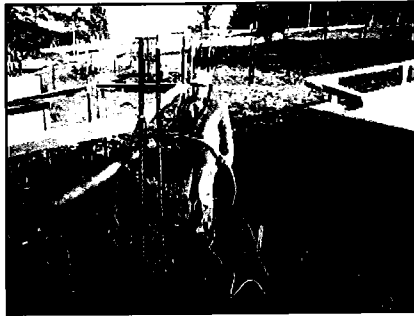
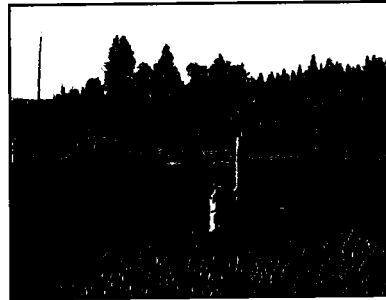
# ENVS 610: Interdisciplinary Environmental Science Research

Winter 2012

Tues. 4:00 - 6:20pm

142 Columbia

Course coordinator: Prof. Pat McDowell



The magnitude and complexity of environmental issues demand solutions that transcend traditional disciplinary boundaries. But doing interdisciplinary science requires skills and knowledge that may be missing from typical graduate study within a department. Other technical and social barriers inhibit interdisciplinary science.

ENVS 610 aims to provide graduate students an entry into methods, tools and approaches from the life and earth sciences relevant to doing problem-oriented environmental science. This is an experimental course, planned by a group of faculty from Anthropology, Ecology and

Evolution, Geography, Geological Sciences, and Landscape Architecture, and supported by an *Innovations in Graduate Education* grant from the UO Graduate School.

The seminar-style course will be organized around three topics (see below), with a group of faculty from different departments leading each topic. Course activities will include readings and discussion with faculty members whose research engages the topic, visits to research labs to understand how the conduct of research varies among disciplines, and teamwork activities to articulate interdisciplinary research ideas. Course participants will develop a preliminary interdisciplinary research proposal in a team format with two or three other members. In addition to the proposal, course requirements include reading discussions and engaged participation in course activities.



- Week 1: Introduction and general concepts
- Weeks 2-3: Topic 1: Watersheds, rivers, oceans, fish
- Weeks 4-5: Topic 2: Biotic responses to climate change
- Weeks 6-7: Topic 3: Human impacts on landscapes and ecosystems
- Week 8: Interdisciplinary science-social science research
- Weeks 9: Team consultations with faculty
- Week 10: Team presentations on research proposal with feedback from the class
- Week 11: Proposals due

Enrollment is by consent of instructor, to ensure a mix of students from different disciplines. Contact Pat McDowell (Geography) at [pmcd@uoregon.edu](mailto:pmcd@uoregon.edu), or 541-346-4567.