

MES Fall Quarter 2008

First-year core: *Political Economic and Ecological Processes*- Frederica Bowcutt & Ted Whitesell
Tuesdays & Thursdays 6-10 pm

This program provides a framework for understanding current environmental issues from an interdisciplinary perspective. Students will begin to develop the skills to become producers of new knowledge, rather than being strictly learners of information already available. Multiple methods of data acquisition and analysis will be introduced through examples drawn from many fields of study. The philosophy of science and the problematic relationship between science and policy are also introduced.

Second-year core: *Case Studies*- Peter Dorman and Rob Knapp
Tuesdays & Thursdays 6-10 pm

Students will examine in detail a variety of environmental problems, using the skills they gained in their first year of MES core studies to carry out individual or small group projects. Students and faculty will also work together to apply what has been learned throughout the core sequence about interdisciplinary environmental research to design individual thesis research plans that will be ready to carry out by the end of the fall quarter of the student's second year.

Electives:

Ecology of Western Washington – Alison Styring

Wednesdays 6-10 pm, several Saturday field trips

Focus: Western Washington consists of several unique, interlinked ecosystems. Understanding the key ecological processes regulating these systems is important in shaping solutions to environmental dilemmas. This course will focus environmental "hotspots" the region (areas of active research, management, and debate), and we will delve into primary literature to piece together the relationships among science, management, and restoration. The class will be largely student-driven, and students will lead most class activities. We will break into ecosystem interest groups during the first day of class and students will weave together cohesive multi-component learning modules for each ecosystem we cover (components such as lectures, workshops, seminars, and field trips). Each student will be responsible for presenting a component of content and submitting any relevant documentation to the program website (lecture notes, PowerPoint presentations, workshop instructions, etc.). Students will participate in faculty seminar with other presenters and the instructor prior to their presentation. At the end of the quarter, we will participate in a final exam, which will consist of student-written questions. All program materials will be added to the program website, which will serve as a resource for class participants.

Behavior and Ecology of Pacific Salmon – Larry Dominguez

Mondays 6-10 pm, Saturdays 9-5

Focus: This class will cover the life histories of seven Pacific salmon species with special emphasis on fall spawning species chum, sockeye, pink, coho and chinook. Discussion will focus on spawning and winter rearing habitats, and effective winter habitat restoration. This class will be taught in lectures and predominantly on field trips in coastal, Puget Sound, and West Cascade streams.

Global and Regional Climate Change – Kurt Unger

Wednesdays 6-10 pm

Focus: The science and policy of global and regional climate change. This elective will address questions such as these: How does current climate change differ from past changes? How do climate change models work? What are some of the key effects of climate change? How are policy makers addressing climate change, what should they be doing and what can individuals do? We will also discuss the roles of technology and the media, as well as a variety of economic, legal, political and social perspectives.