

MES Fall Quarter 2010

First-year core: Political Economic and Ecological Processes – Henderson, Saul, & Cushing

Tuesdays & Thursdays 6-10 pm CRN: 10320

Focus: This program provides a framework for understanding current Pacific Northwest environmental issues from an interdisciplinary perspective. Students will begin to develop the skills to become producers of new knowledge, rather than being strictly consumers of preexisting information. Multiple methods of data acquisition and analysis will be introduced through examples drawn from many different disciplines. Students will study the relationship between economic and political systems with regard to the environment within the Pacific Northwest region. Students will also study the region's natural history and explore the relationship between science and policy with a special focus on environmental history and ecological restoration. Field trips will provide opportunities to visit local ecosystems.

Second-year core: Case Studies and Thesis Research Design – Murphy & Chin-Leo

Tuesdays & Thursdays 6-10 pm CRN: 10321

Focus: Students will examine selected research projects on a variety of environmental problems. The aim is to understand how research is conceived, planned, and executed. This program will draw upon the skills gained in the first year of MES core studies. Students will work to apply their knowledge and skills to the design of their individual thesis research plans. At the end, each student will have a polished draft of their Thesis Prospectus, ready for refinement in consultation with the student's thesis advisor.

Electives:

Global & Regional Climate Change - Kurt Unger CRN: 10412- 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.

GIS and Spatial Analysis- Greg Stewart CRN: 10322 - Mondays 6-10PM

Focus: In this course, we will focus on creating and analyzing spatially-referenced data using ArcGIS 10. Instruction will be offered through a combination of lecture and lab. Weekly lab assignments are likely to require use of computing facilities outside of class. By the end of the term, students will have identified and completed a geo-spatial analysis project, which they will present to the class. Students should be well-versed in Microsoft Windows file management, but the course requires no previous experience with ArcGIS.

Sustainable Forestry: A Study in Natural Resource Management

Richard Bigley CRN: 10415- Wednesdays 6-10 PM

Sustainable Forestry: a study in Natural Resource Management is lecture and field-based introduction to forests of the Pacific Northwest, the science of forests and associated aquatic habitat management and the forces of change on their management. Case studies from forest, wildlife and fisheries management will examine 1) how society catalyzed, and forest science has fueled, recent developments towards a sustainable forestry; 2) the role of habitat restoration in sustainability of both forests and fisheries; and 3) insights into the future of ecosystem-based management. Weekend field trips will provide an insider's perspective into the front line of natural resources management science and policy. The course will provide background, and an introduction to analysis skills to help evaluate policies and strategies for management, restoration and protection of forests and the services they provide.