## **MES Spring Quarter 2009**

# First-year core: <u>Quantitative and Qualitative Data Analysis</u>- Alison Styring & Peter Dorman -Tuesdays and Thursdays 6-10 pm- Tuesdays 6-10 PM SEM II A1105, Thursdays 6-10 SEM II A1107- CRN 30388

Students learn how to integrate the use of inferential statistics and qualitative data analysis to conduct rigorous examinations of the social, biological, and physical aspects of environmental issues. This knowledge will prepare students for their own research and for understanding and critiquing research articles and reports in fields of their choosing.

#### Thesis-Essay Workshop - Ted Whitesell -Tuesdays 6-8 PM- SEM II D2107- CRN 30126

<u>Focus:</u> This continuation of the winter quarter workshop is intended to help students prepare a high-quality thesisessay and to increase the likelihood of completion by the end of the spring quarter. This quarter, the workshop will emphasize the continuation of student support groups and improvement of thesis presentations through critique of presentation rehearsals by students and the workshop instructor.

#### **Electives:**

### Floristic Research Methods- Frederica Bowcutt - Mondays 6-10 PM- LAB I 1050- CRN 30127

Focus: In this program students will learn how to use Hitchcock and Cronquist's *Flora of the Pacific Northwest*, a technical key for identifying unknown plants. We will spend time in the field and laboratory discussing diagnostic characters of plant families. Seminar readings will be focused on floristics and vegetation ecology. Students will learn how to collect and prepare herbarium specimens and apply this knowledge to a collaborative research project. Students will also learn about herbarium curation. Several one day-long field trips will give students an opportunity to learn about Pacific Northwest plant communities in the field. Students will be expected to maintain a detailed field journal and will be taught basic botanical illustration skills to support this work. *Program is preparatory for careers and future study in conservation, ecological restoration, forestry, natural resource management, plant ecology, or plant taxonomy.* 

#### Public Works: Sustainability and Democracy- Rob Knapp and Cheryl Simrell King - Mondays 6-10 PM- SEM II D1107-CRN 30128

Focus: This course investigates the question of what it takes to make the public work? And, how do we make the public work sustainably and democratically? "Public works" refers to the infrastructure needed to maintain civic society as well as the practices needed to minimize our footprint and maximize democratic possibilities. In this cotaught, interdisciplinary MPA/MES joint elective, we explore the charged issues that arise between and among citizens and experts over the planning, construction, and operation of large public facilities, such as road networks, waterworks, or sewage plants, as well as in the planning and implementation of cities and communities. The challenge of sustainability illuminates public works issues for cities and states in new ways, and opens new paths for resolving them. In our investigation of what it takes to make the public work, we highlight the process of design, i.e. the focused, multi-dimensional (physical, social, financial) exploration of potential public facilities, and relate national/international success stories and best practices to the Pacific Northwest's needs and opportunities.

Forest Ecology: Form and Function of PNW Forests- Richard Bigley - Wednesdays 6-10 PM- SEM II A2109- CRN 30130

Forest ecology principles provide a scientific foundation for understanding and meeting many of our most pressing regional and global ecological challenges. Field trips will feature the application of ecological knowledge for forest restoration and multi-resource management. Students will gain an understanding of forest stand structural development pathways, biogeochemistry, forest soils, ecological site classification, wildlife habitat creation and insight into emerging forest management issues. The class format will include lectures, discussions, and field studies.

#### Environmental Policy Making- Craig Partridge - Wednesdays 6-10 PM- SEM II A3107-CRN 30129

Focus: The goal of this course is to introduce students to the important concepts and to both theoretical and practical problems in the making and carrying out of environmental and natural resource policy in the U. S. Students will learn several approaches to understanding how, why, and by whom environmental policy decisions are made, and will gain experience with policy analysis and evaluation techniques, negotiation, and with the particular problems of policy implementation. This course takes a process approach to the topic, rather than a descriptive or prescriptive approach, and is aimed primarily at students who see themselves as future practitioners or researchers in this field. Some prior familiarity with the main categories of environmental and natural resource legislation and with the fundamental topics of political science will help students gain the most from this course.