ENVIRONMENTAL SCIENCES GRADUATE PROGRAM
AREA OF CONCENTRATION IN SOCIAL SCIENCE

PURPOSE

The Area of Concentration in Social Science is designed for students who have a strong natural science background and want to develop capabilities in the social sciences to go with this background. The Social Science track focuses on merging qualitative methodologies with various types of survey research.

Identification and measurement of people's values are a major area of social science inquiry that integrates across social science disciplines. Environmental decisions require the systematic study of values and preferences from both scientific and applied perspectives. Methods for assessing values are central to the Social Science track.

PROGRAM OF STUDY

The Social Science track has five components: ES Core courses, Methods and Numerical Skills courses, Social Science Topics courses, Scientific Focal Area courses, Elective co-s, and dissertation. Total credits required are a minimum of 45 Cr for the M.S. and M.A. degree and 108 Cr for the Ph. D. degree. Typical Programs of Study will include minimum credits as follow:

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>M.S. &amp; M.A. Degrees</th>
<th>Ph. D. Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES Core Courses</td>
<td>9 Cr</td>
<td>10 Cr</td>
</tr>
<tr>
<td>Methods and Numerical Skills</td>
<td>9 Cr</td>
<td>9 Cr</td>
</tr>
<tr>
<td>Social Science Environ. Topics</td>
<td>12 Cr</td>
<td>18 Cr</td>
</tr>
<tr>
<td>Science Focal Area Courses</td>
<td>9 Cr</td>
<td>15 Cr</td>
</tr>
<tr>
<td>Electives</td>
<td>0 Cr</td>
<td>0-14 Cr</td>
</tr>
<tr>
<td>Thesis</td>
<td>6 Cr</td>
<td>36-50 Cr</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45 Cr</strong></td>
<td><strong>108 Cr</strong></td>
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CORE COURSES

9-12 Cr. for the M.S and M.A. degree (required are ENSC 515, 520, 508 and one class from the approved list of core courses- below) and 10-12 Cr. for the Ph. D. degree. (required are ENSC 515, 520, 508 and classes from the approved list of core courses- below). These courses include Environmental Perspectives, Environmental Analysis, Environmental Profiles, and the Joint-Campus Workshop in Environmental Science, Studies, and Policy.

Approved Core Course List:

- ANTH 581 Natural Resources and Community Values
- ANTH 582 World Food and the Cultural Implications of International Development
- BI 570 Community Structure and Analysis
- BI 670 Community Structure and Analysis
- CE 513 GIS in Water Resources
- Comm 540 Theories of Conflict and Conflict Management
- EC 539 Public Policy Analysis
- FOR 561 Forest Policy Analysis
- FS520 Posing Researchable Questions
- FS521 Natural Resource Research Plan
- FS565 Forest Ecosystem Management
- FS646 Ecosystem Analysis and Evaluation
- FW515 Model Selection and Inference
- GEO 520 Geography of Resource Use
- H524 Health Data Analysis
H525  Intro Epidemiology
H526  Epidemiological Methods
H549  Health Risk Communication
H575  Evaluation
H576  Proposal Writing
HIST 569 History of the Pacific Northwest
LA 607  Experimental Seminar in Biocomplexity and Alternative Futures
MRM515 Coastal Resources Management
PS 574  Bureaucratic Politics and Policy
PS 575  Politics of Environmental Problems
PS 576  Science and Politics
SED 580 Research and Evaluation
SOC 581 Society and Natural Resources
Z582  Molecular Methods in Ecology and Evolution

METHODS AND NUMERICAL SKILLS COURSES
9 Cr for M.S. and M.A. degree and 9 Cr for Ph. D. degree. Courses in Methods and Numerical Skills are intended to develop student background in qualitative, quantitative or statistical methods courses. The courses below are not a complete list satisfying the Methods and Numerical Skills category of courses. Quantitative methods, qualitative methods, and statistical methods courses are to be selected by consensus of the graduate advisor, advising committee, and student.

1A. Qualitative Methods
   ANTH 591 Ethnographic Methods
   ANTH 598 Oral Traditions
   COMM 514 Communication Research Methods
   PS 5XX Course Under Development
   SOC 518 Qualitative Sociology

1B. Quantitative Methods
   ANTH 593 Statistical applications in Anthropology
   EC 525 Econometric Methods
   EC 526 Applied Econometrics
   HDFS 531 Methods of Behavioral Research
   SOC 516 Conducting Social Research

1C. Statistical Methods
   STAT 511, 512, 513 Methods of Data Analysis
   STAT 531 Sampling Methods
   STAT 539 Survey Methods

SOCIAL SCIENCE
Social Science Environmental Topics:  12 Cr for M.S. and M.A. degree and 18 Cr for Ph. D. degree. Courses in social science environmental topics are intended to develop student background in human impacts on environmental systems and effects of environmental change on social systems. Social science environmental topics are to be selected by consensus of the graduate advisor, advising committee, and student.

Agricultural and Resource Economics
AREC 550 Environmental Economics
AREC 551 Natural Resource Economics
AREC 651 Advanced Resource Economics
AREC 652 Advanced Environmental Economics

Anthropology
ANTH 581 Natural Resources and Community Values
ANTH 582 World Food and Development

Business
BA 532 Environmental Law

Civil Engineering
CE 547 Environmental Resource Systems

Economics
EC 539 Public Policy Analysis

Forest Resources
FOR 530 & 531 Forest Resource Economics I & II
FOR 532 Economics of Recreation Resources
FOR 559 Forest Resource Planning and Decision Making

**Geosciences**
- GEO 520 Geography of Resource Use
- GEO 522 Reconstructing Historical Landscapes
- GEO 524 Water Resources Geography
- GEO 526 Third-World Resource Development
- GEO 529 Topics in Resource Geography

**History**
- HST 581 Environmental History
- HST 569 History of the Pacific Northwest
- HST 567 & 568 History of the American West

**Marine Resource Management**
- MRM 514 Ocean Resources Management
- MRM 515 Coastal Resources Management

**Philosophy**
- PHIL 590 Ethical Issues in the Resource Sciences
- PHIL 543 World Views and Environmental Values

**Political Science**
- PS 574 Bureaucratic Politics and Policy
- PS 575 Politics of Environmental Problems
- PS 576 Science and Politics

**Sociology**
- SOC 580 Environmental Sociology
- SOC 581 Society and Natural Resources
- SOC 575 Rural-Urban Sociology

**Speech Communication**
- COMM 540 Theories of Conflict and Conflict Management
- COMM 542 Bargaining and Negotiation Processes
- COMM 544 Mediation

### SCIENCE FOCAL AREA
9 Cr for M.S. and M.A. degree and 15 Cr for Ph. D. degree. Courses in the science focal area are to supplement the natural science background that was the background for entering the program and may be selected from life or physical science disciplines. The combination of courses taken prior to admission to the program and science focal area courses are intended to develop a coherent area of scientific study. Science focal area courses may be selected from the Ecological Area of Concentration, other ES areas of concentration, or courses from the Colleges of Science, Agricultural Sciences, Oceanic and Atmospheric Sciences, Forestry, or Engineering. Science focal area courses are to be selected by consensus of the graduate advisor, advising committee, and student.

### ELECTIVE COURSES
0 Cr for M.S. and M.A. degree and 0-14 Cr for Ph. D. Degree. Students will work with their graduate advisor and committee to select elective courses to develop necessary background to add breadth and depth to the student's Program of Study.

### THESIS:
6 Cr for M.S. and M.A. degree and 36-50 Cr for Ph. D. degree.