ENVIROMENT AND RESOURCE MANAGEMENT (ERM)

Department of Geography, Environment and Geomatics, College of Social and Applied Human Sciences

The major focuses on environmental interactions and problem solving by developing an integrated biophysical environment - human environment perspective. In ERM, students will gain knowledge across the natural sciences, an understanding of how they interact, the skills (tools and techniques) needed to support decision making, as well as the methods of management and governance that are critical for environmental decision making. Beginning in first year students learn in the classroom and through hands-on work in labs and in the field. Students are expected to design and conduct experiments and problem solve using state-of-the-art computing and analytical tools. This major provides the knowledge, skills and methods an environmental scientist requires as environmental consultant, environmental manager, environmental and/or resource planner, geographic information systems analyst or to facilitate future graduate work.

Major Code  Title  Credits
Semester 1
BIOL*1070 Discovering Biodiversity 0.50
CHEM*1040 General Chemistry I 0.50
ENVS*1030 Introduction to Environmental Sciences 1.00
MATH*1080 Elements of Calculus I 0.50

Semester 2
BIOL*1090 Introduction to Molecular and Cellular Biology 0.50
CHEM*1050 General Chemistry II 0.50
FARE*1040 Introduction to Environmental Economics, Law and Policy 1.00
GEOG*1300 Introduction to the Biophysical Environment 0.50

Semester 3
ECON*2100 Economic Growth and Environmental Quality 0.50
or FARE*2700 Survey of Natural Resource Economics
GEOG*2000 Geomorphology 0.50
GEOG*2460 Analysis in Geography 0.50
1.00 electives 1.00

Semester 4
GEOG*2110 Climate and the Biophysical Environment 0.50
GEOG*2210 Environment and Resources 0.50
GEOG*2480 Mapping and GIS 0.50
1.00 electives or restricted electives 1.00

Semester 5
ENVS*2120 Introduction to Environmental Stewardship 0.50
GEOG*3000 Fluvial Processes 0.50
GEOG*3110 Biogeography 0.50
GEOG*3210 Indigenous-Settler Relationships in Environmental Governance 0.50
0.50 electives or restricted electives 0.50
Semester 6
GEOG*3480 GIS and Spatial Analysis 0.50
2.00 electives or restricted electives 2.00

Semester 7
ENVS*4001 Project in Environmental Sciences 0.50
GEOG*4110 Environmental Systems Analysis 1.00
GEOG*4210 Environmental Governance 0.50
0.50 electives or restricted electives 0.50

Semester 8
ENVS*4002 Project in Environmental Sciences 0.50
2.00 electives or restricted electives 2.00

1 GEOG*3610 Environmental Hydrology may be substituted for GEOG*3000 Fluvial Processes and would be taken in Semester 6.

Restricted Electives
1. A minimum of 2 of the following courses:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENVS*4390</td>
<td>Soil Variability and Land Evaluation</td>
<td>1.00</td>
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<tr>
<td>GEOG*4220</td>
<td>Local Environmental Management</td>
<td>0.50</td>
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<tr>
<td>GEOG*4230</td>
<td>Environmental Impact Assessment</td>
<td>0.50</td>
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2. An additional 1.00 credits in Geography (GEOG) at the 3000 level or higher.

Credit Summary
(20.00 Total Credits)

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<td></td>
<td>Environmental Sciences Core</td>
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<td></td>
<td>Environment and Resource Management Required Courses</td>
<td>6.00</td>
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<td></td>
<td>Environment and Resource Management Restricted Electives, depending on course selection</td>
<td>2.00-2.50</td>
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<tr>
<td></td>
<td>Free Electives, depending on course selection</td>
<td>4.50-5.00</td>
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<td>Total Credits</td>
<td>20</td>
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Students are reminded that 6.00 credits of their B.Sc. (Env.) degree must be at the 3000-4000 level.

Students are encouraged to seek advice on their choices from their faculty advisor.