

# ENVIRONMENT 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
<b>Semester 1</b>		
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
<b>Semester 2</b>		
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
<b>Semester 3</b>		
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
<b>Semester 4</b>		
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
<b>Semester 5</b>		
ENVS*2120	Introduction to Environmental Stewardship	0.50
GEOG*3000	Fluvial Processes <sup>1</sup>	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

- A minimum of 2 of the following courses:

Code	Title	Credits
ENVS*4390	Soil Variability and Land Evaluation	1.00
GEOG*4220	Local Environmental Management	0.50
GEOG*4230	Environmental Impact Assessment	0.50

- An additional 1.00 credits in Geography (GEOG) at the 3000 level or higher.

## Credit Summary

(20.00 Total Credits)

Code	Title	Credits
Environmental Sciences Core		7.00
Environment and Resource Management Required Courses		6.00
Environment and Resource Management Restricted Electives, depending on course selection		2.00-2.50
Free Electives, depending on course selection		4.50-5.00
<b>Total Credits</b>		<b>20</b>

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.