

# ENVIRONMENTAL ECONOMICS AND POLICY (EEP)

Department of Food, Agricultural and Resource Economics, Ontario Agricultural College

This major provides the foundation for applying science and economics to environmental issues to produce effective environmental policy.

Students gain an understanding of the policy tools and market mechanisms for managing our natural resources effectively. Knowledge and skills learned in this major will enable students to identify, prioritize and solve environmental problems by integrating both scientific and economic theories and data. Equipped with the ability to look at current topics from the perspectives of economics, politics and environmental sciences, students have a number of interesting career opportunities in the public, private and NGO sectors. At the same time, the major fully prepares students to move onto professional and research graduate programs.

## 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*1100	Introductory Macroeconomics	0.50
FARE*2700	Survey of Natural Resource Economics	0.50
1.50 electives or restricted electives		1.50
<b>Semester 4</b>		
ECON*2310	Intermediate Microeconomics	0.50
ECON*2410	Intermediate Macroeconomics	0.50
ECON*2770	Introductory Mathematical Economics	0.50
ECON*2740	Economic Statistics <sup>1</sup>	0.50
or STAT*2040	Statistics I	
0.50 electives or restricted electives		0.50
<b>Semester 5</b>		
ECON*2100	Economic Growth and Environmental Quality	0.50
ECON*3740	Introduction to Econometrics	0.50
1.50 electives or restricted electives		1.50
<b>Semester 6</b>		
FARE*3170	Cost-Benefit Analysis	0.50
2.00 electives or restricted electives		2.00
<b>Semester 7</b>		

ECON*4930	Environmental Economics	0.50
ENVS*4001	Project in Environmental Sciences	0.50
FARE*4290	Land Economics	0.50
1.00 electives or restricted electives		1.00

### Semester 8

ENVS*4002	Project in Environmental Sciences	0.50
FARE*4310	Resource Economics	0.50
1.50 electives or restricted electives		1.50

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Students interested in the Statistics and Environmental Risk Assessment sequence in their restricted electives should choose STAT\*2040 Statistics I to satisfy the statistics requirement in the ENVS core.

## Restricted Electives

Students in the Environmental Economics and Policy major are required to complete 6.00 credits in restricted electives. 2.50 restricted elective credits must be in FARE or ECON courses at the 3000 or 4000 level.

Courses in the following lists may be taken to satisfy the restricted electives requirement. Courses are grouped to assist students select programs of study aimed at different educational and career paths.

### List A

Students must select a minimum of 2.50 credits from the following lists:

#### 1. Quantitative Methods, Research and Graduate Studies

Code	Title	Credits
ECON*3100	Game Theory	0.50
ECON*3710	Advanced Microeconomics	0.50
ECON*4640	Advanced Econometrics	0.50
ECON*4700	Advanced Mathematical Economics	0.50
ECON*4710	Advanced Topics in Microeconomics	0.50
ECON*4750	Topics in Public Economics	0.50
FARE*4500	Decision Science	0.50
FARE*4550	Independent Studies I	0.50
FARE*4560	Independent Studies II	0.50

#### 2. Policy Analysis

Code	Title	Credits
ECON*2650	Introductory Development Economics	0.50
ECON*3500	Urban Economics	0.50
ECON*3580	Economics of Regulation	0.50
ECON*3610	Public Economics	0.50
ECON*3620	International Trade	0.50
ECON*4830	Economic Development	0.50
ECON*4880	Topics in International Economics	0.50
EDRD*2650	Introduction to Planning and Environmental Law	0.50
FARE*2410	Agri-food Markets and Policy	0.50
FARE*3250	Food Security, Nutrition and International Development	0.50
FARE*4000	Agricultural and Food Policy	0.50
FARE*4550	Independent Studies I	0.50
FARE*4560	Independent Studies II	0.50
POLS*3370	Environmental Politics and Governance	0.50

**List B**

Students must select a minimum of 1.00 credits from the following lists:

Students are encouraged to seek advice on their choices from their faculty advisor. Students are reminded that 6.00 credits of their B.Sc. (Env.) degree must be at the 3000 or 4000 level.

**1. Remote Sensing, Geographical Information Systems and Spatial Analysis**

Code	Title	Credits
GEOG*2420	The Earth From Space	0.50
GEOG*2480	Mapping and GIS	0.50
GEOG*3420	Remote Sensing of the Environment	0.50
GEOG*3480	GIS and Spatial Analysis	0.50
GEOG*4480	Applied Geomatics	1.00

**2. Statistics and Environmental Risk Assessment**

Code	Title	Credits
STAT*2050	Statistics II	0.50
STAT*3510	Environmental Risk Assessment	0.50

**Note:** Students interested in this sequence should take STAT\*2040 Statistics I rather than ECON\*2740 Economic Statistics to satisfy the statistics requirement in the ENVS core.

**3. Earth Sciences**

Code	Title	Credits
ENVS*2030	Meteorology and Climatology	0.50
ENVS*2060	Soil Science	0.50
ENVS*2310	Introduction to Biogeochemistry	0.50
ENVS*3060	Groundwater	0.50

**4. Ecology and Conservation Biology**

Code	Title	Credits
BIOL*2060	Ecology	0.50
BIOL*3060	Populations, Communities and Ecosystems	0.50
BIOL*3130	Conservation Biology	0.50
BIOL*4150	Wildlife Conservation and Management	0.50
BIOL*4500	Natural Resource Policy Analysis	0.50
ENVS*2330	Current Issues in Ecosystem Science and Biodiversity	0.50

**5. Toxicology and Environmental Chemistry**

Code	Title	Credits
ENVS*3020	Pesticides and the Environment	0.50
ENVS*3040	Natural Chemicals in the Environment	0.50
ENVS*3220	Terrestrial Chemistry	0.50
TOX*2000	Principles of Toxicology	0.50
TOX*3360	Environmental Chemistry and Toxicology	0.50

## Credit Summary

(20.00 Total Credits)

Code	Title	Credits
	Environmental Sciences Core	7.00
	Environmental Economics and Policy Required Courses	5.00
	Environmental Economics and Policy Restricted Electives	6.00
	Free Electives	2.00
	<b>Total Credits</b>	<b>20</b>