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Resource/Environmental Economic Courses and Expertise At Canadian Institutions

An Summary Report of a Survey Conducted by the Special Initiatives Program, Corporate Affairs and Initiatives

August 1995

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Judith A. McCallum Program Associate

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# Introduction

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#### 1.0 Introduction

In September 1993, the SIP commissioned a survey of Canadian universities to find programs, courses and short courses in the areas of Resource or Environmental Economics. This survey was inspired by the realization that changes to the Centre's program focus and priorities were requiring training in unfamiliar areas, such as Environmental/Resource Economics, and that this training was being sought outside of Canada, due to a lack of awareness of Canadian expertise. At this time, 20 universities responded to the survey sent out by Christian DaSilva, CAID Program Associate, which were compiled into a binder that is available from the Special Initiatives Program. This report is a follow up to the work that Christian did in 1993, filling in some of the universities that did not respond the first time, and updating the information from those that did.

#### 1.1 Methodology

Starting with the universities who were included in the first report, a form letter was sent out requesting updated information and documentation on courses fitting our interest of Resource/Environmental Economics. A second form letter was sent to other Canadian universities which were not included in the original list. Follow-up was made through e-mail, where addresses could be found, and some information was also gleaned from home pages of the universities on the World Wide Web.

#### 1.2 Organization of Material

This report is divided into two parts; first, a binder which will remain in the SIP office for reference, and second, this summary report for dissemination. This summary briefly outlines everything that is in the binder and provides key contact people at the universities and institutes listed. The binder contains course outlines, calender excerpts, correspondence and other supporting documentation. The rationale for this format is that much of the information in the binder will not be of use to everyone, and can be overwhelming to try and wade through. This way, one can briefly see the Canadian resources, and if interested follow up on them, either through information in the binder, by contacting the institutes directly, or by checking out their home page on the World Wide Web.

#### 1.3 How To Use This Report

This report has two main divisions; the first indicates Canadian expertise in Resource/Environmental Economics by geographic location by giving a brief summary of what each institution has to offer, the second lists the universities in alphabetical order. Each listing will have a summary sheet providing the key contact people, www home pages on the Internet, a description of undergraduate, graduate and short non-degree courses offered at each university, and information available in the binder. Also included will be key faculty who would be interested

in working with IDRC in tailor-making programs to meet Centre training objectives. The binder will contain correspondence, course outlines, calender excerpts, and CVs of key faculty in this area. If this information is required, the readers may contact the Centre Library or Mr. Chris Smart at the following addresses.

Reference Desk	Mr. Chris Smart
IDRC Library	Director
9th Floor	Special Initiatives Division
P.O. Box 8500	Corporate Affairs and Initiatives
Ottawa	IDRC, 10th floor
Canada K1G 3H9	P.O. Box 8500
	Ottawa
Tel. 613-236-6163 x2571	Canada K1G 3H9
Fax 613-563-9463	
E-mail: reference@idrc.ca	Tel. 613-236-6163 x2323
	Fax 613-563-0815
	E-mail: csmart@idrc.ca

#### **1.4 Internet Resources**

As mentioned, much of the information from this report was drawn from world wide web sites on the Internet. Most universities in Canada now have a home page on the world wide web, providing a range of information including course descriptions, email addresses and research interests of faculty and students. The pages following this introduction illustrate the type of information that is available on the www. This information is constantly updated and expanding in scope, providing a valuable resource for knowing what is current in the university scene.

There are a few methods that one may use to access university home pages on the Internet. The URL for most university home pages in Canada are in the following format: *http://www.universityname.ca.* For example, the University of Calgary's URL is: *http://www.ucalgary.ca*, and for the University of Prince Edward Island the URL is: *http://www.upei.ca.* It is therefore a matter of knowing the way the university is usually called and testing out the various forms. There are also a couple of sites that list Canadian Universities in hypertext. The best site I have found is: *http://www.mit.edu:8001/people/cdemello/ca.html.* For each university in this report I have listed the URL for their home page, where available.

Judith McCallum, Program Associate SIP/CAID



# -Welcome to The University of Calgary!

- About The University of Calgary
- **University of Calgary faculties**
- Services for students
- Service departments
- The University of Calgary telephone directory
- Search tools
- Other University of Calgary units
- **Conference Information**
- University of Calgary Electronic Publications
- University of Calgary Miscellany
- What's new at the U of C home page (11 August 1995)
- U of C campus women
- The previous U of C home page
- **Other WWW sites**
- Help Desk (220-5555)
- Last modified 95-08-11 Mail comments to Mike Morrow by clicking <u>morrow@acs.ucalgary.ca.</u>



# University of Prince Edward Island

Welcome to the <u>University of Prince Edward Island's</u> <u>World-Wide Web</u> System, located in <u>Charlottetown</u>, Prince Edward Island, Canada.

You are the 28500th caller to this page.

Library Information Student Information Faculties and Schools Extension and Summer Schools Institutes, Centres and Major Projects Administration and Service Departments Official University Documents Campus Phone Books and Directories UPEI's Gopher Server UPEI Newsletter Weather [forecast | current conditions]

Prince Edward Island Information Canadian Information International Information

Information about World-Wide Web (WWW) and the Internet

# **Internet Search Tools:**

[ AliWeb | CUI W3 | JumpStation | Lycos | WebCrawler | Yahoo | Web Worm | Veronica ]

The UPEI WWW System is managed by the UPEI Networked Information Resources Committee, which welcomes your comments.



Welcome to the University of Alberta, one of Canada's largest, full-service, research-intensive universities, located <u>Edmonton</u>, <u>Alberta</u>, Canada. Information about our university may be found in the menus below.

Local users: This page is maintained by Rob Lake of the Department of Computing Science. Please send mail to '<u>rke@cs.ualberta.ca</u> if you would like your Department's home page linked to this list.

# Table of Contents

WelcomeAdmissions and Course InformationAdministrationFacultiesResearch Centres and InstitutionsAssociated Institutions and AgenciesSupport ServicesStudent ServicesPeopleLibrariesElectronic JournalsCampus EventsWorld Wide Web Information

# Welcome

Message from the President Campus Overview Campus Location Campus Layout What's New

# Admissions and Course Information

Office of the Registrar (Admissions) Academic Schedule 1995-96 University Calendar 1995-96 Course Information Office of the Comptroller (Fees and Scholarships) Housing and Food Services (Student Housing)

# Administration

<u>Chancellor of the University</u> <u>Office of the President</u> Office of the Vice-Presidents <u>The Board of Governors</u> · ·

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# Section 2

# Geographic Distribution of Canadian Expertise in Resource/Environmental Economics

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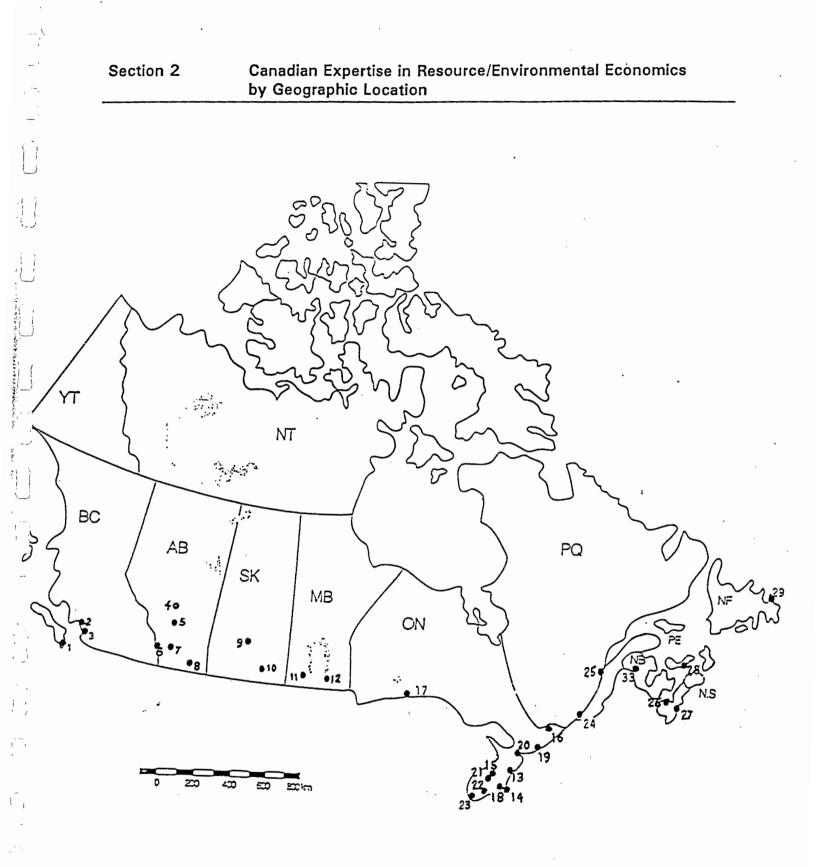
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The map on the previous page indicates the location of Canadian Institutions with expertise in Resource/Environmental Economics. The number preceding each university correlates with its location on the map.

#### 2.1 Western Canada

#### British Columbia

No.

1 University of Victoria - Victoria

The Department of Economics, University of Victoria, offers a number of courses in Resource and Environmental Economics. Dr. G.R. Walters, who teaches Economics 312, 430A and 430B may be interested in working with IDRC in this area.

2 University of British Columbia - Vancouver

The University of British Columbia offers graduate degrees in Agricultural Economics (M.Sc., M.A., P.hd.). The Sustainable Development Research Institute aims to initiate and contribute to multidisciplinary research on the linkages between the environment, the economy and social equity.

3 Simon Fraser University - Burnaby

The Department of Economics and the School of Resource and Environmental Management offer a variety of graduate and undergraduate courses in Resource and Environmental Economics.

#### Alberta

4 Athabasca University- Athabasca Athabasca offers one course in the Political Economy of Resource Development in Canada.

#### 5 University of Alberta- Edmonton

The University of Alberta offers a number of programs, both graduate and undergraduate in resource and environmental Economics within the Departments of Rural Economy and Economics. Their Undergraduate degrees include; a B.Sc. in Environmental and Conservation Sciences (ENCS) that includes a "major" in Environmental Economics and Policy, a B.Sc. in

Agriculture with a specialization in Applied Economics, and a B.A. with specializations in Economics.

Graduate Programs in Environmental Economics may be pursued either within the department of Rural Economy or the department of Economics. Rural Economy offers M.Ag., M.Sc and Ph.d. degrees with Natural Resource Economics as an area of concentration. Economics offers M.A. and Ph.D degrees. There is also a new Ph.D. program in Environmental and Resource Economics offered jointly by the Departments.

#### 6 Banff Centre for Management

The Banff Centre for Management has offered courses in resource and Environmental Leadership since 1972. These short, intensive courses offer a balance of skill based and technical information to business and government at senior levels. The programs are designed to incorporate practical responses on environmental issues into the planning and operation of all types of enterprises. Courses include: GIS, Environmental Conflict Resolution, Ecotourism, Native Canadian Relations.

- 7 University of Calgary- Calgary
- 2.2 Prairies

#### Saskatchewan

- 9 University of Saskatchewan- Saskatoon
- 10 University of Regina Regina

#### Manitoba

- 11 Brandon University Brandon
- 12 University of Manitoba- Winnipeg

The Faculty of Agriculture and Food Sciences at the University of Manitoba offers 2 undergraduate and 1 graduate course in resource/environmental economics.

The Department of Economics has several graduate and undergraduate courses in Environmental Economics and several professors who would be willing to work with IDRC on related course development.

# 12 University of Winnipeg- Winnipeg The University of Winnipeg offers two undergraduate courses related to Resource or Environmental Economics.

## 2.3 Ontario

#### 13 Ryerson Polytechnic University- Toronto Ryerson offers two courses in Environmental Economics.

#### 13 University of Toronto- Toronto

the Institute for Environmental Studies, University of Toronto, while not currently offering training courses on a regular basis, have been involved in such activities in the past and would be willing and able to offer courses here or abroad if the demand were there for such services. They are currently involved in a CIDA-funded programme, "Training for Environmental Management", in Vietnam. Information regarding this program is in the binder.

### 13 York University- North York

The faculty of Environmental Studies at York University offers an introductory course in Environmental Economics as well as graduate and undergraduate level courses in Ecological economics. Since 1978 they have been offering a series of non-degree seminars, workshops and short courses aimed at providing opportunities for professional upgrading and a forum for the exploration of environmental issues of interest to the general public. They are currently expanding their non-degree courses are interested in working with IDRC in developing appropriate training opportunities.

#### 14 Brock University - St Catherines

Brock University offers a four year honours undergraduate program in Environmental Economics.

#### 15 Guelph University - Guelph

Guelph has several options in the area of environmental and resource economics. They include: a Phd program in Resource and Environmental Economics; a minor in Natural Resource Management through the International Agriculture Program; a minor in resource economics through the International Agriculture Program; several undergraduate courses in environmental and resource economics through the agricultural economics

department; several undergraduate courses through the economics department, minors in Environmental Economics and Policy, Environmetrics, or Natural Resource Management through the Bachelor of Environmental Sciences program; and, a correspondence course entitled "Economic growth and environmental quality".

#### 16. Carleton University - Ottawa

The Department of Economics, Carleton, offers two undergraduate courses related to Resource or Environmental Economics.

#### 16 Ottawa University- Ottawa

The department of Economics at the University of Ottawa offers both undergraduate and graduate courses in Resource/Environmental Economics. The department will be participating in the University's Environmental Studies program (through the Faculty of Arts) and the Environmental Sciences program (through the Faculty of Sciences). The Department has also applied to add a field of economics of the environment to its PhD program (offered jointly with the department of Economics at Carleton University).

#### 17 Lakehead University - Thunder Bay

Lakehead University offers one undergraduate course in Forest resource Economics. Dr. Hazenberg would be interested in working with IDRC in development of short courses in Environmental Economics.

## 19 Queens University- Kingston

Queens University offers two graduate courses in Resource/Environmental Economics.

#### 20 Trent University - Peterborough

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The Environmental and Resource Studies Program at Trent University is an interdisciplinary program offered by Environmental and Resource Studies (ERS) in cooperation with twenty-three other University departments and programs. Students may take a single or joint majors general BS in Environmental Studies (ER) or B.Sc in Environmental Sciences (ES) degree. This program offers specializations in seven themes, one of which offers a BA in Community Economic and Resource Development. Brenda Leith is interested in Economics consequences of different management strategies in marine fisheries and in forestry.

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# 21 University of Waterloo - Waterloo The University of Waterloo offers a Masters of Applied Environmental Studies (MAES) in Local Economic Development within the department of Environmental Studies. The Department of Economics offers an Undergraduate Environmental Economics options.

#### 21 Wilfred Laurier University - Waterloo

WLU offers two undergraduate courses related to Resource or Environmental Economics. Faculty willing to work with IDRC: Professor Frank Millerd (School of Business and Economics); Professor Randy Wigle (School of Business and Economics); Professor Christian Dufournaud (Department of Geography).

# 22 University of Western Ontario- London The University of Western Ontario offers two courses in Resource/ Environmental Economics

#### 2.4 Quebec

# 24 *Concordia University - Montreal* Concordia offers several undergraduate and graduate courses related to Resource or Environmental Economics.

#### 24 McGill University- Montreal

The department of Agricultural Economics at McGill offers a BSc. in Agricultural Economics, within which there are three options: Systems, Resource Economics, and Agri-Business. They also offer a minor in Ecological Agriculture which may be combined with major program in Agricultural Economics. At the graduate level, the Department offers a course in Environmental and Resource Economics. Several of the staff in the department work in areas related to resource economics (Baker, Goldsmith, Henning and Thomassin.) They would be willing to work with IDRC to provide training in this area. The Department of Economics offers two courses in Environmental and Ecological Economics.

#### 25 Laval University- Quebec

Laval offer three undergraduate courses and two graduate courses in Resource/Environmental Economics.

2.5 Atlantic

#### Nova Scotia

### 26 Acadia University - Wolfville Acadia offers two undergraduate courses related to Resource or Environmental Economics.

#### 27 Dalhousie University - Halifax

Dalhousie University has several undergraduate and graduate level courses in resource/environmental economics. Dalhousie also has a Master's degree in Environmental Studies which might have some courses relevant to Economics.

#### **Prince Edward Island**

28 University of Prince Edward Island - Charlottetown UPEI offers two courses every second year in Resource Economics. Dr Mian Ali (mian@upei.ca), who offers them may be interested in working with IDRC.

#### Newfoundland

29 Memorial University of Newfoundland - St. John's The Department of Economics, Memorial University, offers four undergraduate courses related to Environmental and Resource Economics. In addition, the Centre for Earth Resource Research offers a two week course on resource economics aimed at mineral and petroleum industry personnel and government officials whose job it is to regulate the mineral and petroleum industries.

#### New Brunswick

30 University of New Brunswick - Fredericton, St. John The University of New Brunswick, St. John and Fredericton campuses, offer a number of undergraduate courses in the area of Environmental/Resource Economics.

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# Resource/Environmental Economics Courses at Canadian Institutions by Alphabetical Listing

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#### Acadia University

#### Department of Economics

Contact: Dr. John Davies, Chair, Department of Economics Acadia University Wolfville, Nova Scotia BOP 1X0 T 902-542-2201 F 902-542-4727

# WWW site on the Internet

http://www.acadiau.ca

#### Summary

Acadia offers two undergraduate courses related to Resource or Environmental Economics.

Professors interested in working with IDRC Professor Tugwell

#### Materials in Binder

Covering letter and outlines.

Acadia University: Undergraduate	Resource/Environmental Economics courses	
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Course offered	Description	Instructor
Economics 4823X1 Environmental Economics	Issues related to the quality of the environment and role of natural resources in the growth and development of the economy.	Maurice Tugwell
Economics 4813 Resource Economics	An examination of man's approach to the use of resources provided by nature rather than as a result of actions wholly predetermined by man. Topics to be considered will include: depletion and its implications, the various approaches to allocation, and the practicality of economic policies to influence resource use, as these pertain to raw materials and food.	John Connor

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#### University of Alberta

Department of Economics Chair: Dr Melville McMillan mmcmilla@vm.ucs.ualberta.ca Bradford G. Reid, Graduate Program Committee Department of Economics University of Alberta 8-14 HM Tory Building Edmonton, AB Canada T6G 2H4 T (403) 492-7634 F (403) 492-3300

#### School of Agriculture, Forestry and Home Economics Dean: Dr.Edward Tyrchniewicz etrychni@vm.ucs.ualberta.ca

#### **Environmental Research Studies Institute**

Director: Dr. Ellie Prepas T 403-429-3463

WWW site on the Internet http://www.ualberta.ca

#### Summary

The University of Alberta offers a number of programs, both graduate and undergraduate in resource and environmental Economics within the Departments of Rural Economy and Economics. Their Undergraduate degrees include; a B.Sc. in Environmental and Conservation Sciences (ENCS) that includes a "major" in Environmental Economics and Policy, a B.Sc. in Agriculture with a specialization in Applied Economics, and a B.A. with specializations in Economic.

Graduate Programs in Environmental Economics may be pursued either in the departments of Rural Economy or Economics. Rural Economy offers M.Ag.M.Sc and Ph.d. degrees with Natural Resource Economics as an area of concentration. Economics offers M.A. and Ph.D degrees. There is also a new Ph.D. program in Environmental and Resource Economics offered jointly by the Departments.

#### Materials in Binder

Photocopies of relevant pages form the U of A Calendar describing undergraduate and graduate courses offered at the Department of Economics. Department of Economics Graduate brochure. Rural Economy Graduate Handbook. Course outlines

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Course	Description	Instructor
ECON 355 Economics of Project Evaluation	The use of cost-benefit analysis and other economic methods in evaluating public investment projects with examples from transportation, river basin management, electrical generation, oil and gas, and pollution control. Course focus: Large scale (mega) project evaluation of economics, risks, financing and sponsor/government decision-making. Analysis includes economics, benefit- cost, investment, and public policy issues. A megaproject field trip will be organized.	Dr. Allan A Warrak T 403-492-3998 F 403-492-3325 email: awarrack@vm.uc s
ECON 365 Resource Economics	Problems of allocation and development of natural resources, including contemporary Canadian resource policy issues; nature and types of resources; the economics of conservation; and the role of resources in growth.	Dr. D. Ryan T 403-492-5942
ECON 366 Energy Economics	Types of energy resources, substitutability, conversion. The relevance of energy to economic growth. Energy as input and as a consumers' good. An overview of quantities available and used. The problems of measuring energy, the energy balance, the energy industries. The role of energy in Canadian economic development. World energy markets. Energy policy problems.	Dr R. Lindsay T 403-492-7642
INTD 369 Economics of the Environment (offered jointly by the Departments of Rural Economy and Renewable resources	Economics of natural resources related to agriculture and forestry; conservation, population, resource scarcity, property and tenure institutions, economic rent and resource pricing, resource development and evaluation, environmental protection, public resource policy.	T.S.Veeman T 403-492-0818
INTD 365 Natural Resource Economics	Economics of natural resources related to agriculture and forestry; conservation, population, resource scarcity, property development and evaluation, environmental protection, public resource policy.	· .
ECON 466 Economics of Non-Renewable Natural Resources	The economic theory of non-renewable natural resources, resource allocation and resource policies with a focus on petroleum and natural gas supply and demand.	Dr D. Young T 403-492-7626

University of Alberta: Undergraduate Resource/Environmental Economics Courses

Course offered	Description	Instructor
ECON 565 Resource Economics I: The Economics of Conservation and Resource Scarcity	Economic analysis of quantitative aspects of natural resource use and development; the economics of conservation; the role of resources in growth; resource scarcity; quantitative tools (benefit-cost and input- output analysis) in resources management; selected Canadian resource issues.	Dr. D. Young Associate Professor., Economics-Rural Economy T 403-492-7626
INT D 565 Natural Resource and Environmental Economics	Economic analysis of renewable resource and environmental issues. Renewable resource theory with applications to the fishery, forestry, soils and wildlife. Economic analysis of environmental protection and policy. Topics in applied benefit-cost analysis including the valuation of non-market goods and services.	Henry van Egteren T 403-492-7637
INT D 566 Resource Economics II: Economics of the Environment	Economic theory and policy relating to resource and environmental quality problems; welfare and public policy issues in resource decision-making; the relationships between economic growth and environmental preservation; externalities and public goods; economics of pollution; recreation economics; selected Canadian environmental issues.	

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# University of Alberta: Graduate Environmental/Resource Economic Courses

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### Athabasca University

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Department of Economics Dr. Mohammed Ansari, Associate Professor of Economics T. 403-675-6111 email mohammed@ca.athabascau.ca

# WWW site on the Internet

http://www.athabascau.ca

# Professors interested in working with IDRC Dr Mohammed Ansari

# Athabasca University: Undergraduate Environmental/Resource Economic Courses

Course offered	Description	Instructor
Political Economy of Resource Development in Canada	This course tries to strike a balance between facts, theory, and policy.	Mohammed Ansari, Ph.d. Associate Professor of Economics T 430-675-6111 email mohammed@ca.athabascau.ca

#### Banff Centre for Management

Gerald Lemmon, Director Resource & Environmental Leadership Programs Toll Free: 1 800 590 9799 Tel: 403 762 7583 Fax: 403 762 6422

#### Summary

The Banff Centre for Management has offered courses in Resource and Environmental leadership since 1972. These short, intensive, courses offer a balance of skill based and technical information to business and government at senior levels. These programs are designed to incorporate practical responses on environmental issues into the planning and operatio of all types of enterprises.

#### Cost

Daily accomodation and meals: \$129 Tuition: Fees range from \$995 for 3 day courses to \$1695 for 5 day courses.

Materials in Binder Correspondence

#### Current courses offerings:

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Course	Date
Advanced Environmental Conflict Resolution	October 1995
Introduction to Environmental Conflict Resolution	November 1995
Ecotourism	November 1995
Valuing Natural Resources	November 1995
Native Canadian Relations: Overview	December 1995
GIS for Native Lands	December 1995
GIS for Project Design	February 199
Purchasing GIS Products	February 1996
Introduction to Environmental Conflict Resolution	March 1996 (Barrie, Ontario)
Advanced Environmental Conflict Resolution	March 1996

## University of British Columbia

# Department of Agricultural Economics

R. Barichello, Head UBC 2329 West Mall Vancouver, BC V6T 1W5

Department of Economics Dr W. Craig Riddell, Head

Sustainable Development Research Institute Director: J. Robinson (Geography)

# WWW site on the Internet http://www.ubc.ca

nttp.//www.ubc.co

#### Summary

The University of British Columbia offers graduate degrees in Agricultural Economics (M.Sc., M.A., P.hd.). The Sustainable Develoment Research Institute aims to initiate and contribute to multidisciplinary research on the linkages between the environment, the economy and social equity.

Materials in Binder Information from WWW

#### Brock University

#### Department of Economics

Felice Martinello Assoc. Prof. and Chair Dept. of Economics Brock University St. Catherines, Ontario L2S 3A1 T(905)688-5550 x3325 F (905)688-9388 email fmarine@adam.econ.brocku.ca

## WWW site on the Internet

http://spartan.brocku.ca

#### Summary

Brock University offers a four year, honours, undergraduate program in Environmental Economics.

#### Materials in Binder

Brochure on Environmental Economics at Brock.

Flyer on Environmental Economics at Brock, listing titles of all courses in the program.

Course Outlines. Relevant Calendar Entries

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Course	Description	Instructor
ECON 3P27 Natural Resource Economics	Economic analysis of the extraction of non- renewable resources (such as oil or minerals) and the harvest of renewable resources (such as water, fish or forests). Development of socially optimal extraction or harvesting rules. Examination of recent government resource policy	Stephen Renzetti T 905-688-5550 x3121
ECON 3P28 Environmental Economics	Economic analysis of environmental Degradation. The theory of externalities applied to environmental policy design for air, water, soil, and toxic pollutants. International and distributional impacts.	Diane Dupont T 905-688-5550 x3129
ECON 3P97 Cost Benefit Analysis	Analysis of welfare economics and its application to project evaluation. Emphasis on measurement of non-market activities such as benefits from environmental improvements and valuation of unemployed resources.	
ECON 4F28 Advanced Environmental Economics	Research methodologies and advanced topics for environmental analysis. Examination of data sources and the integration of physical and economic data models. Topics include international trade and the environment and ethically flexible policy evaluation.	

Brock University: Undergraduate Environmental/Resource Economic Courses

# University of Calgary

Environmental Research Centre Dr Tony Yarranton 1040 Earth Sciences Building 2500 University Drive NW Calgary, AB T2N 1N4 T 403-220 5271 F 403 282 1287

WWW site on the Internet http://www.ucalgary.ca

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Materials in Binder Correspondence

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#### Carleton University

Department of Economics Donald McFetridge, Chair Department of Economics Carleton University Ottawa, ON K1S 5B6 T 613-788-2600 x3762

WWW site on the Internet

http://www.carleton.ca

#### Summary

The Department of Economics, Carleton, offers two undergraduate courses related to Resource or Environmental Economics.

Materials in Binder Course outlines

Carleton University: Undergraduate Environmental/Resource Economic Courses

Course	Description	Instructor
Economics 43.385*A Natural Resource Economics		Eric Davis T
Economics 43.386 Environmental Economics		D.A. Smith T 613-788-2600 x3762

#### Concordia University

Department of Economics Professor Frank G. Muller Department of Economics Concordia University 1455 de Maisonneuve Blvd. W. Montreal, Quebec H3G 1M8 T 514-848-3917 F 514-848-3494

## WWW site on the Internet

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http://artsci-ccwin.concordia.ca/Economics/econ.html

## Summary

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Concordia offers several undergraduate and graduate courses related to Resource or Environmental Economics.

## Materials in Binder

Pages off of the WWW detailing the department of Economics Course outlines

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Course	Description	Instructor
Econ 391/2 Economics of the Environment	The subject of this course is environmental quality. It proceeds through an analysis of the relationships among the natural environment, economics, and institutions. The objective is to depict the problem of environmental quality as an economic problem whose solution demands major changes in economic, political, and legal institutions. Attention is also given to policies of collective environmental actions in which the effective management of common property resources is discussed. The course concludes with a discussion of some broader issues, such as the consistency of improved environmental quality with continued economic and population growth. TEXT: <u>Environmental Natural Resource Economics</u> , by T. Tietenberg Scott Foresman & Co.	F.Muller T 519-848- 3917
Econ 396/4 Natural Resource Economics	This course focuses on the problems of the finiteness of the natural resources base in Canada and in the world, and on an analysis of the demand for and supply of natural resource and energy. The course also discusses the economic aspects of a selected group of conservation measures (financial incentives, reallocation of property rights, regulation). TEXT: <u>The Economics of Natural Resource Use</u> by J.M. Hartwick and N.D. Oleusler - Harper & Row	
Econ 491/2 Advanced Environmental Economics	The course deals with the economics of the management and use of environmental resources. The course focuses primarily on two aspects of the environmental issues: 1) the economic rationale of government policies and 2) programmes for environmental protection such as taxation, pollution, property rights, emission permits, public goods, conservation, sustainable development, evaluation of environmental damage, and environmental ethics.	F. Muller T 519-848- 3917

# Concordia University: Undergraduate Resource/Environmental Economic Courses

# Concordia University: Graduate Resource/Environmental Economic Courses

Course Offered	Description	Instructor
ECON 659/4 Economics of the Environment	This course deals with economic concepts that are relevant to the management and use of environmental resources and focuses on the two aspects: (i) the economic rationale of governmental policies and programmes for environmental protection; and (ii) the economic valuation of non-market environmental goods and services.	Prof. F.G. Muller

## Dalhousie University

## Department of Economics Peter Burton, Department Head

Department of Economics Halifax, Nova Scotia B3H 3J5 T 902-494-2026 F 902-494-6917

WWW site on the Internet http://www.dal.ca

#### Summary

Dalhousie University has several undergraduate and graduate level courses in resource/environmental economics. Dalhousie also has a Master's degree in Environmental Studies which has some courses relevant to Economics.

Materials in Binder Course outlines

Course	Description	Instructor
ECON 3332b Resource Economics	This course is designed to serve as an introduction to natural resource and environmental economics for students who have little calculus and only a basic background in economics. Topics include the mine, forestry, the fishery, and externalities (e.g., pollution). Typical problems (e.g., common property problems in the fishery) and basic regulatory mechanisms are discussed.	Peter Burton
SCI 3050R Waste Management and the Environment	This course will explore the subject of waste management form a number of perspective: resource economics; public health issues; risk management; the regulatory context; waste management in North America, Europe and developing countries; trade in waste; the 3Rs; waste management technology; and planning for management. Focus on solid waste but also explore hazardous waste management.	Peter Burton T 494-2026

# Dalhousie University: Undergraduate Resource/Environmental Economics Courses

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Course	Description	Instructor
Econ 5516a Natural Resource Economics	Topics: analysis of interpersonal and intertemporal decision- making criteria including equity considerations, the basic theory of nonrenewable resource exploitation 9including Hotelling's theory of the mine), the basic forestry model (i.e., the Faustmann model) including extensions which allow for benefits that arise from standing forests, and the gordon- Schaefer model of the fishery and optimal dynamic harvesting. Empirical applications of these models (from the current economic literature) will also be presented.	Peter Burton T 494-2026
Econ 5517b Environmental Economics	This course in intended as an introduction the theory and application of environmental economics for students with a background in economics	Peter Burton T 949-2026

## University of Guelph

Faculty of Environmental Sciences Michael Moss, Associate Dean University of Guelph Guelph, Ontario N1G 2W1 T 519-824-4120 F 519-763-4686

#### Department of Economics

Evaline Adomait T 519-824-4120 x. 6343 F 519-763-8497 email economic@vm.uoguelph.ca

## WWW site on the Internet

http://www.uoguelph.ca

#### Summary

Guelph has several options in the area of environmental and resource economics. They include: a Phd program in Resource and Environmental Economics; a minor in Natural Resource Management through the International Agriculture Program; a minor in resource economics through the International Agriculture Program; several undergraduate courses in environmental and resource economics through the agricultural economics department; several undergraduate courses through the economics department; several undergraduate courses through the economics department, minors in Environmental Economics and Policy, Environmetrics, or Natural Resource Management through the Bachelor of Environmental Sciences program; a correspondence course entitled "Economic growth and environmental quality".

#### Professors interested in working with IDRC

Dr John Livernois, director of Guelph's Phd program in Environmental and Resource economics is willing to work with IDRC on a program in Environmental/Resource economics.

#### Materials in Binder

Course outlines, calendar descriptions, information from the WWW.

Section 3 Resource/Environmental Economic Courses at Canadian Institutions

Course	Description	Instructor
02-101 Introduction to Agricultural and Resource Economics (Department of Agricultural Economics)	This course provides an opportunity to apply the fundamental concepts of economics to economic relationships in the Canadian food system. Students will explore the economic interpretation of prices, gains from trade, competition, and the functions of markets in human society. The economic effects of public policies on the food sector will be studied.	
02-270 Survey of Natural Resource Economics	Natural resources in broad economic perspective. A discussion of factors that shape decisions concerning their use (or misuse) with illustrations of topical interest.	
36-493 Environmental Economics (Department of Economics)	An advanced treatment of the interrelationship between economic activities and the state of the natural environment form the economists point of view.	Patrick Martin
36-21068 Economic Growth and Environmental Quality (Distance Education)	The objective of this course is to help you learn how to apply basic economic principles to environmental problems. Economic principles, as you will learn, are indispensable tools for helping to arrive at solutions to environmental problems such as global warming, acid rain, and water pollution.	
36-210 Economic Growth and Environmental Quality	An examination of the implications of economic growth on the quality of the environment, employing the basic principles of economic analysis.	
36-256 Introduction to the Economics of Developing Countries	This course will consider some of the most important economic problems facing the so-called Third World countries (or LDCs). In the beginning, the course will develop some of the techniques that are specifically designed to describe the economic state of a country and discuss what	Michael Hoy
36-493 Environmental Economics	This course will operate at three levels: the theory of Environmental Economics; Measuring Benefits of Environmental Improvements; and Case studies.	Prof. John Livernois

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Guelph University: Undergraduate Resource/Environmental Economics Courses

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# Guelph University: Graduate Resource/Environmental Economics Courses

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Course	Description	Instructor
02-661 Economics of Renewable Resources		
02670 Seminar in Resource Economics		
36-680 Environmental Economics		
<b>36-681</b> Economics of Non-Renewable Resources		

## Lakehead University

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Faculty of Forestry G. Hazenberg Associate Professor Faculty of Forestry Lakehead University 955 Oliver Rd. Thunderbay, On P7B 5E1 T 807-343-8507 x8519 F 807-343-8116 email: Tom.Hazenberg@lakeheadu.ca

## WWW site on the Internet

http://www.lakeheadu.ca

#### Summary

Lakehead University offers one undergraduate course in Forest resource Economics.

# Professors interested in working with IDRC Dr. Hazenberg

Materials in Binder Letter from Dr. Hazenberg

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#### Laval University

# Départment d'économique Christine Soucy

Adjuointe à la direction Départment d'économique Faculté des Sciences sociales, Pavillion J.-A.-DeSéve Québec, Canada G1K 7P4 T 418-656-5122 F 418-656-2707

WWW site on the Internet http://rsvs.ulaval.ca

Materials in Binder Letter from M. Soucy

Université Laval: Cours *Pré-gradués* sur l'économie des ressources naturelles et de l'environnement.

Course	Description	Instructor
ECN-16092 Économie des ressources naturelles		
ECN 15375 Économie de la réglementation		
ECN 19103 Économie de l'environnement		

Université Laval: Cours *Gradués* sur l'économie des ressources naturelles et de l'environnement

Course	Description	Instructor
ECN-62519 Économie des ressources naturelles		
ECN-62649 Séminaire d'économie des ressources naturelles et de l'énergie		

## University of Manitoba

Departments, Faculties and Institutes: Faculty of Agriculture and Food Sciences James A. MacMillan, Department Head Faculty of Agriculture and Food Sciences University of Manitoba Winnipeg, Manitoba R3T 2N2 T 204-474-9384 F 204-261-7251

#### **Department of Economics**

Dr. John Gray Department of Economics, University of Manitoba R3T 2N2 T 204-474-9207 F 204-261-0090

WWW site on the Internet http://www.umanitoba.ca

#### Summary

The Faculty of Agriculture and Food Sciences at the University of Manitoba offers 2 undergraduate and 1 graduate course in resource/environmental economics. The Department of Economics has several graduate and undergraduate courses in Environmental Economics and several professors who would be willing to work with IDRC on related course development.

#### Professors interested in working with IDRC

The faculty have previous experience in designing programs for Third World trainees for IDRC, and several of the Faculty would be willing to work on a course in Environmental/Resource economics.

### Materials in Binder

Course outlines, correspondence

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University of Manitoba: Undergraduate Environmental/Resource Economic Courses

Course	Description	Instructor
Econ 18.239 Introduction to Environmental Economics (Department of Economics, Faculty of Agriculture and Food Science)	Concepts, theoretical relationships and issues in the management of environmental resources and environmental problems. Analytical techniques and methods for the management of environmental resources and problems. Economic aspects of the management of environmental quality with applications to the control of water pollution, air pollution, solid wastes and toxic substances. Economic incentives for environmental improvement, selected Canadian, transborder, US, international, and global issues.	John A. Gray T. 204-474- 6325 F 204-269- 1765
Econ 18-240 Introduction to Energy Economics (Department of Economics)		
61.421 Land Economics (Sustainable Agriculture) (Faculty of Agriculture and Food Science)	Application of economic theory for the analysis of the rural real estate market, appraisal procedures, taxation, property rights and land use planning.	R.M. Josephson & G.V. Johnson
Econ 18.447 Natural Resource Economics (Department of Economics)	The application of economic theory to the study of natural resource development and resource problems. Emphasis on the implications for resource management and policy.	John A. Gray T. 204-474- 6325 F 204-269- 1765

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Course	Description	Instructor
61.743 Advanced theory of Resource Economics (Department of Economics)	A graduate course in the theory of natural resource and environmental economics with applications to resource and environmental management issues.	Gary V. Johnson T 204-474-9795
Econ 18.744 Renewable Resource Economics (Department of Economics)	A seminar in applied economic analysis of the economics and management of renewable natural resources concentrating on specific topics and policy issues in water resources, agriculture, environmental quality, forestry, fisheries, wildlife, outdoor recreation and other renewable resources, sustainable development issues of resource management and the environmental, with applications and examples from Canada, developed and developing countries.	John A. Gray T. 204-474-6325 F 204-269-1765
Econ 18.745 Non- Renewable Resource Economics (Department of Economics)		-

# University of Manitoba: Graduate Environmental/Resource Economic Courses

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#### Memorial University of Newfoundland

Department of Economics Eugene Tsoa Head, Department of Economics Memorial University of Newfoundland St. John's, Newfoundland Canada A1C 5S7 T 709-737-8248 F 709-737-4569

## **Centre for Earth Resources**

## Gary Quinlan

Professor and Head of Earth Sciences Acting Director, Centre for Earth Resources email: gquinlan@kean.ucs.mun.ca

WWW site on the Internet http://www.ucs.mun.ca

#### Summary

The Department of Economics, Memorial University, offers 4 undergraduate courses related to Environmental and Resource Economics. In addition, the Centre for Earth Resource Research offers a two week course on resource economics aimed at mineral and petroleum industry personnel and government officials whose job it is to regulate the mineral and petroleum industries.

#### Materials in Binder

Photocopy of course listings from University Calendar. Correspondence with Prof. Tsoa and Prof. Gary Quinlan.

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Memorial University of Newfoundland: Undergraduate Environmental/Resource
Economics courses

Course	Description	Instructor
Economics 3080 Natural Resource and Environment al Economics	Application of economic analysis to renewable and nonrenewable natural resource industries such as the fishery, forestry, and mining. Emphasis is given to the criteria for optimal resource use under various market structures and their implications for public policy. Issues of environmental resource management and pollution control will also be covered.	
Economics 4070 Forestry Economics	An examination of the theoretical and empirical literature on the economics of forest use.	
Economics 4080 Advanced Fisheries Economics	An examination of advanced theoretical and empirical studies of economic problems associated with prosecuting fisheries resources	
Economics 4090 Mineral and Petroleum Economics	An Introduction to some of the theoretical economic problems and practical solutions involved in the exploration, development and production phases of mineral and petroleum mining in Newfoundland and Labrador.	

#### McGill University

Faculty of Agricultural and Environmental Sciences John Henning, Graduate Affairs Committee Chair Department of Agricultural Economics McGill University, MacDonald Campus Ste-Anne-de-Bellevue Québec, Canada H9X 3V9 T. 514-398-7820 F. 514-398-8130 email: INF3@MUSICB.MCGILL.CA

WWW site on the Internet http://www.mcgill.ca

#### Summary

The department of Agricultural Economics at McGill offers a BSc. in Agricultural Economics, within which there are three options: Systems, Resource Economics, and Agri-Business. They also offer a minor in Ecological Agriculture which may be combined with major program in Agricultural Economics. At the graduate level, the Department offers a course in Environmental and Resource Economics. Several of the staff in the department work in areas related to resource economics (Baker, Goldsmith, Henning and Thomassin.) They would be willing to work with IDRC to provide training in this area. The Department of Economics offers two courses in Environmental and Ecological Economics.

## Materials in Binder

Correspondence from John Hennig

Information on the Department of Agricultural Economics, MacDonald Campus and graduate program in Agricultural Economics, Current Research Interests in Agricultural Economics, photocopies of relevant material from University calender, Course outlines for 334-333A Resource Economics, 334-340B Agriculture, Food and Resource Policy, and 334-663A Environmental and Natural Resource Economics.

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Course	Description	Instructor
334-333A Resource Economics (Undergraduate level course)	This course is designed to provide an introduction to natural resource economics. It will include theoretical foundations to the field, economic issues and techniques used for empirical analysis. A number of policy implications and applications will be analyzed.	Dr. O. Guindo T. 514-398-7821 Department of Agricultural Economics
3443-430BTo improve our understanding of the purpose, nature, degree and consequences of government intervention in the agriculture and food sectors and the methods of analysis appropriate to each of these aspects.(Undergraduate level course)aspects.		Prof. G. Coffin Department of Agricultural Economics
154-225A/B Economics of the Environment (Undergraduate level course)	A study of the application of economic theory to questions of environmental policy. Particular attention will be given to the measurement and regulation of pollution, congestion and waste and other environmental aspects of specific economies	Prof Vica Department of Economics
154-326A Ecological Economics	Macroeconomic and structural aspects of the ecological crisis. A seminar course in which subjects discusses include the conflict between economic growth and the laws of thermodynamics; the search for alternative economic indicators; the fossil fuels crisis; and "green" fiscal policy.	Professor Naylor Department of Economics- Main Campus.
334-633A Environmental and Natural Resource Economics (Graduate Level)	This course is designed to introduce graduate students in agricultural economics to the theory and problems of environmental and natural resource economics and the analytical procedures used to assess natural resource issues. Specifically: to review the economic principles and concepts that form the basis of environmental and natural resource economics; to develop the analytical skills required to analyze environmental and natural resource management problems (this will include both nonmarket and market models of resource valuation and utilization); to assess and evaluate the workability of various solutions and policies.	Prof. Paul J. Thomassin Department of Agricultural Economics MacDonald Campus

McGill University: Courses in Resource/Environmental Economic	McGill Univers	ity: Courses	in	<b>Resource/Environmental</b>	<b>Economics</b>
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## University of New Brunswick

Institutes and Departments

Department of Economics, Fredericton N.B. Campus Vaughan Dickson University of New Brunswick P.O. Box 4400 Fredericton, N.B. E3B 5A3 T (506) 453-4828 F (506) 453-4514

Department of Economics, St. John Campus Fidelis Ezeala-Harrison, Ph.D. Associate Professor of Economics University of New Brunswick P.O. Box 5050 St. John, N.B. E2L 4L5

WWW site on the Internet http://www/unb.ca/UNB.html

Materials in Binder

Correspondence Photocopy of relevant courses from Calendar Course Outline for Econ. 3755 Resource and Environmental Economics

Resource/Environmental Economics Courses			
Course	Description	Instructor	
ECON. 3755 Environmental Economics	Examines the interaction of ecological and economic systems. Considers population growth and food supply, non-renewable resources, and population.	To be hired	
ECON 3791 Natural Resource Economics I	Primarily applied economics in natural resource management. Involves the application of economic theory to resource- related problems. Includes resource scarcity and conservation, intertemporal allocation of natural resources, common property resource management and environmental quality.	B. Cook	
ECON 5705 Natural Resource Economics II B.Cook	Economic theory applied to management of fishery, forestry and mineral sectors of the economy.	B. Cook	
ECON 5775 Fisheries Economics R.McGraw	Considers the economic theory of the fisheries problem, optimal management of the resource and economic modelling of fisheries.	R. McGaw	

# University of New Brunswick, Fredericton Campus: *Undergraduate* Resource/Environmental Economics Courses

# University of New Brunswick, St. John, N.B.: *Undergraduate* Environmental/Resource Economics Courses

Course	Description	Instructor
ECON 3755 Environmental and Resources Economics	Resource and Environmental Economics is the study of ways to promote efficiency in society's use of natural resources and the physical environmental impacts of it. This course applies economic theory and analysis toward better understanding of resource and environmental issues, with a view to setting effective policy approaches for promoting resource and environmental harmony.	Fidelis Ezeala-Harrison, Ph.D. Associate Professor of Economics T. 506-648-5590 F. 506-648-5611

## University of Ottawa

Faculty of Social Sciences, Economics

Chair: Dr André Plourde 550 Cumberland St. P.O. 450, Stn. A Ottawa, ON K1N 6N5 T 613-562-5753 F 613-562-5999 email: aplourde@praxis.cc.uottawa.ca

WWW site on the Internet

http://www.uottawa.ca

## Summary

The department of Economics at the University of Ottawa offers both undergraduate and graduate courses in Resource/Environmental Economics. The department will be participating in the University's Environmental Studies program (through the Faculty of Arts) and the Environmental Sciences program (through the Faculty of Sciences). The Department has also applied to add a field of economics of the environment to its PhD program (offered jointly with the department of Economics at Carleton University).

## Professors interested in working with IDRC

Philippe Crabbé, Rose Anne Devlin, Quentin Grafton, and André Plourde.

## Materials in Binder

Correspondence photocopies of relevant information from calender. Course outlines for Eco 2118, Eco 4136, Eco 4536.

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Course	Description	Instructor
ECO 2118 Introduction to the Economics of the Environment. (same as ECO 2518- French language of instruction)	Principles of ecology. Energy economics. The rate of utilization of natural resources and the environment. Need for institutional solutions. Problems specific to each type of resource. Institutional aspects. Canadian policies relating to energy and natural resources.	P.J. Crabbé T 613-564- 7644
ECO 4136 Economics of the Environment (Same as ECO 4536- French language of Instruction	A survey of theory, policies and experience as in the disposal and utilization of Canada's natural endowment. Problems of open-access resources and of ownership and jurisdiction. Markets, values and externalities. Criteria of efficient allocation not only in terms of immediate personal and social cost-benefit, but also through times (user cost, depletion and conservation problems) and in relation to wider issues of the location of population and industry, economic growth, pollution, and the preservation of the environment.	R. Quinton Grafton T 613-564- 5820

# University of Ottawa: Undergraduate Resource/Environmental Economics Courses

# University of Ottawa: Graduate Resource/Environmental Economics Courses

Course Offered	Description	Instructor
ECO 6173 Environmental Aspects of Economic Development (same as ECO 6573- French language of instruction	Policy aspects of sustainable economic development and environmental quality in developing countries. Topics to include energy use, deforestation, drought and desertification, depletion of natural resources, debt, environment and poverty, sustainable industrial and agricultural development, conservation policies, pollution control and global environmental issues.	M. Genné T 613-564-5983
ECO 6143 Economics of Natural Resources (Same as ECO 6543- French language of instruction	Elements of dynamic optimization. Microeconomic theory of exhaustible natural resources, both renewable and non-renewable; exploration, development and production. Uncertainty: sources, types, the value of information, informational externalities, search. Optimal juristiction over regulation and taxation of natural resources. Canadian case studies. macroeconomic theory: intergenerational equity, technological substitution and impact upon growth.	

## University of Prince Edward Island

#### Department of Economics

Dr. James Sentance Chairman, Department of Economics University of Prince Edward Island 550 University Avenue Charlottetown, PEI C1A 4P3 T (902) 566-0498 F (902) 566-0420 email: sentance@upei.ca

# WWW site on the Internet http://www.upei.ca

#### Summary

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in Fare UPEI offers two courses every second year in Resource Economics.

# Professors interesed in working with IDRC Dr Mian Ali (mian@upei.ca)

Materials in Binder Correspondence

<b>University of Prince</b>	Edward	Island:	Undergraduate	Resource/	Environmental	
<b>Economics Courses</b>						

Course	Description	Instructor
Econ 211 Resource Economics		Dr. Mian Ali (Mali@upei.ca)
Econ 352 Applied Resource Economics		Dr. Mian Ali

## Queens University

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Department of Economics Ellen Mckay, Departmental Assistant mckayE@qucdn.queensu.ca Fax (613) 545-6668

WWW site on the Internet http://info.queensu.ca

#### Summary

Queens University offers two graduate courses in Resource/Environmental Economics.

## Materials in Binder

Pages off the Economics www page on the Internet. Correspondence to Christian DaSilva (1993) Course Outlines from 1993

Course	Description	Instructor
890 Natural Resource Economics	The objective of this course will be to examine the economic theory of the exploitation and conservation of natural resources. Included are analyses of exhaustible resources (oil pools), and renewable resources (fisheries and forestry).	J. Hartwick hartwick@q ed.queensu. ca
891 Environmental Economics	The course provides a rigorous theoretical treatment of environmental policy design. Although the emphasis will be on microeconomic modelling approaches, the course will also draw upon case studies of environmental policies. Topics covered include: the theory of externalities, Pigouvian taxes, performance and design standards, marketable permit systems, hybrid systems, policy instrument choice under uncertainty, design of regulatory mechanisms under asymmetric information, political economy of environmental regulation, monitoring and incomplete enforcement, and environmental negotiation.	

## Queen's University: Graduate Resource/Environmental Economic Courses

## Ryerson Polytechnic University

## Department of Economics

Dr. Dagmar Rajagopal Chair, Dept of Economics Ryerson Polytechnic University 350 Victoria Street Toronto, ON M5B 2K3 email: drajagop@acs.ryerson.ca

WWW site on the Internet http://acs.ryerson.ca

#### Summary

Ryerson offers two courses in Environmental Economics.

## Materials in Binder

Correspondence with Prof. Rajagopal Course Outlines for ECN 510, ECN 104, ECN 511, ECN 110

## Ryerson Polytechnic University: *Undergraduate* Resource/Environmental Economics Courses

Course	Description	Instructor
ECN 510 Environment al Economics	This course applies economic analysis to the problems of pollution and the use of natural resources. It examines market processes when externalities in production and consumption are present. The relationship between the environment and the economic system, sources of pollution, and methods of pollution abatement are studied. Problems in measuring environmental costs and benefits are evaluated. Topics include: resource classification, the theory of optimal usage, resource conservation. The final topic of the course deals with the problems of growth in a finite environment and sustainable development.	
ECN 511 Economy and the Environment	This course looks at the relationship between the economy and the environment. It discusses how economics can help identify key issues in environmental problems. Economic concepts are used to shed light on solutions to the problem of pollution, the management of common property resources, and the possibility of "sustainable development". Issues to be discussed in the course include global warming and the greenhouse effect, the devastation of tropical rainforests, agricultural policies, and the population question	Dr. Cecilia Rocha T 416-979- 5000 x6185 email: crocha@acs .ryerson.ca

## Simon Fraser University

## **Department of Economics**

Gisela Seifert, Undergraduate Advisor T. (604) 291-4571 Lynn Kumpula, Graduate Advisor T. (604) 291-3562 Department of Economics Simon Fraser University Fax. (604) 291-5944

## WWW site on the Internet

http://www.sfu.ca

#### Summary

The Department of Economics and the School of Resource and Environmental Management offer a variety of graduate and undergraduate courses in Resource and Environmental Economics.

#### Materials in Binder

Correspondence with Gisela Seifert, Photocopies of relevant Calendar Material

## Simon Fraser University: *Undergraduate* Resource/Environmental Economics Courses

Course	Description	Instructor
Econ 260-3 Environmental Economics	Economic analysis of environmental problems (water and air pollution, etc). Evaluation of market failures due to externalities and public goods. market and non-market regulation of environmental problems.	
Econ 261-3 Resources and the Economy of British Columbia	Review of the development of the British Columbia economy with particular emphasis on the role played by natural resources. Examination of the economics of major BC natural resources and the design of policies for their exploitation.	
Econ 362-4 Economics of Natural Resources	Application of economic analysis to natural resource problems and efficient management practice; public policy considerations in respect to development and conservation; benefit-cost analysis.	
Econ 460-3 Seminar in Environmental Economics	focus will vary from semester to semester.	

Course	Description	Instruct or
Econ 861-4 Natural Resource Economics	Basic issues of intertemporal valuations. The economic theory of natural resource management for non-renewable resources, fisheries and forest. The effects of market structure and taxation on intertemporal supply patterns will be considered	
Econ 862-4 Forestry Economics	Economic analysis of forest exploitation. Alienation policies, structure of the forest industry, optimum harvesting criteria, taxation and public policy in the light of achieving efficiency in forest management.	
Econ 863-4 Fisheries Economics	Analysis of economic fisheries management techniques derived from the study of a variety of actual fisheries management projects.	
Econ 864-4 Studies in Economic Fisheries Management	Analysis of economic fisheries management techniques derived from the study of a variety of actual fisheries management projects	
MRM 621-5 Economics of Natural Resources	Application of economic theory to natural resources management problems with a view to assessing existing and alternative policies. Includes theoretical analysis of concepts such as resource pricing, market failure, taxation, etc., and management strategies for specific resources such as forestry, fisheries and environment.	

Simon Fraser University: Graduate Resource/Environmental Economics Courses

## Trent University

Environmental and Resource Studies Program

WWW site on the Internet

http://www.trentu.ca

## Summary

The Environmental and Resource Studies Program at Trent University is an interdisciplinary program offered by Environmental and Resource Studies (ERS) in cooperation with twenty-three other University departments and programs. Students may take a single or joint majors general BS in Environmental Studies (ER) or B.Sc in Environmental Sciences (ES) degree. This program offers specializations in seven themes, one of which offers a BA in Community Economic and Resource Development.

## Faculty

Brenda Leith is interested in Economics consequenses of different management strategies in marine fisheries and in forestry.

## Materials in Binder

Information from the WWW

Course	Description	Instructor
Environmental Economics	This course examines the links between economic activity and environmental degredation. The course examines the relationship between private and social incentives for economic activity. Topics include the valuation of environmental amenities, incentive compatible regulation, the economic and environmental effects of market failure and the rationale for govenment intervention.	B. Leith

## Trent University: Undergraduate courses in Resource/Environmental Economics

## University of Toronto

## Institute for Environmental Studies

Professor Rodney White, Director University of Toronto Toronto, ON M5S 1A4 T 416-978-6526 F 416-978-3884 email: rodney.white@utoronto.ca

#### **Department of Economics**

www site: http://epas.utoronto.ca:5680/eco/eco.html information on: the faculty (sample list of recent publications) Visual tour around the department Fields of Studies Graduate and Undergraduate course offerings

#### Division of the Environment

http://www.utoronto.ca:80/env/teaching/doe

#### WWW site on the Internet

http://www.utoronto.ca

#### Summary

At the University of Toronto, the Institute for Environmental Studies, while not currently offering training courses on a regular basis, have been involved in such activities in the past and would be willing and able to offer courses here or abroad if the demand were there for such services. They are currently involved in a CIDAfunded programme, "Training for Environmental Management", in Vietnam. Information regarding this program is in the binder.

#### Materials in Binder

Activity Report on the Institute for Environmental Studies Calendar for Environmental/Toxicology Collaborative Graduate Programs at the University of Toronto (Environmental Studies, Environmental Engineering, Toxicology) University of Toronto: Undergraduate Environmental/Resource Economics Courses

Course	Description	Instructor
ECO 313H Environmental Economics and Policies		
ECO314H Energy and Resource Economics		
ECO 324Y Economic Development		
GGR 233Y Environmental Management for Sustainable Development		

# University of Toronto: Graduate Resource/Environmental Economic Courses

Course	Description	Instructor
Eco 2908H Environmental and Resource Economics	This course introduces the student to a set of core topics in environmental economics and Natural Resource economics. The course will cover environmental topics including benefit-cost analysis, cost estimation, contingent valuation, cost minimization dispersion modelling, marketable permits. Natural resource topics may include optimal extraction of non- renewable resources, renewable resources, common- property resources, the economics of recycling, and sustainable development.	

## University of Victoria

Department of Economics Malcolm Rutherford, Chair Department of Economics University of Victoria P.O. Box 3050 MS 8532 Victoria BC V8W 3P5 T 604-721-8532 F 604-721-6234

WWW site on the Internet http://www.uvic.ca

#### Summary

The Department of Economics, University of Victoria, offers a number of courses in Resource and Environmental Economics.

## Professors interested in working with IDRC

Dr. G.R. Walters, who teaches Economics 312, 430A and 430B.

Materials in Binder

Correspondence

Photocopies of Relevant pages from U Vic Calendar Course Outlines for Econ 312, Econ 330, Econ 416, econ 430A, Econ 430B, Econ 516, Econ 531.

University of Victoria: <i>Undergraduate</i> Environmental/Resource Economics Courses
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Course	Description	Instructor
Econ 330/ ES 312 Environment al Economics	Economic principles as applied to environmental questions associated with B.C. resource exploitation. The problem of spillovers to economic processes. Externalities and their management through economic institutions. Economic aspects of the use and conservation of the environmental, particularly regarding energy, forestry fisheries, mining, air and water. Problem of sustainable production, conservation, and possible limits to economic growth arising from scarcity of environmental resources.	Peter Kennedy T 604-721- 8530
Econ 416 Cost Benefit Analysis: Principles and Application	Principles of cost benefit analysis including consideration of welfare economics, the treatment of intangibles, non-efficiency considerations, time discounting, evaluation criteria, uncertainty and risk; selected applications in such areas as human resource economics, natural resource and recreation economics, economic development and urban planning.	Warren Bell T 604-952- 0244 email wbell@galaxy. gov.bc.ca
Econ 430A Natural Resource Economics	An examination of the economic principles governing the use of natural resources, social and private cost and the regulation of natural resource use. The economics of various resource sectors, including fisheries, forests, recreation and mining.	Dr. G. R. Walter T 604-721- 8538
Econ 430B Topics in Natural Resource Economics	Seminar on selected issues in natural resource economics; rents and their appropriation, taxation, user's cost, ecology and economics, depletion of energy and other reserves, sustainable economic development and resource exploitation, and applications of cost benefit analysis are indicative topics.	Dr. G.R. Walter T 604-721- 8538
Econ 516 Cost Benefit Analysis	Theoretical issues in project and program analysis. Selected applications in such areas as human resource economics, natural resource and recreation economics, economic development, subnational planning.	Peter Kennedy T. 604-721- 8530
Econ 513 Environment al Economics	Seminar in selected issues in environmental economics. Topics to be covered may include problems of externalities, liability rules, various models of the interaction between economic and environmental processes, measurement of consumers' surplus in the case of environmental goods and the debate concerning the limits to growth.	Peter Kennedy T. 604-721- 8530

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## University of Waterloo

Faculty of Environmental Studies Dr. Jeanne Kay Dean, Faculty of Environmental Studies University of Waterloo Waterloo, ON N2L 3G1

WWW site on the Internet http://www.uwaterloo.ca

#### Summary

The University of Waterloo offers a Masters of Applied Environmental Studies (MAES) in Local Economic Development within the department of Environmental Studies. The Department of Economics offers an Undergraduate Environmental Economics options.

#### Materials in Binder

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Correspondence Course Outline for Envs 220 Brochure outlining the Masters of Applied Environmental Studies (MAES) in Local Economic Development.

Course	Description	Instructor
Envs 220 Environmental Economics	Evaluation of various economic approaches to the environment. The links between economics, systems and the natural environment will be explored and future directions examined.	Dr. M Delfgaauw email mcdelfga@watserv1.u waterloo.ca
Econ 174A-001 Natural Resource and Environmental Economics		D. Burgess T 519-661-3507
Econ 355 Economics of Energy and Natural Resources	An analysis of the economics of conservation, especially the adequacy of the market mechanism as an allocator of resource use over time. Issues concerning the economic behaviour of Canada's fishery, forest, fuel and nonfuel mineral industries will be considered.	
Econ 357 Environmental Economics	Application of economic theory to problems of the environment, in particular, air, water, and land pollution. Emphasis is on the theory of the management of common property resources	
ENVS 320 Environmental Economics: An Historical Perspective	An Introduction to the history of economic thought as it relates to the environment. Approaches taken by economists in different eras will be assessed as to their applicability in the development of environmental policies now and then.	

University of Waterloo: Undergraduate Environmental/Resource Economics Courses

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## University of Western Ontario

## **Department of Economics**

Melissa Broadfoot, Undergraduate Coordinator Department of Economics, University of Western Ontario London, Ontario Canada N6A 5C2 T 519-661-3500 F 519-661-3666

WWW site on the Internet http://www.uwo.ca

Materials in Binder Course Outlines for Econ 174-001, Econ 288F-001 Correspondence

# University of Western Ontario: *Undergraduate* Environmental/Resource Economics Courses

Course	Description	Instructor
Econ 174-001 Natural Resource and Environmental Economics	The purpose of this course is to explain the economist's approach to optimal management of renewable and nonrenewable natural resources, to examine the tension between economic growth and environmental preservation, and to develop efficient policies for achieving sustainable development	D. Burgess T 519-679- 2111 x5510
Econ 288F-001	The main objective of this course is to discuss the microeconomic aspects of some current policy issues in Canada.	Kul Bhatia T 519-661- 3530

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## Wilfred Laurier University

School of Business and Economics Dr. Frank Millerd School of Business and Economics Wilfred Laurier Waterloo, Ontario N2L 3C5 T 519-884-1970 F 519-884-0201

#### WWW site on the Internet

http://www.lamf.uwindor.ca

## Summary

WLU offers two undergraduate courses related to Resource or Environmental Economics.

## Professors Interested in working with IDRC

Professor Frank Millerd (School of Business and Economics) Professor Randy Wigle (School of Business and Economics) Professor Christian Dufournaud (Department of Geography)

## Materials in Binder

Course outlines

Course	Description	Instructor
Econ 238 Environmental Economics	Economic theory is applied to the problems of environmental disruption and pollution. The factors that inhibit environmental improvements are examined. Economic policies that can be used to prevent environmental decay are studied.	Anastasia Lintner T 519-824-4120 x 2579
Econ 218 Natural Resource Economics	Economic theory is applied to the problems of natural resource pricing, allocation and conservation. Topics include common property resources, resource production and exhaustion, resources and economic growth, and the economics of recreational resources. The formulation of natural resource policy is discussed.	

#### Wilfrid Laurier University: Undergraduate Resource/Environmental Economic Course

## University of Winnipeg

Department of Economics Dr. Robert W. Fenton, Department of Economics University of Winnipeg 515 Portage Ave Winnipeg, Manitoba R3B 2E9

WWW site on the Internet http://www.uwinnipeg.ca

#### Summary

The University of Winnipeg offers two undergraduate courses related to Resource or Environmental Economics.

Materials in Binder Course outlines

Course	Description	Instructor
Econ 3317-5 Environmental Economics	Looks at the role of economics in decision-making about the environment. The concepts of space-ship earth, ecological scarcity, sustainable economics are investigated. the neo-classical model with market based decisions in compared to alternative paradigms.	R. Fenton

University of Winnipeg: Undergraduate Environmental/Resource Economics Courses

## York University

Faculty of Environmental Studies David V.J.Bell Dean, Faculty of Environmental Studies email dvjbell@vm2.yorku.ca

Mary Bernard, Manager, External Relations Development & Non-Degree Studies es052003@orion.yorku.ca

Faculty of Environmental Studies York University 355 Lumbers Building York University 4700 Keele Street North York, ON M3J 1P3

T (416) 736-5285 F (416) 736-5679

WWW site on the Internet http://www.yorku.ca

#### Summary\_

The faculty of Environmental Studies at York University offers an introductory course in Environmental Economics as well as graduate and undergraduate level courses in Ecological economics. Since 1978 they have been offering a series of non-degree seminars, workshops and short courses aimed at providing opportunities for professional upgrading and a forum for the exploration of environmental issues of interest to the general public. They are currently expanding their non-degree courses and would be eager to work with IDRC in developing appropriate training opportunities.

#### Professors interested in working with IDRC

Patricia Perkins, Rodger Schwass, Peter Penz, Jennifer Clapp

#### Materials in Binder

Correspondence, course outlines and syllabi for courses, information on Non-Degree studies, CV's of qualified Faculty.

Course	Description	Instructor
ENVS 5310 Environmental Economics I	This course takes the premise that economic analysis has an important role to play in dealing with environmental problems. The economy/environment interactions that are competitive or mutually exclusive in the limit, will form the starting point for discussion in the course. Relevant economic theory will be introduced to develop the concepts and tools necessary to systematically analyze environmental problems.	Femida Handy T 416-736- 5083 x20581
ES4510 Environmental Economics II	This course provides an introduction to the emerging new field of ecological economics. Areas of focus include the appropriate scale of the economy in relation to the environment, the role of discount rates in mediating inter-generational and interspecies equity, environmental valuation, full-cost accounting, environmental risk assessment, and the application of thermodynamic and ecological principles in economic analysis.	Ellie Perkins email: esperk@orion.y orku.ca T 416-736- 2100 F 416-736- 5679

## York University: Undergraduate Environmental/Resource Economics Courses

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# York University: Graduate Environmental/Resource Economics Courses

Course	Description	Instructor
ENVS 5164 Introduction to Environmental Economics	This course provides a critical but comprehensive introduction to basic economic tools and methods as they are applied to environmental issuesincluding (among others) pollution control, resource depletion, the global commons, intergenerational equity, and policy decision-making.	Ellie Perkins email: esperk@orion.yor ku.ca T 416-736-2100 F 416-736-5679
ENVS 6269 Ecological Economics	Exploration in the emerging field of ecological economics, including discussions of the optimal scale of the economy in relations to the environment, environmental valuation, measurement, risk, and discounting; intergenerational and interspecies equity; entropy/thermodynamics; and community-based economics.	Ellie Perkins email: esperk@orion.yor ku.ca T 416-736-2100 F 416-736-5679

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