



School of Arts & Science
ENVIRONMENTAL TECHNOLOGY DEPARTMENT
ENVR 222-001
Urban and Regional Environments
2009W

COURSE OUTLINE

The Approved Course Description is available on the web @ _____

Ω Please note: this outline will be electronically stored for five (5) years only.
It is strongly recommended students keep this outline for your records.

1. Instructor Information

(a)	Instructor:	Dr. Tim Elkin		
(b)	Office Hours:	9:30 – 10:20 AM Tuesday and Thursday 12:30 – 1:20 PM Monday, Tuesday and Thursday		
(c)	Location:	E-238		
(d)	Phone:	250-370-3115	Alternative Phone:	
(e)	Email:	elkint@camosun.bc.ca		
(f)	Website:	D2L		

2. Intended Learning Outcomes

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

Upon completion of this course the student will be able to:

- Demonstrate an understanding of key concepts in environmental management, including natural capitalism, preventive approach, demand management, and environmental policy.
- Demonstrate an ability to use specific techniques and tools in environmental management, including environmental reports and environmental indicators, cost benefit analysis, environmental auditing and environmental management systems, and GIS.

3. Required Materials

Excerpts from the following works:

- Hawkin, Paul, and Amory and Hunter Lovins, 2008, Natural Capitalism Rocky Mountain Institute <http://www.rmi.org/>
- Jackson, Tim, 1996, Material Concerns Routledge
- National RoundTable on the Environment and the Economy, 2003, Environmental Quality in Canadian Cities
- Roberts, J., 2004, Environmental Policy Routledge
- Roseland M., ed., 1997, Eco-City Dimensions. Gabriola Island, BC: New Society

4. Course Content and Schedule

WEEK 1

- Jan 5 Introduction to the course
Reading
Jay Jasper, *New Lessons from the Old World*, E MAGAZINE March/April 2005 (pp.27-33) <http://online.camosun.ca/>
- Jan 7 **Environmental management: Key principles**
Focus on the urban region
- Readings**
UBC, Sustainable urban landscapes, setting the context: water, air, people (pp. 8-15)
http://www.jtc.sala.ubc.ca/projects/DesignManual/Setting_context1.pdf
- Hawkin, Paul, Amory and Hunter Lovins, 2008, *The next industrial revolution in Natural Capitalism* RMI <http://www.rmi.org/>
- Wendell Berry, 2006. The Idea of a Local Economy, Orion Magazine
<http://www.orionmagazine.org/index.php/articles/article/299/>
- Project 1: Focus on local food

WEEK 2

- Jan 12 Project 1: Focus on local food
- Jan 14 **Science, policy and environmental management**
- Ecological modernization and preventive environmental management
 - Working with material cycles
 - Land use and urban form: Smart growth, low impact and carbon-neutral development, green building and LEED.
 - Case studies: Selkirk Waterfront; Dockside Green

Readings

Roberts, J. Environmental Policy Ch. 4: *Science and technology: policies and paradoxes*
UBC, Sustainable urban landscapes, setting the context: policy and planning, the emerging context for sustainability (pp. 16-23)
http://www.jtc.sala.ubc.ca/projects/DesignManual/Setting_context2.pdf

WEEK 3

- Jan 19 Project 2: Low Impact Development:
Managing the hydrologic cycle
- Jan 21 Land use and urban form: Selkirk Waterfront Development, Cecilia Creek

WEEK 4

- Jan 26 Project 2: Low Impact Development:
Managing the hydrologic cycle
- Jan 28 Low Impact Development - SITE VISIT

WEEK 5

- Feb 2 Project 2: Low Impact Development:
Managing the hydrologic cycle
- Feb 4 Green building and LEED
Guest speaker: Wendy Macdonald, Sustainability Consultant, Advicus

WEEK 6

- Feb 9 Project 2: Low Impact Development:
Managing the hydrologic cycle
- Feb 11 **Environmental management and the corporate sector**
- Corporate environmental policy and values-based business
 - Environmental Management Systems
 - Natural Step
- Readings**
Roberts, J. Environmental Policy Ch. 5, *Corporate environmental policy making*
- The Natural Step.* <http://online.camosun.ca/>
Making a Profit and a Difference. New York Times, October 2006
<http://online.camosun.ca/>

WEEK 7

- Feb 16 Project 3: EMS at Camosun College
- Feb 18 EMS: ISO 14000
Guest Speaker: Federal government

WEEK 8

- Feb 23 Project 3: EMS at Camosun College
- Feb 25 Environmental management and the market economy
- Readings
Jackson, Tim, 1996, Material Concerns, Ch. 5: *Easy Virtues*.
Routledge
- Hawkin, Paul, Amory and Hunter Lovins, 2008, *Capital Gains* in Natural Capitalism RMI <http://www.rmi.org/>

WEEK 9

- March 2 Project 4: Economics and Environmental Management: Case of
renewables and energy efficiency
- March 4 Transportation policy
Guest speaker: Todd Litman, Director, Victoria Transport Policy
Institute
- Readings**

Todd Litman, 2008, *Evaluating Transportation Land Use Impacts*
<http://www.vtpi.org/landuse.pdf>

WEEK 10

March 9 Project 5: Economics and Environmental Management: Case of transportation

March 11 Project 5: Economics and Environmental Management: Case of transportation

WEEK 11

March 16 Project 5: Economics and Environmental Management: Case of transportation

March 18 Dockside Green - SITE VISIT
Guest speaker: Lehna Malmkvist, Swell Environmental Consulting

WEEK 12

March 23 Project 5: Economics and Environmental Management

March 25 Environmental management and the public sector

- Environmental policy in government
- Importance of environmental information: State of Environment reports and environmental indicators
- Obstacles to action

Readings

Moore J., *Inertia and Resistance on the Path to Healthy Communities*, in Roseland M., ed., 1997, Eco-City Dimensions. Gabriola Island, BC: New Society

National Round Table on the Environment and the Economy, 2003, Environmental Quality in Canadian Cities Ch 2 *Quality of environment in Canadian cities* (pp. 11-14); Ch 3 *Energy use and urban environmental quality* (pp. 17-20) [http://www.nrtee-](http://www.nrtee-trnee.com/eng/publications/environmental-quality-canadian-cities/NRTEE-environmental-quality-canadian-cities.pdf)

[trnee.com/eng/publications/environmental-quality-canadian-cities/NRTEE-environmental-quality-canadian-cities.pdf](http://www.nrtee-trnee.com/eng/publications/environmental-quality-canadian-cities/NRTEE-environmental-quality-canadian-cities.pdf)

Margaret Wente, Globe and Mail, 2008 Toronto's tempest in a Tim's cup
<http://online.camosun.ca/>

Carly Weeks, Globe and Mail, 2008 *Corporate recycling: an eco fairy tale?*

<http://online.camosun.ca/>

In-class exercise

Monitoring the local region: State of environment in the Capital Region

Assignment for in-class discussion

Access the online version of State of Environment Indicators in BC's Capital Region <http://www.crd.bc.ca/rte/report2006/index.htm>.

The report's findings relate to several goals. Goal 2 asks the question: *Is sustainability being achieved through transportation and land use*

planning? Goal 4 focuses on *implementing the principles of environmental stewardship and sustainability in decision making.*

We will examine some key indicators used to examine the region's environment in relation to each of these goals:

Goal 2: Read Section 5, Land use. What criteria are used to measure effective land use? What indicators are used?

Examine the section, *Land removed from the ALR*, and measure the rate of loss of agricultural land. Is the rate increasing or decreasing? **Print the information and bring it to class.**

Question: What is the implication of losing agricultural land?

Goal 4 is tracked by examining resource use and waste reduction in the region (Section 6 in the report). Examine Section 6.4, Solid Wastes and Recycling, on pages 54-57. In particular examine the key indicators in Figures 29 and 30. **Print the information and bring it to class.**

Question: What do these indicators tell us about how we are managing solid waste in the Capital Region?

Access BC Environment's online report [Environmental Trends in BC 2007](http://www.env.gov.bc.ca/soe/et07/) <http://www.env.gov.bc.ca/soe/et07/>. Select the topic, *Population and Economic Activity*, and under 'Indicators at a Glance', select the indicator, *Municipal Solid Waste Disposed of and Recycled per person in BC*, http://www.env.gov.bc.ca/soe/et07/01_population_economic/solid_waste.html.

Print the information and bring it to class.

Question: What does this indicator tell us about how we are managing solid waste in BC?

Questions for discussion:

How is the CRD assessing land use in the region? What are the issues? What legislation governs the management of solid waste in the CRD? How is solid waste managed in the CRD? Can the current approach to waste management be criticized? Is there a no-waste or zero waste solution to the waste management problem? What questions about waste management do the 2 articles from the [Globe and Mail](#) raise for you?

WEEK 13
March 30

April 1

WEEK 14
April 6

April 8

5. Basis of Student Assessment (Weighting)

Projects:

Project 1: Local food miles	- 7.5%
Project 2: Low impact development	- 22.5%
Project 3: Environmental Management Systems	- 15%
Project 4: Economics - Energy	- 7.5%

Project 5 Economics - Transport	- 22.5%
Project 6: Environmental policy	- 15%
Participation	- 10%

6. Grading System

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Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at camosun.ca for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

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There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services and on the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED