## ENVR 222 URBAN AND REGIONAL ENVIRONMENTS

fall 2016

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## **LEARNING OUTCOMES:**

On completing the course students should be able to

- Demonstrate an understanding of key concepts in urban and regional planning and environmental management, including sustainability, design with nature and demand side management.
- Demonstrate an ability to use specific techniques and tools in urban and regional planning and environmental management, including environmental reports and environmental indicators, auditing, lifecycle analysis, full cost accounting and environmental management standards.

## **CONTENT:**

The course introduces the theory and practice of environmental management and sustainability planning at the urban and regional scale. The focus is sustainable communities. A key theme is the application of ecologic theory to urban systems. Another key theme is the collection, interpretation and synthesis of environmental data for decision-making.

#### **APPROACH:**

This is an applied, participatory course; the emphasis is on *application* of theory to practice in the field of environmental management (sustainability planning) in the context of urban and regional land-use planning. Guest speakers - consultants and government officials – are invited to discuss current practice. Several case studies and site visits within the local urban region are introduced to allow the student to critically examine local issues and policy. An emphasis is placed on project work, carried out either in small groups or individually.

## **COURSE READINGS:**

**Excerpts** from the following works:

Patrick Condon, 2010, <u>Seven Rules for Sustainable Communities</u>, Island Press; Mark Roseland, 2012, Toward Sustainable Communities 4<sup>th</sup> ed., New Society; Paul Edition, Earthscan; Jane Roberts, 2010, <u>Environmental Policy</u>, Routledge; Mark Roseland, ed., 1997, <u>Eco-City Dimensions</u>, New Society

#### **INTERNET ACCESS**

Course material is found online at the Camosun D2L site http://online.camosun.ca/

## **EVALUATION SUMMARY**

<u>Projects</u> (90%) Sustainable communities Climate Change Adaptation

Land use and transportation Stormwater Management Corporate Responsibility (EMS)

## **Participation** (10%)

Evaluation here is based on attendance at all presentations in the course. In an applied academic course of this nature, participation is essential if students are to be successful. Students are expected to be fully involved in the course by attending <u>all</u> <u>class events</u> – lectures, guest speakers and site visits. **Students must achieve a 70% participation mark to pass the course.** 

Students are expected to fully participate in small-group project work where students tackle a problem and present a report based on their findings. Groups have the option to hand in, with each report, an evaluation of student member participation in the project, if participation in the work has not been equal for all students.

## **COURSE OUTLINE AND READINGS**

### WEEK 1 Introduction

Week of<br/>Sept.5Class 1: Introduction to course - Urban and regional environments:<br/>-Framing the challenge<br/>-Identifying the Urban and Regional context and change over time<br/>- Introduction of Sustainability key concepts

Paul Hawken, Amory B. Lovins and L. Hunter Lovins, 2010, <u>Natural</u> <u>Capitalism</u>, 2<sup>nd</sup> Edition. Earthscan, *Chapter 1:* The Next Industrial Revolution;

## WEEK 2 Sustainable communities: Key Concepts

Sept.12 Class 1:Approaches to sustainable community building: Urban and Regional Planning Concepts (Lecture)

Class 2: Guest (Mark Boysen - City of Victoria)

Introduction to Project 1: Advocate for development of an Integrated Sustainability Approach

## **Reading:**

Mark Roseland, 2012, Toward Sustainable Communities, Ch. 1, *The Context for Sustainable Communities*; Ch. 2, *Sustainable Community Development* 

## WEEK 3 Sustainable communities: Key Concepts

Sept 19 Class 1: Leadership, Tools, Targets, Indicators, Measurement and Monitoring

Jenny Moore, *Inertia and Resistance on the Path to Healthy Communities*, in Roseland M., ed., 1997, <u>Eco-City Dimensions</u>.

Class 2: Climate Change: Energy and Emissions

Introduce Project 2: Climate Change Adaptation: Addressing Risk and Vulnerability

## WEEK 4

Sept 26 Class 1: Climate Change: Adaptation Planning

Class 2: Project work (Climate Change Adaptation)

## WEEK 5 Sustainable communities: Urban planning, concepts and practice

Oct.3 Theme: Integrating land use and transportation

Class 1: Lecture: Integrating land use and transportation

Introduction to project 3: Integrated TDM Strategy

#### **Reading:**

Mark Roseland, 2012, <u>Toward Sustainable Communities</u>, *Ch. 8, Transportation Planning and Traffic Management; Ch. 9, Land Use, Urban Form and Community Design* Todd Litman, 2011, *Evaluating Transportation Land Use Impacts* <u>http://www.vtpi.org/landuse.pdf</u>

Class 2: Project work (City Studio - Tania Weg)

## WEEK 6 Sustainable communities: Urban planning, concepts and practice

Oct.10 Theme: Integrating land use and transportation

#### Class 1: Thanksgiving

Class 2: Guest: CRD (City Studio -Sarah Webb (Victoria))

## WEEK 7 Sustainable communities: Urban planning, concepts and practice

Oct. 17 Theme: Integrating land use and transportation

Class 1: Project Work

Class 2: Project Work

## WEEK 8 Sustainable communities: Urban planning, concepts and practice

Oct. 24 Theme: Integrating Land-Use with Asset Management

Class 1: Lecture - Asset management and land-use/Eco-Asset Management

Class 2: Eco-Asset Management (Roy Brooke 2-3pm)

Introduction to Project 4: Managing the hydrologic cycle

**Reading:** Patrick Condon, Ch. 8, *Invest in Lighter, Greener, Smarter Infrastructure*; Mark Roseland, 2012, Toward Sustainable Communities, Ch. 5, *Water and Sewage*;

## WEEK 9 Sustainable communities: Urban planning, concepts and practice

Oct.31 Theme: Designing with nature - regional

Class 1: Water Sustainability (Guest)

Class 2: Project Work (Water)

## WEEK 10 Sustainable communities: Urban planning, concepts and practice

Nov. 7 Theme: Designing with nature -Urban design

Class 1:Lecture - Urban Design with nature (case studies)

Class 2: Site visit - Dockside Green (Guest: Kim Fowler)

## Week 11 Sustainable communities: Urban planning, concepts and practice

Nov.14 Theme: Design with nature: Buildings

Class 1: Building Standards (HCMA)

Class 2: HCMA passiv house site visit

## Week 12 Sustainable Communities: Corporate Leadership

Nov.21 Class 1: Lecture -Corporate leadership Environmental Management systems/ standards

Introduce Project 5: EMS Investigation

Class 2: Project Work (EMS)

## WEEK 13 Sustainable Communities: Review

Nov. 28 Class 1: Lecture on Implementation Class 2: Project Work

## WEEK 14 Sustainable communities: Presentations

- Dec. 5 Class 1: Student Presentations Class 2: Student Presentations

## **INFORMATION FOR PROJECT REPORTS**

REPORTS must be **type written**.

All REPORTS should be written from a **'professional'** perspective, as if you were working as a consultant and submitting a professional report to a client. This is an opportunity to practice technical writing skills, in presenting the findings of your project work.

#### All REPORTS must have:

**Purpose and Background:** Explain the nature of the project itself (not just the topic)

- **Discussion** of relevant theory, data, analysis and findings.
- Conclusion (and Recommendations), summarizing findings.

# It is expected that students will consistently cite course readings, and other research, in their report, to demonstrate understanding of the theoretical context of their work.

Note that all work must use a standardized bibliographic style.

Any report handed in late (within 3 days) will lose 5%; up to a week 10%. Very late submissions (more than one week) will not be accepted.

## **Grading System**

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	А		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		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

## Standard Grading System (GPA)

#### **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. <i>(For these courses a final grade will be assigned to either the 3</i> )		
cw	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consultin with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.		

#### Recommended materials or services to assist students to succeed throughout the course

## LEARNING SUPPORT AND SERVICES FOR STUDENTS

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 <u>camosun.ca</u>.

## 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 the College web site in the Policy Section.