



THE UNIVERSITY OF BRITISH COLUMBIA
Course Outline

Geography 310: Environment and Resources
2011 (Term 1)

Course Description: Co-taught by physical and human geographers, this course addresses environmental issues from an interdisciplinary perspective, drawing on concepts from both the social and natural sciences. After introducing general concepts related to environmental management and sustainability, we focus on four resources that are central to contemporary environmental debates, with particular relevance to British Columbia: fresh water, energy, forestry, and fisheries. Throughout the course, the following concepts will be addressed: sustainability; systems concepts and dynamics; resistance, resilience and tipping points; risk and uncertainty; ecological perspectives; regulation and governance; and human impacts on the environment. Students are expected to develop an understanding of these concepts, and be able to display this understanding in the assignment, midterm, and final exam.

Some background in the study of environmental and social sciences, gained in lower years, is necessary. Students who do not have the prerequisites require prior permission of the instructors to take the course.

Instructors:

Professor Karen Bakker (Rm G142) [office hours 10:00 to 11:00 T and Th]
Professor R.D. (Dan) Moore (Rm G225) [office hours 12:30 to 2:00 T and Th]

Learning Objectives:

1. To acquire knowledge on key scientific and governance issues pertaining to the management of resources (fresh water, energy, forestry, fisheries).
2. To develop critical thinking and data interpretation skills with particular reference to environmental issues, including the ability to integrate scientific and social perspectives.

Readings will be made available via the course web site, where the lectures will also be posted. (www.geog.ubc.ca/courses/geog310/)

Evaluation:

Assignment	25%
Midterm	30%
Final examination	45%

NOTE: The due dates for the assignment, midterm, and final exam are fixed. Late assignments will be assessed a penalty of 10% per day. Extensions will not be granted, except for documented medical or compassionate reasons. Only one makeup exam will be scheduled for the midterm. Leave to grant the makeup exam will only be granted if documentation is provided of extenuating circumstances (e.g. medical reasons). Students who miss the midterm and the makeup will have their final mark calculated as follows: Assignment 30%; Final examination 70%.

Date	Lecture topic	Lecturer
6-Sep	<i>No classes – Imagine Day</i>	
Introductory Module		
8-Sep	Introductory lecture	KB/DM
13-Sep	Environment and resource management as "wicked problems" Assignment handed out	KB
15-Sep	Environmentalism and sustainable development	KB
20-Sep	Limits to growth	DM
22-Sep	Guest Lecture: Ecological footprint analysis	Dr. Bill Rees
27-Sep	Debating Sustainable Solutions: Reducing your ecological footprint	KB
Module: Energy and Water		
29-Sep	Peak oil and the dynamics of scarcity	DM
4-Oct	Greenhouse gases and climate change Assignment due	DM
6-Oct	The global water "crisis"	KB
11-Oct	Hydroelectric power	DM
13-Oct	Climate variability, climate change and water supply	DM
18-Oct	Water in Canada: Debating Sustainable Solutions Assignment handed back	KB
20-Oct	Midterm examination	--
25-Oct	Guest Lecture: Water and ecological footprints	Dr. Hans Schreier
Module: Forestry		
27-Oct	Forestry and sustainability	KB
1-Nov	Forest dynamics and management: sustained yield vs sustainable forestry	DM
3-Nov	Parks and protected areas	DM
8-Nov	Forest management in the face of surprise: mountain pine beetle	Dr. Allan Carroll
10-Nov	Forest certification: Debating Sustainable Solutions Midterm handed back	KB
Module: Fisheries		
15-Nov	Fisheries and sustainability: fishing down the food chain	KB
17-Nov	Global fisheries	Dr. Daniel Pauly
22-Nov	Pacific salmon 1: Is 'maximum sustained yield' sustainable?	DM
24-Nov	Pacific salmon 2: Wild stocks vs aquaculture, and the paradox of salmon enhancement	DM
30-Nov	Fisheries: debating sustainable solutions	KB
1-Dec	Final arguments	KB/DM