

Lakehead University: Department of Geography and the Environment

Geography/Environmental Studies 4411: Water Sustainability and Water Resources Management

Seminars: Fridays (24-01-08 to 24-04-09)
Time: 8:30am-11:30am
Room: RB 3026

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Course content

The objectives of this course are to explore the fundamental principles of water resources, introduce students to emerging water security problems, and explore the application of sustainable approaches to water resource management in Canada. The student will gain an understanding of modern principles for water resource management, contemplate the role of science in making sound environmental decisions, and explore Integrated Water Resource Management strategies through a range of case studies that draw from readings, seminars, group exercises and student presentations. The course attempts to integrate resource science contexts with historic-, development-, management-, and policy-related contexts of water. Adaptive management and the ecosystem approach provide preliminary theoretical foundations for the understanding of socio-ecological dimensions of water resource use and water security.

Course Evaluation

3 Policy Briefings 30%

Independent Course Project

40%

- Research Statement (5 marks)
- Research Proposal (5 marks)
- Research Report (20%)
- Research Presentation (10%)

Final Exam 30%

Schedule of Seminars, Tasks Due and Required Weekly Readings:

Date	Topic	Task
Jan 12	Water Security: The Global Water Crisis	
Jan 19	Water Privatization	Policy Briefing #1
Jan 26	Watershed Approach and IWRM	Research Topics
Feb 2	Hydro Dams and other River Barriers	Research Statement
Feb 9	Floodplain Management	Research Proposal
Feb 16	Source Water Protection	Policy Briefing #2
Feb 23	READING WEEK – NO CLASS	
Mar 1	Great Lakes Remedial Action Plan	Research Progress
Mar 8	Great Lakes Lakewide Management Plan	Policy Briefing #3
Mar 15	Stormwater Management	Research Writing
Mar 22	Lake Eutrophication	Research Reports
Mar 29	Research Presentations Group I	1
Apr 5	Research Presentations Group II	