

Lakehead University: Department of Geography

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

Seminars: Tuesdays (14-01-07 to 13-04-01)

Time: 8:30 – 11:30

Room: RC 2003

Professor: Dr. Robert Stewart

Office: RC 2006

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Course content

Session: Winter 2014

The objectives of this course are to explore the fundamental principles of water sustainability and water resources management and to introduce students to emerging water security problems and challenges 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, field trips, 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

2 Assignments: Policy Briefings (10% each)	20%
Independent Research Report (Proposal 10%; Report 30%)	40%
Community Service Learning	30%
Participation	10%

Schedule of Seminars and Due Dates:

- January 7: Water Security and the Global Water Crisis
- January 14: Integrated Watershed Management
- January 21: Water Privatization (Assignment 1 Due)
- January 28: Municipal Water Treatment, Supply and Quality (Assignment 2 Due)
- February 4: Watershed Planning and Source Water Protection
- February 11: LUSU Drinking Water Audit Data Collection (Independent Research Project Proposal Due)
- February 18: **READING WEEK – NO CLASS**
- February 25: Restoration and Remedial Action Plans for the Great Lakes
- March 4: Lakewide Management and the Great Lakes
- March 11: LUSU Drinking Water Audit Results Presentations
- March 18: Climate Change and The Water Sector
- March 25: Climate Change Adaptations and the Great Lakes Basin (Independent Research Reports Due)
- April 1: Community Service Learning Experiences and Recommendations