

REM 655: WATER PLANNING AND MANAGEMENT – FIELD COURSE

April 30–May 18, 2007 (excluding weekends)

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This course explores a range of issues related to water conservation and use, and examines institutional arrangements and jurisdictional responsibilities for water planning and management. The course is heavily field-oriented, relying on site visits and discussions with practicing experts to review water management practices and experiences.

Topics and site visits planned for this year include:

- Water myths and the future of water in Canada – Karen Bakker, editor of *Eau Canada*
- Collaborative planning for a major river basin – The Fraser Basin Council
- Multi-jurisdictional water management in the Okanagan Valley – the Okanagan Basin Water Board; Coldstream, B.C.
- Tour of the Revelstoke Dam and discussion of the Columbia River Treaty; Revelstoke, B.C.
- The Columbia Basin Trust and water management in the Columbia River Basin (including tour of the Kinbasket Reservoir and the wetlands at the headwaters of the Columbia River); Golden, B.C.
- Impacts of a major dam on aboriginal fisheries, the Canadian Columbia River Inter-Tribal Fishery Commission, the Grand Coulee Dam, and the International Joint Commission – CCRITFC; Kimberly, B.C.
- Community management of a local watershed – The Mark Creek Recovery Program (including tour); Kimberly, B.C.
- Restoration of a multi-use watershed – The Joseph Creek restoration project (including tour); Cranbrook, B.C.
- Irrigation channels and infrastructure, groundwater and drinking water supply – Osoyoos/Oliver irrigation and drinking water systems
- Water reuse case studies, water/wastewater treatment, low impact development principles, integrated water management
- Fisheries-based watershed planning: The Chilliwack River Watershed Strategy
- Managing water quality and quantity in the Greater Vancouver Regional District (including watershed tour)
- Watershed management planning and restoration for an urban stream – The Bowker Creek Urban Watershed Renewal Initiative (including watershed tour); Victoria, B.C.
- Managing water quality and quantity in the Victoria Capital Regional District (including watershed tour)
- Demand management programs for residential, industrial, commercial and institutional consumers in the Victoria Capital Regional District
- Groundwater management planning in Langley

Schedule:

The first week of the course will consist of in-class seminars and guest speakers. We will discuss international, national and local water issues, and the institutions through which water is managed. For the second week, we will take a 5-day field trip through southern British Columbia (We will leave early on the morning of Monday, May 7th and return late on the evening of Friday, May 11th). The final week of the course (May 14-18) will include a field trip to southern Vancouver Island and a tour of one of the GVRD watersheds. (A detailed course outline and field trip schedule will be distributed during the first week of class).

Estimated Cost:

There will be a fee of approximately \$300-350 for this course, to cover accommodations and travel expenses. The amount of the fee will depend on the number of students who take the course, but we will endeavour to keep it close to \$300.00. Students will also be responsible for their own expenses for food, and there will be other small miscellaneous expenses such as ferry tickets. Lunches will generally be eaten in the vans or at stops while travelling—we should all bring portable food suitable for this. Breakfasts and dinners will be a mix of food we prepare ourselves and eating out. You will need to bring/wear appropriate clothing for the field trips, including rain gear and boots. For the trip to Vancouver Island, you will need sleeping bags and thinsulates.

Assignments/Grading:

1. Class participation and field trip attendance will make up 30% of the final grade. As part of the class participation requirement, each student will prepare and present during the first week of the class a brief overview of key water-related issues in a country of his or her choice.
2. Each student will write a major term paper (20-25 pages) on a water-related subject of his or her choice. Papers will be due in late June, and we will have a class meeting in June or July to present and discuss papers (70% of the final grade – 55 % paper, 15% presentation).

Required Textbook:

Bakker, K. (ed.). 2007. *Eau Canada: The future of Canada's water*. Vancouver, B.C: UBC Press.