

COURSE TITLE Special Topics –The Right to Water and Sanitation in First Nation Communities

Department Soil Science

Course Number SOIL7250

Academic Session Fall 2017

Credit Hours 3

Prerequisites and how they apply to this course Consent of instructor

Classroom Location Robson Hall, room to be determined

Meeting Days and Class Hours Every Wednesday (1pm to 3:50pm) from September 5 to December 5, 2017

Instructor Information

Course coordinators:

Dr. Annemieke Farenhorst, Professor of Soil Science, 380 Ellis Bldg. *E-mail:* annemieke.farenhorst@umanitoba.ca, *Phone:* 204-474-6858.

Dr. Karen Busby, Professor of Law, 440 Robson Hall, *E-mail:* karen.busby@umanitoba.ca, *Phone:* 204-474-6155

Course Philosophy

Students' Learning Responsibilities

Students are required to meet with the instructor every two weeks, or more frequently as required; and complete tasks by the set deadlines.

Why this course is useful?

This course is essential to soil science students enrolled in the NSERC CREATE H2O Program for First Nations Water and Sanitation Security. Through readings, presentations and seminars, we will consider the persistent problem of the lack of clean drinking water and adequate sanitation in First Nation communities in Canada and what do to about this problem. This includes discussions about the scientific reasons why contamination prevails, such as groundwater flow contaminating underground cisterns, atmospheric dust entering water trucks and the rapid dissipation of chlorine concentrations in the water distribution system, along with the formation of carcinogens such as trihalomethanes. We will examine five legal frameworks for understanding roles, relationships, responsibilities and rights in relation to water in Canada: Anishinaabe law, Indigenous-settler treaties, Canadian constitutional law, statutory approaches and Canada's international law commitments. We will think about how scientists and engineers can work with lawyers and social scientists to examine various advocacy strategies including civil resistance. We may visit, on a weekend, the Shoal Lake First Nation #40 Museum of Human Rights Violations.

Who should take this course?

Graduate students enrolled in the NSERC CREATE H2O Program for First Nations Water and Sanitation Security, and graduate students from any program (department/faculty) who work in collaboration with First Nations communities and/or on research related to drinking water quality or sanitation.

How this course fits into the curriculum

This is an optional course at the graduate level.

Course Description/Objectives

Instructional Methods

Readings, seminars and podcasts will be utilized throughout the course. Many of the seminars will feature guest speakers and they will be open to the public. As this is a seminar course, students will be expected to participate in dialogue with

the guest and other participants. The public seminars will be two hours long and the student cohort will usually meet together in the third hour. Readings will be assigned for each seminar.

Course Objectives

The objectives of SOIL7250 are for students to fully understand the drinking water crisis in First Nations communities in Canada and to be able to communicate on this to a broad audience. The objective is also for students enrolled in science and engineering to learn aspects not normally covered in their science course curriculum, such as legal perspectives on water as it pertains to Canadian law, Anishinaabe law and Indigenous-settler treaties.

Learning outcomes

Upon completion of the course, the student will have knowledge of and can present on:

- Five legal frameworks as they relate to water in First Nations communities in Canada
- Indigenous-settler treaties, emphasizing land and source water.
- Scientific methodologies used to test water quality
- Water distribution systems used in First Nations communities in Canada

Upon completion of the course, the student will have the communication tools and strategies necessary to engage with:

- the general public and media to inform them on the drinking water crisis in First Nations communities in Canada
- lawyers and social scientists on advocacy strategies needed to solve the drinking water crisis in First Nations communities in Canada

Grade Evaluation

This is a Pass/Fail course. The student is expected to attend all seminars and, in order to earn a passing course grade, the student must engage in the group discussions following each seminar. When a seminar is missed, students must listen to the podcast (available online) of the seminar and group discussion and submit a one-page outline demonstrating what they learned. In order to earn a passing grade, the student must also submit a PowerPoint presentation that covers one or more topics discussed in the course, and present these slides in a 40-minute presentation to staff and students in the Department of Soil Science, or in an alternate unit which requires the approval of the course instructors.

Readings: Readings will be assigned for each seminar. The student must read these materials prior to the seminar as it will help the student to take part in the group discussions.