



COURSE OUTLINE

ENVS 042z/ENVS 227z

YUKON SOURCE WATER PROTECTION AND WATERSHED STEWARDSHIP

45 Hours
3 credits

PREPARED BY: Larry Gray, Instructor DATE: Nov 21, 2016

APPROVED BY: _____ DATE: _____

APPROVED BY ACADEMIC COUNCIL: (DATE)

RENEWED BY ACADMEIC COUNCIL: (DATE)

YUKON COLLEGE
Copyright January 2017

All rights reserved. No part of this material covered by this copyright may be reproduced or utilized in any form or by any means, electronic or mechanical, traded, or rented or resold, without written permission from Yukon College.

Course Outline prepared by Larry Gray, January 2017

Yukon College
P.O. Box 2799
Whitehorse, YT
Y1A 5K4

DIVISION OF APPLIED SCIENCE AND MANAGEMENT
Yukon Source Water Protection and Watershed Stewardship
Credit Course
Winter 2017

YUKON SOURCE WATER PROTECTION AND WATERSHED STEWARDSHIP

INSTRUCTOR: Larry Gray

OFFICE HOURS: Mon. & Wed.
10:30 am - Noon

OFFICE LOCATION: A2303

CLASSROOM: C1440

E-MAIL: lgray@yukoncollege.yk.ca

TIME: Tues/Thurs, 10:30 am - Noon

TELEPHONE: 456-8607

DATES: January 5 - April 21, 2017

COURSE DESCRIPTION

The course has two over-arching goals. One is to learn ways to foster holistic connections between people, communities and watersheds, connections based on more than science. The second is to help facilitate and enhance, using both science and indigenous knowledge, the capacity of Yukon communities and First Nations to develop and implement plans for source water protection and watershed stewardship.

The course aims to increase community understanding of water management principles and promote acceptance of community-based watershed stewardship. The course encapsulates multiple perspectives and will include local indigenous knowledge and western science (i.e. hydrology, biology), in order to create a more comprehensive approach towards drinking water security and safety and overall watershed stewardship.

The course will be offered at two levels (200 level and college prep level) and the target audience will include water professionals (i.e. First Nation water operators and Lands and Resources officers) as well as the general public.

Development of this course has been a collaboration between Trent University (Institute of Watershed Science and Department of Indigenous Environmental Studies) and Yukon College. Funding was through an RBC Bluewater Fund grant to Trent University.

EQUIVALENCY/TRANSFERABILITY:

In progress.

LEARNING OUTCOMES

- a. With successful completion of the course, students will be able to understand the scope of global water issues as well as water issues within Canada and the North.
- b. With successful completion of the course, students will have demonstrated an ability to apply both indigenous knowledge and western science to issues of source water protection and watershed stewardship in the Yukon.
- c. Upon successful completion of the course, students will know and understand principles and concepts of source water protection and watershed stewardship.
- d. Upon successful completion of the course, students will be able to develop and evaluate basic source water protection plans.
- e. Upon successful completion of the course, students will have demonstrated the ability to use various strategies to engage their home community in addressing local source water protection issues.

DELIVERY METHODS/FORMAT

This course is designed for distance delivery. There will be two 1 ½ hour videoconferences each week and a course website, including a discussion forum and links to other information sources.

PREREQUISITES

There are no prerequisites for 042-level students. Pre-requisite for 227-level students is 2nd year standing for 200-level students or permission of the instructor for college prep students.

COURSE REQUIREMENTS/EVALUATION

Attendance and Participation

Attendance at all videoconference sessions is mandatory. Unexcused absences in excess of 10% of scheduled activities may result in dismissal from the course at the instructor's discretion.

Evaluation

The coursed grade will be arrived at as follows:

<u>ENVS 041</u>		<u>ENVS 227</u>	
Journal	30%	Journal	20%
Mid-term Exam	35%	Mid-term Exam	20%
Final Exam	35%	Research Project & Paper	35%
		Final Exam	25%
TOTAL	<hr/> 100%	TOTAL	<hr/> 100%

REQUIRED TEXTBOOKS/MATERIALS

There is no formal textbook. A compendium of selected readings and on-line resources will form the text for the course.

ACADEMIC AND STUDENT CONDUCT

Information on academic standing and student rights and responsibilities can be found in the current Academic Regulations that are posted on the Student Services/Admissions & Registrations web page.

PLAGIARISM

Plagiarism is a serious academic offence. Plagiarism occurs when students present the words of someone else as their own. Plagiarism can be the deliberate use of a whole piece of another person's writing, but more frequently it occurs when students fail to acknowledge and document sources from which they have taken material. Whenever the words, research or ideas of others are directly quoted or paraphrased, they must be documented according to an accepted manuscript style (e.g., APA, CSE, MLA, etc.). Resubmitting a paper which has previously received credit is also considered plagiarism. Students who plagiarize material for assignments will receive a mark of zero (F) on the assignment and may fail the course. Plagiarism may also result in dismissal from a program of study or the College.

STUDENTS WITH DISABILITIES OR CHRONIC CONDITIONS

(NOTE: This statement must be in each course outline.)

Reasonable accommodations are available for students with a documented disability or chronic condition. It is the student's responsibility to seek these accommodations. If a student has a disability or chronic condition and may need accommodation to fully participate in this class, he/she should contact the Learning Assistance Centre (LAC) at (867) 668-8785 or lassist@yukoncollege.yk.ca.

ENVS 042z/227z COURSE SYLLABUS

DATE	TOPIC	GUEST SPEAKERS
January 4	Course Introduction	
January 9, 11	An Overview of Water Issues What is Source Water Protection, and why do we need it?	
January 16, 18	Indigenous Knowledge Water Protection in Story and Oral History	
January 23, 25	Hydrology	
January 30, February 1	Hydrology	
February 6, 8	Characterizing your Water Source	
February 13, 15	Water Management in the Final Agreements	Yukon Water Board YESAB
February 20, 22	Protection Zones around water supplies	
February 27, March 1	Water Monitoring	Erin Light, YG
March 6, 8	Land use impacts	Lewis Rifkind. YCS
March 13, 15	City of Whitehorse Water Management Infrastructure Tour	
March 20, 22	Groundwater Quality & Treatment Membrane Filtration for Water Treatment Water Analysis & Water Quality Monitoring	Amelie Janin, YRC
March 27, 29	Groundwater Quality & Treatment Membrane Filtration for Water Treatment Water Analysis & Water Quality Monitoring	Amelie Janin, YRC
April 3, 5	Case Studies in the Yukon/Course Review	

