



School of Science

**ENVS 227**

Yukon Source Water Protection and Watershed

Stewardship Term: Winter 2022

Number of Credits: 3

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## Course Outline

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**INSTRUCTOR:** Nesha Wright

**E-MAIL:** [nesha.wright@yukonu.ca](mailto:nesha.wright@yukonu.ca)

**Office Hours:** Typically, I am available after class on Wednesday (via Zoom) but I am flexible, so please email me should you like to discuss something or have questions!

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### COURSE DESCRIPTION

The course aims to increase community understanding of water movement within the biosphere, 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.

### COURSE REQUIREMENTS

Prerequisite(s): Second-year standing or permission of the instructor.

### EQUIVALENCY OR TRANSFERABILITY

Receiving institutions determine course transferability. Find further information at:

<https://www.yukonu.ca/admissions/transfer-credit>

### LEARNING OUTCOMES

Upon 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.
- Demonstrate an ability to apply both indigenous knowledge and western science to issues of source water protection and watershed stewardship in the Yukon.
- Understand principles and concepts of source water protection and watershed stewardship.
- Develop and evaluate basic source water protection plans.
- Demonstrate the ability to use various strategies to engage their home community in addressing local source water protection issues.

## COURSE FORMAT

### Weekly breakdown of instructional hours

Monday's lecture will be posted by noon each week. You will be expected to watch the pre-recorded lecture on your own time, prior to Wednesday's Zoom lecture. Some weeks will have guest lecturers some may be pre-recorded. Each week you can expect to have roughly 2 to 2.5 hours of lecture time and the remaining 30 min - 1 hour will consist of discussions, quizzes or assigned readings.

**\*Note:** Late assignments will NOT be accepted without communication and acceptable reason.

### Delivery format

This course is designed for distance delivery. We will be primarily using Moodle and Zoom. Monday's lecture will be asynchronous (pre-recorded and posted) for you to watch on your own time and Wednesdays will be synchronous (real time) via Zoom. Wednesday's lecture will **NOT** be recorded. Information regarding quiz details will be posted on Moodle and discussed in class.

## EVALUATION

\*Each of these will be discussed in more detail on the first day

Quizzes (5)	25 %
Discussion Posts (2)	15 %
Term Project	20 %
Interview of Interest	10 %
Engagement	5 %
Final Exam (cumulative)	25 %
Total	100 %

## COURSE WITHDRAWAL INFORMATION

Refer to the YukonU website for important dates.

## TEXTBOOKS & LEARNING MATERIALS

There is no assigned textbook for this course; however, you will be expected to keep up with assigned readings/videos as the course progresses. These readings will be posted on Moodle and discussed in class.

Within Moodle there is a "Useful Information" tab. Here you will find links to resources such as "How to" sites on referencing, creating a Power Point presentation etc. YukonU has many useful resources I encourage you to take advantage of.

Learning Links: <https://www.yukonu.ca/student-life/learning-matters>

Health and Wellness: <https://www.yukonu.ca/student-life/health-wellness>

## ACADEMIC INTEGRITY

Students are expected to contribute toward a positive and supportive environment and are required to conduct themselves in a responsible manner. Academic misconduct includes all forms of academic dishonesty such as cheating, plagiarism, fabrication, fraud, deceit, using the work of others without their permission, aiding other students in committing academic offences, misrepresenting academic assignments prepared by others as one's own, or any other forms of academic dishonesty including falsification of any information on any Yukon University document.

Please refer to Academic Regulations & Procedures for further details about academic standing and student rights and responsibilities.

## ACADEMIC ACCOMMODATION

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon University Academic Regulations (available on the Yukon University website). It is the student's responsibility to seek these accommodations by contacting the Learning Assistance Centre (LAC): [LearningAssistanceCentre@yukonu.ca](mailto:LearningAssistanceCentre@yukonu.ca).

## TOPIC OUTLINE

**\*Course outline/dates may be altered at any point at the discretion of the instructor\***

Module	Topics	Notable Events
Module 1 (Jan 5)	Introduction	Familiarize yourself with Moodle
Module 2	Defining Water, Water Cycle	
Module 3	Atmospheric Water	Quiz 1 (Module 2)
Module 4	Terrestrial Water	
Module 5	Ground Water	Quiz 2 (Module 3 & 4)
Module 6	Climate Change	Discussion post 1 due Feb. 10 <sup>th</sup>
Module 7	Characterization of a Watershed	Quiz 3 (Module (5 & 6)
<b>READING WEEK (Feb 21-25)</b>	<b>NO CLASS</b>	<b>NO CLASS</b>
Module 9	YESAB	Quiz 4 (Module 7)
Module 10	Whitehorse Water	Discussion post 2 and Interview due March 10 <sup>th</sup>
Module 11	Water Monitoring and Contamination	Quiz 5 (Module 8 & 9)
Module 12	Case Studies	
Module 13	Class Presentations	
Module 14	Review	Final Exam (cumulative)