APPLIED SCIENCE AND MANAGEMENT DIVISION ENVS 050/225 Environmental Change and Fish & Wildlife Health 3 Credits Fall, 2020



# COURSE OUTLINE

## ENVS 050/225 ENVIRONMENTAL CHANGE AND FISH & WILDLIFE HEALTH

### **3 CREDITS**

PREPARED BY: Larry Gray, Instructor DATE: August 19, 2020

APPROVED BY: Joel Cubley, Chair, School of Science DATE: October 5, 2020

APPROVED BY SENATE: Click or tap to enter a date RENEWED BY SENATE: Click or tap to enter a date

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### ENVIRONMENTAL CHANGE AND FISH & WILDLIFE HEALTH

INSTRUCTOR: Larry Gray OFFICE LOCATION: A2303 E-MAIL: lgray@yukonu.ca TELEPHONE: 336-0370 **OFFICE HOURS:** By appointment **CLASSROOM:** N/A **TIME:** T 2:30-4:00, Th. **DATES:** September 1 – December 8

#### **COURSE DESCRIPTION**

This course has been developed partly in collaboration with Canada's Northern Contaminants Program (NCP) and Trent University's Department of Indigenous Environmental Studies. It will be of interest to all northerners, but especially anyone interested in fisheries, wildlife, and land and resource management. The course begins with an overview of global environmental changes and how they impact the North, especially the Yukon. These environmental changes include long-range contaminants, contaminants from mining, changes in fish and wildlife disease patterns and climate change. We discuss environmental monitoring and community education as two tools used to address environmental change and fish and wildlife health. The course integrates both traditional knowledge and science. Students will have the opportunity to undertake practical activities and research in their own community.

#### PREREQUISITES

There is no prerequisite for the 050 level, but for the 225 level, the pre-requisite is 2nd year standing or permission of the instructor.

#### **EQUIVALENCY OR TRANSFERABILITY**

In progress

#### LEARNING OUTCOMES

Upon successful completion of the course, students will be able to ...

a. Recognize and appreciate the geographic and global scope of unprecedented environmental changes at this time in Earth's history.

b. Understand climate change and its diverse impacts on the northern environment.

c. Understand the sources (natural and human-made), pathways, action, levels and trends of contaminants in arctic ecosystems, including long-range contaminants and contaminants from mining.

d. Know and understand the major diseases and disease processes of northern fish and wildlife and how environmental change such as climate change may affect these processes.

e. Understand environmental monitoring and community education principles, procedures and programs that are currently used or needed in the Yukon.

#### **COURSE FORMAT**

This course is designed for online delivery. There will be a weekly podcast followed by a variety of learning activities.

#### **EVALUATION:**

SARs	40%
Article Review	25%
Research Paper	35%
Total	100%

#### **REQUIRED TEXTBOOKS AND MATERIAL**

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 & Registration web page.

#### PLAGIARISM

Plagiarism is a serious academic offence. Plagiarism occurs when a student submits work for credit that includes the words, ideas, or data of others, without citing the source from which the material is taken. Plagiarism can be the deliberate use of a whole piece of work, but more frequently it occurs when students fail to acknowledge and document sources from which they have taken material according to an accepted manuscript style (e.g., APA, CSE, MLA, etc.). Students may use sources which are public domain or licensed under Creative Commons; however, academic documentation standards must still be followed. Except with explicit permission of the instructor, resubmitting work 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 University.

#### YUKON FIRST NATIONS CORE COMPETENCY

Yukon University recognizes that a greater understanding and awareness of Yukon First Nations history, culture and journey towards self-determination will help to build positive relationships among all Yukon citizens. As a result, to graduate from ANY Yukon University program, you will be required to achieve core competency in knowledge of Yukon First Nations. For details, please see www.yukonu.ca/yfnccr.

#### 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. If a student requires an academic accommodation, he/she should contact the Learning Assistance Centre (LAC): lac@yukonu.ca.

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#### **TOPIC OUTLINE**

	DATE	TOPIC
Week 1	September 1, 3	Introduction to the Course
Week 2	September 8, 10	Global Perspectives
Week 3	September 15, 17	An Overview of Environmental Issues and Changes in the Yukon/ Concepts of a Healthy Land and People Traditional Foods and the Seasonal Round
Week 4	September 22, September 24	Global Change & Challenge: Contaminants & Mining
Week 5	September 29, October 1	Global Change & Challenge: Long-Range Contaminants
Week 6	October 6, 8	Global Change & Challenge: Long-Range Contaminants
Week 7	October 13, 15	Self-Study
	HALF-WAY	THROUGH!
Week 8	October 20, 22	Global Change & Challenge: Climate Change
Week 9	October 27, 29	Global Change & Challenge: Climate Change Invasive Species
Week 10	November 3, 5	Global Change & Challenge: Loss of Biodiversity (Watersheds)
Week 11	November 10, 12	Global Change & Challenge: Loss of Biodiversity (Forests)
Week 12	November 17, 19	Global Change & Challenge: Loss of Biodiversity (Oceans, Coral Reefs)
Week 13	November 24, 26	Environmental Monitoring and Sampling
Week 14	December 1, 3, 8	Community Education Course Wrap-up & Review