



The Northern Environmental and Conservation Sciences winter field school will be held in the Yukon Territory from February 14-21, 2020. 'Northern Exposures' will join students from northern and southern locations to explore the natural and cultural history of the Yukon, and to learn and apply interdisciplinary approaches to environmental, social and economic challenges in this region. Winter conditions provide a lens for examining the relationships between northern environments and human societies, and identifying appropriate research and management approaches for northern systems.

This is a 3 credit course suitable for senior-level university students enrolled in natural and social science programs, including the Certificate on International Learning. The instructors include university faculty and college staff, personnel from territorial and First Nations governments, and representatives of other Yukon agencies. Seminars and field exercises will emphasize student-centered experiential learning, while benefitting from the wealth of local knowledge present in the Yukon. Students will be based near Whitehorse for four days and near Haines Junction for three days, with excursions to outlying communities and environments. The days will be long, and full participation is expected by all students. Course requirements include completion of assigned readings and questions prior to the field school, maintaining a journal during the field school, and submission of a research paper as a follow-up exercise.

Places are limited and will be filled on a first-come basis. All participants must register in and pay tuition for University of Alberta RENR 465. Additional course fees of \$1500 for non-Yukon students include return transportation from Edmonton to Whitehorse, local accommodation, coverage of most meals in the Yukon, and transport for field excursions. Participants are responsible for personal outdoor equipment (appropriate winter clothing and footwear), as well as some local meals in Whitehorse. Additional course fees of \$700 apply to Yukon students, for coverage of meals, accommodation, and transport for field excursions.

Course registration must be completed by December 16<sup>th</sup>, 2019. A non-refundable deposit of \$600 is due

on January 10<sup>th</sup>, 2020 for all students. The remaining course fees (\$900 non-Yukon/\$100 Yukon) are due by February 3<sup>rd</sup>, 2020.

For more information, contact Gabriel Rivest ([rivest@ualberta.ca](mailto:rivest@ualberta.ca))

### **Draft Field School Curriculum (*subject to change*)**

Note that some of this material will be also covered in advance through directed readings, in order to provide context for the field activities.

<b>Natural Heritage of the Yukon – Beringia Centre &amp; Yukon Wildlife Preserve</b>
<ul style="list-style-type: none"><li>• Glacial history and paleoecology of the Yukon</li><li>• Ecosystems of the Yukon – forest, grassland, wetland, alpine, subarctic and arctic environments</li><li>• Wildlife and waters of the Yukon</li></ul>
<b>Cultural Heritage of the Yukon – Kwanlin Dun Cultural Centre &amp; Locales</b>
<ul style="list-style-type: none"><li>• First Nations of the Yukon</li><li>• Significance of the Klondike Gold Rush</li><li>• Self-governance and the Umbrella Final Agreement</li><li>• Instruments of the Final Agreement</li></ul>
<b>Ways of Knowing – Kluane Research Station, Yukon Wildlife Preserve &amp; Locales</b>
<ul style="list-style-type: none"><li>• Indigenous and scientific knowledge systems</li><li>• Research approaches in natural and social sciences</li><li>• Community-based monitoring</li><li>• Wildlife sampling methods</li></ul>
<b>Co-management in Action – Da Ku Cultural Centre, Kluane National Park &amp; Field Sites, Carcross Tagish</b>
<ul style="list-style-type: none"><li>• Champagne Aishihik First Nation and Traditional Territory</li><li>• Issues in co-management of lands and resources</li><li>• The role of protected areas in northern systems</li><li>• Cross governmental research agreements</li></ul>
<b>Changing Times – Ayamdigut Campus &amp; Field sites</b>
<ul style="list-style-type: none"><li>• Development pressures and cumulative effects in the north</li><li>• Climate change – environmental and social implications</li><li>• Science and policy in the north</li><li>• Institutional responses to change</li></ul>



UNIVERSITY OF  
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## REN R 465 – Winter 2020

### NORTHERN EXPOSURES FIELD SCHOOL

In Winter 2020, RENR465 Northern Exposures Field School is being offered as part of the Northern Environmental and Conservation Sciences, B.Sc. Program partnered with Yukon College. All students registered in RENR465 must adhere to the requirements outlined in this course syllabus, and be aware of, and adhere to, the University's Code of Student Behaviour, referenced in the outline.

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**INSTRUCTOR(S):** **Dr Marianne Douglas**  
Northern ENCS Program

**Gabriel Rivest**  
Field and Outreach Coordinator

Applied Sciences, Yukon College / Renewable Resources, UAlberta

**OFFICE HOURS:** By appointment

**OFFICE LOCATION:** Yukon Research Centre, NR 28/30, Yukon College, Whitehorse

**TELEPHONE/E-MAIL:** [msdougl@ualberta.ca](mailto:msdougl@ualberta.ca) (867) 336-0087/[rivest@ualberta.ca](mailto:rivest@ualberta.ca)

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**CLASS DAYS & TIMES:** February 14 – 21, 2020 (field components), with additional course requirements prior and subsequent to field time.

**CLASS LOCATION:** Environs of Whitehorse, Carcross and Haines Junction, YT.

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#### **COURSE DESCRIPTION:**

Field trip studies with a focus on environmental and conservation biology topics. Course content and offerings vary from year to year. Prerequisite: \*9 in biological or ecological topics. Credit may be obtained for only one of REN R 465 or ENCS 465. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.

The Northern Exposures fall field course will allow students to explore the natural and cultural history of the Yukon and to learn and apply interdisciplinary approaches to environmental, social and economic challenges in this region. Field experience provides a lens for examining the relationships between northern environments and human societies, and identifying appropriate research and management approaches for

northern systems.

### **STUDENT LEARNING OUTCOMES AND COMPETENCIES:**

Upon successful completion of this course students will have been exposed to a diversity of perspectives representing a range of disciplines and considerations relevant to conservation and management of natural and cultural resources in northern Canada. Field schools also help develop team work experience and ethics associated with knowledge and application of ethical conduct and professionalism in the pursuit of activities associated with natural and cultural resources in northern Canada. Students will establish effective oral and written communication skills through field and group interactions, assignments and independent research.

### **COURSE FORMAT (Field Course):**

The course consists of student-centered experiential learning gained while exploring a suite of Yukon and Alaskan natural and cultural sites. Students will be based near Whitehorse for the first four days (February 14 - 17) and then travel to Haines Junction (February 15-20) and back to Whitehorse (February 20- 21). There will be stops along the way to visit natural and culturally relevant sites. Activities (e.g., walks, hikes, guided visits) and discussions will vary according to the different locales. Topics covered will include: ecosystems, geology and paleo-history of the Yukon wildlife (fish and game) management, First Nations of the Yukon and self-governance, economic and natural resource development, significance of the Klondike Gold Rush, and research approaches in natural and social sciences.

The days will be long and full participation is expected by all students. Course requirements include completion of assigned readings and associated questions in advance, maintaining a daily journal during the field school in which observations and questions are recorded, and submission of extended responses to daily questions as a follow-up final assignment to the field program.

### **COURSE PREREQUISITES AND/OR CO-REQUISITES:**

Students will normally have third year or higher standing in a university-level program, and \*9 in biological or ecological topics.

### **REQUIRED TEXTBOOKS/MATERIALS:**

There is no textbook for this course. Required readings drawn from a variety of sources will be provided in advance of the field component of the course. These readings provide context and basic understanding needed to complete the course and to address assignments. Readings will be provided to students in digital format through the class website (eClass see below).

### **COURSE WEBSITE**

Relevant readings and associated course materials (e.g. assignments) will be posted on the UAlberta eClass website for this course.

# UNIVERSITY OF ALBERTA ACADEMIC INTEGRITY AND CODE OF STUDENT BEHAVIOUR

## Academic Integrity

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at [www.governance.ualberta.ca](http://www.governance.ualberta.ca)) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

## Code of Student Behaviour

All students at the University of Alberta are subject to the Code of Student Behaviour, as outlined at: <https://www.ualberta.ca/governance/resources/policies-standards-and-codes-of-conduct/code-of-student-behaviour>. Please familiarize yourself with it and ensure that you do not participate in any inappropriate behavior as defined by the Code. Key components of the code include the following statements.

30.3.2(1) No Student shall submit the words, ideas, images or data of another person as the Student's own in any academic writing, essay, thesis, project, assignment, presentation or poster in a course or program of study.

30.3.2(2) c. No Student shall represent another's substantial editorial or compositional assistance on an assignment as the Student's own work.

## PROFESSIONALISM AND CLASSROOM RULES OF ENGAGEMENT

Students are expected to participate fully in all activities during the field course. Students are expected to be punctual, engaged and courteous to peers, instructors, staff and hosts. Please do not use cellular phones during class or discussions.

## COURSE REQUIREMENTS/EVALUATION:

### Assignments, Attendance and Participation

Evaluation for the course is based upon assignments and participation. There are no exams. Assignment #1 (30%) is a series of answers to questions based upon the required readings as well as the completion of an online course (First Nations 101). This assignment provides background information and basis for the rest of the field course and will be completed in advance of the field component of the course (due date February 10, 2020). Participation during the field course, based on teamwork, engagement in all activities and discussions and professionalism is an important and significant component of the course (15%). Assignment #2 is the maintenance of a field journal in which daily observations and related questions will be documented (15%). It will be due on the last day of the field course (February 21, 2020). The final

assignment (Assignment #3) will be comprised of the extended responses to questions posed during the field course (40%; due date March 27, 2020).

### **Due Dates and Late Assignments**

Due dates for assignments are included in the above section. A penalty of -5% per day will be applied to late assignments.

### **Evaluation**

The course grade will be determined as follows:

	<b>Due Date</b>	<b>Percent</b>
Assignment #1 Required Readings	February 10, 2020	30
Assignment #2 Field Journal	February 21, 2020	15
Assignment #3 Field Course Questions	March 27, 2020	40
Participation, engagement and professionalism		15
<b>Total</b>		<b>100</b>

## Assignment of Grades

The total numerical score will be converted to a final letter grade. The following table outlines how numerical course scorers will be converted into course grades, consistent with the University of Alberta Assessment Policy and Grading Procedure. Grades reflect judgements of student achievement made by the instructor and may be based on a combination of absolute achievement and relative performance in a class.

Descriptor	Numerical Grade	Letter Grade	Grade Point Value
Excellent	95-100	A+	4.0
	90-94	A	4.0
	85-89	A-	3.7
Good	79-84	B+	3.3
	75-78	B	3.0
	71-74	B-	2.7
Satisfactory	67-70	C+	2.3
	64-66	C	2.0
	60-63	C-	1.7
Poor	55-59	D+	1.3
Minimal Pass	50-54	D	1.0
Failure	0-49	F	0.0

### **ELECTRONIC DEVICES: and RECORDING OF LECTURES, LABS, ETC.:**

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

**TENTATIVE COURSE SCHEDULE (DETAILS TO BE CONFIRMED, PENDING CONDITIONS AT THE TIME OF THE FIELD TRIP)**

Date	Location and Topic
February 14	Alberta students arrive in Whitehorse
February 15	Course introduction and overview Visit to Beringia Interpretative Centre and other Whitehorse locations, including Yukon River walk.
February 16	Wildlife Preserve – Adaptations to the cold and field sampling techniques.
February 17	Carcross, medicinal plant library, wildlife co-management
February 18	Travel to Haines Junction Kluane Interpretive Centre and Da Ku Cultural Centre, Squirrel camp
February 19	Thachal Dhal – Kluane National Park Lunch – Ranger’s cabin Shepherd’s Knoll hike – Kluane National Park
February 20	Return to Whitehorse with stops along the way. Tour and community engagement at Long Ago People’s Place, Champagne Innovation in Northern Businesses
February 21	Course wrap-up Whitehorse city visit Flight back to Edmonton