



RENr 205/NOST 201

WILDLIFE DIVERSITY AND ECOLOGY/ NATURAL HISTORY OF THE NORTH

In Fall 2024, NOST 201 Natural History of the North is being offered at Yukon University concurrent with the University of Alberta's RENr 205 Wildlife Diversity and Ecology, as part of the Northern Environmental and Conservation Sciences, B.Sc. Program. All students registered in NOST 201 or RENr 205 must adhere to requirements outlined in this course syllabus. University of Alberta students must also be aware of, and adhere to, the University's Code of Student Behaviour, referenced in the outline; Yukon University students must be aware of, and adhere to, Yukon University's Academic Regulations, also referenced in the outline.

INSTRUCTOR: Larry Gray
Faculty Emeritus, School of Science

OFFICE HOURS: by appointment

OFFICE LOCATION: Library

TELEPHONE: 336-0370

E-MAIL: lgray@yukonu.ca

CLASS DAYS & TIMES: Fridays, 9:00am. – 11:50 am.

CLASS LOCATION: A2206

COURSE DESCRIPTION

Students taking this course will gain a broad introductory overview of the natural history of the circumpolar northern regions. The course emphasizes field skills in collecting data and enjoying the natural world. We begin by learning the processes of identification, methods of study and strategies of survival (particularly for winter) for the spectrum of species living in the north. We also introduce the forces which shape and have shaped the northern landscape including climatic, geomorphic and soil forming processes. The course is

circumpolar in context, but local Yukon examples will be emphasized

COURSE REQUIREMENTS

For students taking the course as NOST 201:

Students must be willing to engage in field activities in inclement weather and uncomfortable circumstances such as insects and steep terrain. A certain (moderate) level of physical fitness is required for activities such as hiking.

For students taking the course as RENR 205:

Registration in Yukon University/University of Alberta B.Sc. in Environmental and Conservation Sciences degree program.

EQUIVALENCY OR TRANSFERABILITY

Receiving institutions determine course transferability. Find further information at: <https://www.yukonu.ca/admissions/transfer-credit>.

Students in the B.Sc. ENCS program should contact an ENCS advisor if they have questions about equivalency or transferability of this course.

LEARNING OUTCOMES

Upon successful completion of this course, students will be able to:

1. Use standard field manuals to identify naturally occurring species including birds, mammals, plants, fish and some invertebrates.
2. Compile a list of commonly found northern species,
3. Identify the adaptations and strategies northern species exhibit to survive and thrive in a northern environment,
4. Use various outdoor study aids, binoculars, spotting scopes, manuals, cameras, and collection apparatus,
5. Use ethical, safe, and respectful behavior in the collection of data and enjoyment of natural history,
6. Be able to express in writing personal field observations of species and phenomena.

COURSE FORMAT

There will be three hours of lecture (in one 3-hour block) per week. Students are expected to read and watch videos posted on the Moodle site and participate in at least two field trips that may occur outside of class time. Students are required to keep a journal of natural history observations. Although it will vary from individual to individual, students should expect to spend at least 2 hours on course material outside of the classroom time (per week) on studying, reading, field trips, or completing assignments.

Delivery format

This course will be delivered in a face-to-face (in person) format. Students will be expected to access the YU online learning platform for additional material (Moodle). There will be short field excursions and a 3-day field trip to Alaska.

EVALUATION

The course grade will be determined as follows:

Assignment	Grade	Due Date
Collections (2)	15%	October 11 & November 1
Photo Essays/Stories (2)	15%	October 18 & November 8
Occasional Reflection Papers	20%	open
The Natural History of You	20%	November 22
Natural History Journal	20%	October 18 & November 22
Natural History Quiz	10%	December 6

Attendance and Participation

Attendance is required for all classes and field trips. There is an extended 3-day field trip to Alaska. Attendance for that is not mandatory but highly recommended.

Assignments

This course requires a high level of personal responsibility and the timely completion of practical assignments. Students will be spending a fair amount of time independently

outdoors making collections, photo essays and keeping a field journal. This requires an ability to work independently and to manage one's time and energy optimally. Expectations for assignments and criteria for grading the various assignments will be made explicit on the first day of class.

Due Dates and Late Assignments

Due dates for all assignments are explicit in the Evaluation section of this course outline. If any assignments are anticipated to be late, the students must consult with the instructor before the due date of the assignment to discuss.

Assignment of grades

The Yukon University letter grading system will be used for both sections of this course with the total numerical score converted to a grade using that system.

COURSE WITHDRAWAL INFORMATION

Students registered in NOST 201 should refer to the YukonU website for important dates.

Students registered in RENR 205 should refer to the UAlberta calendar for important dates (calendar.ualberta.ca).

TEXTBOOKS AND LEARNING MATERIALS

There is no official textbook for this course, but students are expected to read suggested online and print materials, watch videos, and access scientific articles to support their writing and learning. Students will need a phone/camera and materials for making 2 natural history collections.

COURSE WEBSITE

All course materials will be available on the course Moodle website including zoom recordings.

ACADEMIC INTEGRITY

Yukon University Academic Standards and Regulations

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 YukonU Academic Regulations & Procedures for further details about academic standing and student rights and responsibilities.

University of Alberta Academic Integrity and Code of Student Behaviour

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) 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.

All students at the University of Alberta are subject to the Code of Student Behaviour, as outlined at:

<http://www.governance.ualberta.ca/en/CodesofConductandResidenceCommunityStandards/CodeofStudentBehaviour.aspx> 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 attend all lectures and field trips, be engaged and courteous in all course activities, and to be on time for class. Please do not use cellular phones during class. Laptops are permitted for note taking and in-class work; however, please do not use laptops in class for non-class-related activities.

ELECTRONIC DEVICES

Other than cell phones, no electronic devices are permitted in class.

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).

Please note that some classes may be recorded using web conferencing software, and links to recordings may be posted on the class website.

ACCESSIBILITY AND ACADEMIC ACCOMMODATION

Yukon University is committed to providing a positive, supportive, and barrier-free academic environment for all its students. Students experiencing barriers to full participation due to a visible or hidden disability (including hearing, vision, mobility, learning disability, mental health, chronic or temporary medical condition), should contact [Accessibility Services](https://www.yukonu.ca/student-life/learning-matters/accessibility-services) (<https://www.yukonu.ca/student-life/learning-matters/accessibility-services>) for resources or to arrange academic accommodations: access@yukonu.ca.

TOPIC OUTLINE

Week	Dates	Topic
1	September 6	Course Introduction Natural History and Science The Modern Naturalist A short field trip to identify trees (Dendrology)
2	September 13	Tools of the Trade (field equipment and supplies) Recording field observations, note taking, journal-keeping The Technological Naturalist: iNaturalist, eBird and other apps

3	September 20	Natural history writing Natural history collections Northern Biomes: Introduction to the Taiga (Boreal Forest) and Arctic Tundra
4	September 27	Borealis (film) Biome Taiga (films)
5	October 4	Boreal Biome: Classification Distribution Ecozones Environmental characteristics Ecosystems Characteristic animal and plant species Processes that shape the boreal biome The Future (Conservation and Climate Change)
6	October 11	Boreal Biome (Tress & Plants)
7	October 18	Boreal Biome (Birds & Mammals)
8	October 25	Boreal Biome (Fish, Amphibians, Invertebrates)
9	November 1	Arctic Tundra Biome: 1. Classification 2. Distribution 3. Ecozones 4. Environmental characteristics 5. Ecosystems 6. Characteristic animal and plant species 7. Processes that shape Arctic biomes 8. The Future (Conservation and Climate Change)
10	November 8	Arctic Tundra Biome (continued)
11	November 22	Life in the cold: plant and animal adaptations to life in the north
12	November 29	Life in the cold: plant and animal adaptations to life in the north (continued)
13	December 6	Course Wrap-up & Review