School of Science

NOST 201

Natural History of the North

Fall 2025

3 Credits

Course Outline

INSTRUCTOR: Larry Gray & Gabriel Rivest

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OFFICE: N/A

TIME/DATES: Wednesdays 1:00-3:50 pm. A2308

OFFICE HOURS: TBA, please email to make an appointment.

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

Admission to the second year of the Northern Studies program, or admission to the Renewable Resources Management program, or permission of the instructor. 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.

EQUIVALENCY OR TRANSFERABILITY

Please be aware that receiving institutions determine course transferability. Find further information regarding course transferability here:
https://www.yukonu.ca/admissions/transfer-credit

LEARNING OUTCOMES

Upon successful completion of the 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 two 1.5-hour blocks) 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).

EVALUATION

Assignment	Grade	Due Date
Collection	10%	October 15
Photo Essays/Stories (2)	20%	October 22 & November 12
Occasional Reflection Papers (4)	20%	Sept. 16, Oct. 8, Nov 5, Nov 26
Article Review	10%	November 19
The Natural History of ……. You	20%	November 26
Natural History Journal	10%	October 22 & November 26
Final Exam	10%	December 10?

COURSE WITHDRAWAL INFORMATION

The last date to withdraw without academic penalty is Nov. 2, 2023. Refer to the YukonU website for other important dates.

TEXTBOOKS & 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.

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. https://www.yukonu.ca/policies/academic-regulations

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 for resources or to arrange academic accommodations: access@yukonu.ca.

TOPIC OUTLINE (Subject to change) *TBA!*

Week	Dates	Topic
1	September 3	Course Introduction Natural History and Science The Modern Naturalist A short field trip to identify trees (Dendrology)
2	September 10	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 17	Natural history writing Natural history collections Northern Biomes: Introduction to the Taiga (Boreal Forest) and Arctic Tundra
4	September 24	Borealis (film) Biome Taiga (films)
5	October 1	**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 8	Boreal Biome (Tress & Plants)
	October 15	READING WEEK
7	October 22	Boreal Biome (Birds & Mammals)
8	October 29	Boreal Biome (Fish, Amphibians, Invertebrates)
9	November 5	**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 12	Arctic Tundra Biome (continued)
11	November 19	Life in the cold: plant and animal adaptations to life in the north
12	November 26	Life in the cold: plant and animal adaptations to life in the north (continued)
13	December 3	REVIEW