School of Science

RRMT 125

Renewable Resources Measurements

Spring 2026

3 Credits

Course Outline

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Classroom: A2406
CLASS DATES: Apr. 25 – 5 May
FIELD DATES: Apr. 25 – 5 May

COURSE DESCRIPTION

RRMT 125 is a hands-on, practical course designed to equip students with field skills relevant to working in Yukon environments. Students will gain experience through a variety of activities including ice and snow surveys, permafrost assessment, basic forestry techniques, small engine mechanics, navigation in remote settings, camera trapping, and animal tracking. The course introduces field-based work related to Yukon fish, mammals, and birds. Emphasis is placed on integrating data collection, lab analysis, and classroom learning to build a well-rounded understanding of how these skills are applied in real-world northern resource management contexts.

PREREQUISITES

Completion of NOST 215 and GEOG 250 (or equivalent if in another program).

RELATED COURSE REQUIREMENTS

Students are expected to posses a level of physical fitness and preparedness that allows them to work in a field setting for a full workday. Activities include hiking, emergency preparedness, ethical and safe travel in the Yukon wilderness. Students should bring water, sun and other weather protection, snacks, and have footwear and clothing appropriate to be outside all day.

EQUIVALENCY OR TRANSFERABILITY

Students are reminded that it is the receiving institution that determines whether a course is acceptable as an applicable, equivalent course or if it may be transferred to their program for credit. Find further information at: https://www.yukonu.ca/admissions/transfer-credit

LEARNING OUTCOMES

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

1. apply a range of field-based sampling techniques, including ice and snow surveys, permafrost assessment, and basic forestry measurements, in northern environments,
2. demonstrate safe and effective navigation and decision-making skills in remote Yukon field settings using equipment such as GPS devices,
3. maintain and diagnose problems with basic tools and equipment, including small engines and field gear commonly used in natural resource work,
4. collect, record, and manage ecological data related to Yukon fish, mammals, and birds using recent technological methods and direct observation,
5. analyze and interpret field data through basic laboratory and classroom techniques to support resource management decisions, and
6. integrate practical field skills with theoretical knowledge to understand their application in real-world northern resource management contexts.

Secondary course objectives:

- Introduce local resource managers to students so they can try and establish contacts and learn about job opportunities.
- Practise or learn species identification skills of common Yukon plants, mammals, birds, fish, lichen (and mushrooms if practical) and a general familiarity with insects
- Introduce ethical, collaborative, and safe field work practices

COURSE FORMAT

Delivery format

The practical focus of this course incorporates mandatory field and lab activities. Daily activities will generally start in the classroom with a short introduction to techniques and theory. This will be followed by fieldwork in which sampling and data collection techniques are practised. Students will be expected to be present for all practical activities and are expected to work on assignments during the evenings. Students will be made aware by the instructor of the equipment they need to spend several hours outside each day, and are expected to come prepared accordingly.

Workload

This is a full-day field camp type course that incorporates lecture and lab into daily activities. Some portions of each day may be spent inside in a classroom or computer lab, while every day will include portions of outdoor field activities. Students can expect to spend full days with the course, from approximately 8:30 am until 5:00 PM.

EVALUATION

Attendance & Participation

This is an intensive, fast paced course in which it will be very difficult to make up work that is missed. Attendance is mandatory. A student may be dismissed from the course if more than 10% of scheduled contact hours are missed. Attendance, participation and professionalism is worth 30% of the final mark in the course.

Assignments

A series of assignments will be assigned throughout the course and based on the activities of each day. The assignments will be worth 30% of the final mark in total, with assignments weighted according to the workload and difficulty involved.

Exams

There is a final exam consisting of a practical field skills component and a written component. The final exam is worth 40% of the final mark in the course.

Attendance and Participation	30 %
Assignments	30 %
Final Exam	40 %
Total	**100%**

TEXTBOOKS & LEARNING MATERIALS

Students are expected to have a good plant guide, a bird guide ("bird book"), and a good understanding of how to identify common Yukon fish by the end of their program. Bringing field guides on field trips is greatly encouraged during this course.
Plants of Northern British Columbia Edited by A. MacKinnon, J. Pojar and R. Coupe. Revised edition

Birds of North America by C.S. Robbins, B. Bruun, H.S.Zim, J. Latimer and A. Singer. Revised edition 2001 or *equivalent field guide for western North American birds*.

Each student will require a waterproof notebook, clipboard, pencil, and calculator. Suitable (warm and waterproof) clothing for fieldwork is required. On most days we will eat lunch in the field, so a thermos or water bottle and packed lunch will be required.

COURSE WITHDRAWAL INFORMATION

Students may officially withdraw from a course or program without academic penalty up until two-thirds of the course contact hours have been completed. Specific withdrawal dates vary, and students should become familiar with the withdrawal dates of their program. See withdrawal information at www.yukonu.ca/admissions/money-matters

Refer to the YukonU website for important dates: www.yukonu.ca/admissions/important-dates

Refunds may be available. See the Refund policy and procedures at www.yukonu.ca/admissions/money-matters

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 (updated bi-annually) for further details about academic standing, and student rights and responsibilities: 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

Specific course topics will vary depending on the year, seasonal conditions, regional issues of importance, and the availability of guest professionals. In general, the course is a tour through the major disciplines of natural resources management, incorporating a typical field activity or measurement protocol in each discipline. Major regional issues will be incorporated. Local projects will be introduced where possible. Course topics and field activities may include, but are not limited to: field measurement basics, field mapping, GPS and compass navigation, hydrology and aquatic techniques, fish and fish habitat, birds and bird habitat, wildlife and wildlife habitat, toxicology, physiology (necropsy and/or dissection are often conducted), preservation of specimens for collections, other ecology topics, forestry and forest ecology.