School of Science

RRMT 137

Technical Skills and Practices in Renewable Resources Management

Fall 2025

3 Credits

Course Outline

INSTRUCTOR: Dr. Tara Stehelin and guest speakers
E-MAIL: tstehelin@yukonu.ca
OFFICE: A2513 or the biology lab, A2805
PHONE: (867) 456-6957
Dates and times: Tuesday and Thursdays 1:00 – 2:30 PM, LABS Friday 1:00 – 4:00 PM
CLASSROOMs: Tues. A2206, Thurs. A2408, and the lab will be in A2301 computer lab or outside

COURSE DESCRIPTION

This course focuses on a subset of technical skills and knowledge that will contribute to a successful career in natural resource management. Lectures focus on a diverse set of topics that include workplace safety, the dynamics of conflict, time management, ethics (professional codes of conduct) and resources management in a post-land claims environment. The mandatory computer lab component uses hands-on exercises that lead to practical computer use and basic data management.

The course topics have been chosen based on feedback from graduates and employers and aim to address knowledge "niches" that may assist students in achieving professional success. For example, students working in northern Canada need a good understanding of the complexities of how land claims agreements have affected day-to-day resource management and the role of co-management bodies. Renewable resource issues are often controversial and students will benefit from some background training in managing and resolving conflict and an understanding of some of the ethical perspectives facing the profession.

COURSE REQUIREMENTS

Admission to the Renewable Resources Management (RRM) program or permission of the instructor. In preparation for the lab, students should be comfortable using computers, and have some exposure to common computer applications, such as Microsoft Office suite, and online learning systems such as Moodle. Students without these skills may wish to take an introductory computer course (such as COMP 050).

EQUIVALENCY OR TRANSFERABILITY

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

LEARNING OUTCOMES

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

- describe the groups involved in Northern renewable resource management (e.g., various levels of government, First Nations managers of resources, and co-management organizations), their mandates, structures and interactions,
- practice applying skills that will enable them to work effectively in the renewable resource management field including:
    - Personal record keeping (e.g., statements, evidence, photographs, logs) and time management,
    - Communicating effectively in culturally diverse settings as well as in conflict situations
- recognize and utilize features of computer programs that minimize effort and repetition,
- understand how databases are designed for use in GIS systems (for mapping) and other applications (such as in R)

COURSE FORMAT

Weekly breakdown of instructional hours

Lectures: Three hours per week (2 classes of 1.5 hours)
Labs: Two hours per week, sometimes longer if we go on a field trip.

Delivery format

Lectures will be led by a main instructor and supplemented with input from guest speakers or local leaders and Elders. Topics will be presented through a combination of lectures and class discussions involving Renewable Resource Management professionals. This course will be delivered in a face-to-face format, both indoors in the classroom and outdoors (field trips). This is not an online course, although lectures can be provided synchronously online if requested by a student.

EVALUATION

Attendance and Participation

Regular attendance at both lectures and labs is required. Some of the course learning outcomes will be achieved through experiential learning so attendance and participation are critical.

Computer Lab: Late assignments may be penalized by -5% per day, and will likely not be accepted after the assignments have been returned to the rest of the class. In the interest of minimizing distractions during the computer lab, students are asked not to stray off task during scheduled class (no social media during class time).

ASSESSMENTS

Students must pass both the lecture and lab portions of the course to receive credit for the overall course. The final examination will be cumulative. Students are expected to write their exams as scheduled unless there are extenuating circumstances such as an exam conflict or serious illness.

Assessment breakdown:

Participation (in labs and field activities in particular)	15%
Lab marks (Assignments and quizzes)	35%
Semester project	15%
Group assignment	15%
Final Exam	20%
Total	**100%**

Lab Assessment Breakdown
(Min of 50% in lab required to pass the course)

Assignments	80%
Quizzes (5)	20%
Total	**100%**

COURSE WITHDRAWAL INFORMATION

The last day to withdraw from courses without academic penalty for the Fall semester is Fri. Oct. 31, 2025. Refer to the YukonU website for other important dates. https://www.yukonu.ca/current-students/important-dates

TEXTBOOKS & LEARNING MATERIALS

There is no specific textbook for this course. There will be many readings and documents that we will pull information from that will be provided on Moodle. Together Today for Our Children Tomorrow. 1973. Council of Yukon First Nations. If you need a printed copy of some of these, please request it, your Professor can print a reasonable amount for you if you prefer hard copies.

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.

Note that generative artificial intelligence (AI) tools such as Chat GPT can be useful in the same way as a web search or Wikipedia. They can be a starting point but cannot be used to do the work for you. Simply copying the output from something like Chat GPT and submitting it as your own work ***will be considered plagiarism*** the same as if you copied directly from a book, webpage, or classmate. Furthermore, appropriate referencing is expected in submitted work. If generative AI is used as part of your writing workflow, this must be indicated either as a footnote or endnote. Generative AI cannot be used as a reference source. Chat GPT and similar tools are not actual sources of information and should not be referenced as such, much as you would not reference

the results of a web search. References should be to the published scientific literature (these are peer-reviewed journal articles) or the popular scientific media (e.g., a magazine like Scientific News, Science, Cell etc.), or an Elder or Traditional Knowledge Holder.

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, neurodiversity, chronic or temporary medical condition), should contact Accessibility Services for resources or to arrange academic accommodations: access@yukonu.ca.

TOPIC OUTLINE

	DATE, WEEK of….	**TOPIC**	**Lab Topic** (These can change depending on weather or availability of guest speakers, etc.)
Week 1	Sept. 3	Course Introduction Essential University-level Study/Work Skills	Plant walk outside (please wear weather appropriate clothing) Vegetation Plot surveys, collecting data (meet in A2805 to gather equipment)
Week 2	Sept. 8	Yukon Land Claims Environment Yukon Resource Management "Regime"	How to speak to an Elder, reaching out, developing co-created projects (meet in A2805 to get ready)
Week 3	Sept. 15	Project Planning, collaboration or permission, respectful communication	*Field trip to Kwaday dun Kenji leaving entrance #4 at 11:00 am sharp, back at 3:45 pm*
Week 4	Sept. 22	Traditional Ecological Knowledge Western Scientific Knowledge, how to learn from and respect both paradigms *Due Sept. 25th: Statement on how to speak to Elders*	(computer lab) Basic data collection, organizing and summarizing data, note taking Types of data
Week 5	Sept. 29	Wildlife Management and Traditional Knowledge	(computer lab) Introduction to very basic data analysis, descriptive statistics
Week 6	Oct. 6	Field Research Skills *Due Oct. 9th: Generative AI use, and how to reference good sources*	Building and maintaining a database, Excel and basic introduction to R

Week 7	**October 13 – 17 Reading week**	**Work on Assignments**	
Week 8	October 20	Guest Speaker (all guest speakers to be confirmed, but tentatively….) Conservation Officer Services	Basic data analyses; descriptive statistics, make a graph in R
	Oct. 24		**Quiz #1** Basic data management
Week 9	Oct. 27	Guest Speakers Yukon Parks officers *Due Oct. 31: Field notebooks and reflections*	Forensics, note taking for investigations and reports
Week 10	Nov. 3	Guest Speakers Natural History Collections	Collections; how to collect and curate specimens
Week 11	Nov. 10	Professional Ethics *Due Nov. 14: Results section of a paper*	Curation – how to preserve specimens and store data in a database and/or Excel tricks – how to save time
Week 12	Nov. 17	Culture and Conflict Non-violent and/or Respectful Workplace communication module, exact date TBA	How to make and use graphs and other visuals to communicate
	Nov. 21		**Quiz #2** Collections, curation, note taking, and Excel tricks
Week 13	Nov. 24	Perceptions & Body Language *Due Nov. 27: Personal Ethics statement*	How to make a presentation on your work Professional posters (an introduction) **Quiz #3:** Communication
Week 14	Dec. 1	Unconscious Bias and Communications workshop *Due Dec. 5: Group project, RRMT network map for the Yukon*	No lab, work on group projects
	Dec. 5	Traditional Knowledge research	No lab, *work on course reflections*
	Dec. 9	Course Wrap Up & Review *Due Dec. 9: Course Reflection video or multimedia assignment*	
	Dec. 16, 9:00 – 12:00	**Final exam**	Cumulative, but mostly focused on the last half of the course, and on the "big picture" concepts.