

# School of Science RRMT 204 Global Solar Project Field course to Old Crow, YT

Term: Winter 2023 Number of Credits: 3

# **Course Outline**

INSTRUCTORs: Megan Skarnulis MA, Tara Stehelin, BSc, MSc, PhD, Logan Sherk, Millwright Instructor

E-MAIL: mskarnulis@yukonu.ca, tstehelin@yukonu.ca

**OFFICE:** A2513

**PHONE:** (867) 456-6957 (Tara)

**TIME/DATES:** Required meetings on Jan. 20, 27, Feb. 3, Feb. 10 3:00 – 4:30 in A2605, and other times TBA in preparation for travel TBA. Travel to Old Crow: March 25-31, 2023, Dates and times of final presentations TBA

**OFFICE HOURS:** Tara – Wed. 12:30 – 1:30 or book an appointment by email.

#### COURSE DESCRIPTION

This is a three-credit course in which students, with the guidance of a research supervisor, instructor, prepare, implement, and report upon studies or research in the field of renewable resources management. Students use research methodology and the scientific process. Participants are expected to demonstrate organizational skills, the ability to work independently, think criticality, and present oral and written reports to professional standards. Topics may cover any field relevant to renewable resources management and those which include traditional knowledge or relevance to the implementation of land claim settlements are particularly encouraged.

This offering of RRMT 204 has been created for a project to learn about culture, natural history, traditional knowledge, and renewable energy projects in a remote indigenous community in Old Crow, Yukon. Students are required to apply, which will include a statement of interest, and priority will be given to students that identify as indigenous, low-income or with disabilities.

### **PREREQUISITES**

Second-year standing in the Renewable Resources Management (RRMT) program or Northern Science diploma or other science program with permission of the coordinator/chair of the program and permission of the course instructor. Students in the Trades were also welcomed to apply and join the field course. Student must work closely with the instructors throughout the course to ensure all preparations are made to travel and participate effectively.

# **COURSE REQUIREMENTS**

Prerequisite(s): Second-year standing must include first-year English, and at least one of first-year Chemistry, Environmental Science, Geography, or Biology (or equivalents).

(For international versions of this course, Students must possess a valid Canadian passport prior to travel, as well as have all needed vaccinations for the countries of travel.)

Students must be comfortable travelling in locations that are remote, with little or no internet or phone access, in varied, unexpected and possibly uncomfortable conditions (such as sleeping in shared quarters and tents).

#### **EQUIVALENCY OR TRANSFERABILITY**

Please be aware that receiving institutions determine course transferability. Find further information at: <a href="https://www.yukonu.ca/admissions/transfer-credit">https://www.yukonu.ca/admissions/transfer-credit</a>

#### **LEARNING OUTCOMES**

Upon successful completion of the course, a student will be able to;

- plan, investigate, and report on the research topic, project background, and location,
- travel and participate fully in field activities, planning, and learning to install, fix, and/or maintain renewable energy projects in remote communities and work respectfully and collaboratively with local indigenous cultures and diverse groups,
- prepare an outline, first and final written drafts to deadlines, for final presentation to professional standards on the results of the project,
- demonstrate an attitude of respect for knowledge holders, the land and people visited, other student participants in the project, organizers, and instructors, including those on-site.

#### **COURSE FORMAT**

Students will, within the framework of a schedule, formulate a travel and safety plan, demonstrate that they have all required documents and vaccinations to travel, learn the history of the project, and learn some history of the land and first peoples of the area prior to leaving on the trip – this will require some reading, preparation, and demonstration of knowledge using our online learning management system (Moodle). Students will then participate in a field trip to a remote indigenous community. Upon return, students will prepare a short oral presentation at a mini-conference (or poster) demonstrating their knowledge and participation in the project.

#### **ASSESSMENTS**

will include at minimum

- a) a statement about preparedness to travel and acceptance of risks involved, including a signed risk assessment form completed on Moodle,
- b) a written statement on the purpose of the project and why the student wishes to learn about it and participate,
- c) outcomes to be completed on the trip (learning about, maintenance, and installation of the solar projects),
- d) a final product (oral presentation or poster) that would be used to demonstrate successful completion and participation in the project.

# **EVALUATION**

Predeparture activities (classroom sessions) and preparation for travel – all documents	20%
ready, 4 weeks before departure	

Progress report and engagement – participation in all activities and effective contribution – during the trip	50%
Final oral (or written/poster) presentation of project results and reflection (demonstrating engagement and effective help in the project) – and participation in the mini-conference - upon return	30%
Total	100%

**TEXTBOOKS & MATERIALS:** None required, but students will be required to access and use scientific literature for final reports and correctly reference these works.

#### COURSE WITHDRAWAL INFORMATION

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

#### **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

# **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 <a href="Accessibility Services">Accessibility Services</a> (<a href="https://www.yukonu.ca/student-life/learning-matters/accessibility-services">https://www.yukonu.ca/student-life/learning-matters/accessibility-services</a>) for resources or to arrange academic accommodations:

access@yukonu.ca.

#### **Outline and Schedule**

Dates	Topic	Location/details
Jan. 20; 3:00 – 4:00 pm	Trip plan changes, ideas for projects to focus on in Old Crow, Tara Stehelin, Megan Skarnulis	A2605 and online
Jan. 27; 3:00 – 4:30 pm	Risk Management Assessments, planning exercises	A2601 and online
Feb. 3; 3:00 – 4:30 pm	Information about location, geography, local wildlife, microplastics, Old Crow Trivia	A2605 and online
Mar. 17; 1:00 – 2:30 pm	Final preparation for travel (Megan)	A2605 and online

March 25-31, 2023	Travel	
April 13th	Final Presentations and student symposium	

# **Travel and Field Activity Schedule:**

	Saturday March 25	Sunday March 26	Monday March 27	Tuesday March 28	Wed. March 29	Thurs March 30	Fri Marcl
700	Leave YXY						
800	Travel Day	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	Travel day
900		Snowmobile Training	Snowshoe building with elder	Snowshoe building with elder	Dog Sled: <b>Group B</b>	Climate Change Snowshoe Hike/Animal Tracks	Check in t
1000		with Logan	Snowshoe building with elder	Mammal population or winter Ecology	Group B: Curriculum based work: Water Research	Microplastic sample collection	Depart OO
1100				Group A: Travel		Old Crow	
1100	Arrive OC Lunch at			to OC	Survival Hike	Mountain	]
1200	YukonU OC Campus	Lunch	Lunch	Group B: Travel to OC	Lunch	Lunch in Old Crow	on plane
1300	Town & Mountain Tour of Old Crow	Ice Fishing with Elder Elizabeth	Team Building: Continued	Power System Walk with MR and VGFN	Travel to OC	Park Canada Visit (Brenda Frost)	
1400	with Guide		Dog sled: <b>Group A</b>		Solar and wind systems walk	break	YXY
1500			Group B: Snow sampling	Solar	Snowmachine workshops	Cultural history	
	Travel to Tl'oo Kut Camp and Camp set up	free time or work on student projects	Community Based Research	break	Prepare for feast	(tour of John Tizya center)	
1600							
1700	Tea/fire/Story Telling	Tea/fire/Story Telling	Tea/fire/Story Telling	Solar panel walk with Michael Ross	Prepare for feast	Free time at Campus	
1800	Dinner	Dinner	Dinner		Community Feast (Cultural Centre)	Dinner/Sleep in town @ school (shower?)	
1900	Group check-	Group check-in Team building activity	Group check-in	Dinner	Youth Focused	Sports night with youth hosted by YukonU at	

		school (snowmachine workshops)
2000	Group A: Return to Camp	
	Group B: Free time at Campus	
	time at Campus	