

CU FIELD ACTIVITY SAFETY PLAN

This template is designed to help the supervisor and worker recognize, assess and control potential hazards while conducting field activities. It is also designed to help meet due diligence obligation under the Ontario Occupational Health and Safety Act. The plan must be prepared in advance and shared with all participants and modified to reflect the risk as required. It should also be available in the field for consultation. The Principal Investigator or Activity Leader should keep a copy of the plan for 3 years. **Complete all applicable fields. If another Field Safety Plan is in place in collaboration with another institute or an industrial partner, you can attach that and complete Sections A, B, C, S and T in the CU Field Activity Safety Plan.**

A. Principal Investigator/ Activity Leader Contact Information

Name	Alexandre Guillerez (MSc) and Elliott Skierszkan (P.I.)
Department	Earth Sciences
Work Phone	
Home Phone	
Cell Phone	Xxx-xxx-xxxx (Alex); xxx xxx xxxx (elliott)
Email	alexguillerez@cmail.carleton.ca elliottskierszkan@CUNET.carleton.ca

B. Purpose of Travel

☒ Field Research

☐ Field Trip

☐ Field Course

☐ Other

Please describe other

C. Activity Participants (if applicable)

All participants should be fully aware of the risks of this field activity and accept them by completing an Informed Consent. Complete the following table for all participants. **For field trips and courses, attach class list, all waivers and/or informed consent forms.**

Name	Carleton ID Number	Position/Role in The Activity (leader/ first aider)	Field Activity Participant Information Form Completed	Informed Consent Form Completed (if applicable)	Medical Insurance Coverage Confirmed	International Travel Registration Completed
Alexandre Guillerez	XXXXXXXXXX	Graduate Student	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Elliott Skierszkan	XXXXXXXXXX	Faculty Member	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

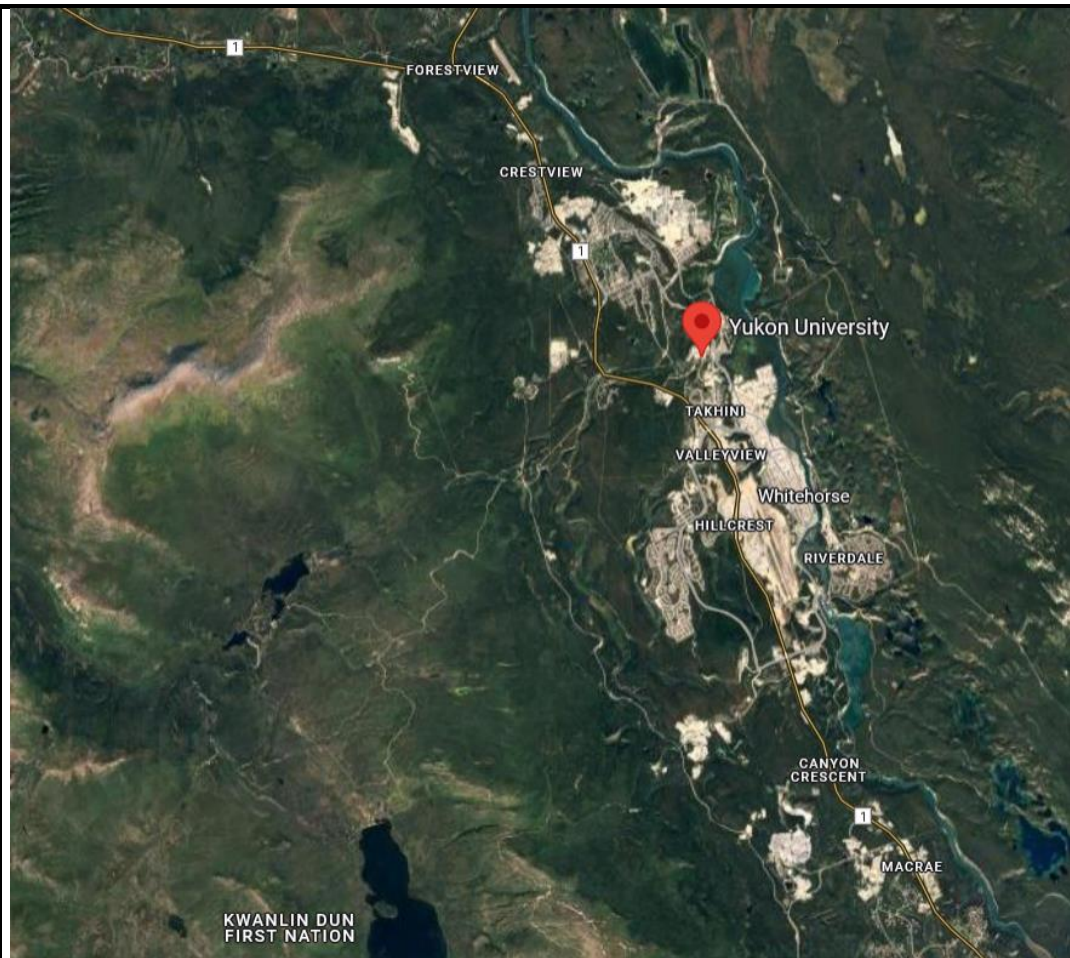
D. Course Information (if applicable)

Course Number	
Course Name	

E. Activity Description (Add more lines if multiple destinations)

Date of Departure	06-15-2025
Date of Return	07-04-2025

Destination of Travel	Whitehorse, YT
Industrial Partner or Associated Institution (if applicable)	Yukon University
Nearest City/Town and Distance	Whitehorse, YT
Geographical Site (Google coordinates and screenshot)	60.74994726361781, -135.0974108614619 (YukonU)



Activity Description	Rock Sampling, Sample preparation, Workshops, Thin section analysis
----------------------	---

F. Travel Itinerary

Please document your complete itinerary and travel related activities.

Leg	Date	Location	Accommodations with address (e.g. hotel, tent, cabin)	Contact Number
1	6-15-2024	Whitehorse	Private accommodations xx Street Whitehorse	xxx xxx xxxx
2				
3				

G. Transportation

Include all transportation used including plane, boat, on-road and off-road vehicles. Dangerous Goods must never be transported without proper insurance and authorization.

Leg/Destination	Type (e.g. air, road, off- road, snowmobile)	Details (e.g. make, model)	Source (e.g. CU, personal, rental)	Insurance
1	Road	To be determined	Rental – Driving Force	<input checked="" type="checkbox"/>
2				<input type="checkbox"/>

3				<input type="checkbox"/>
---	--	--	--	--------------------------

H. Drivers/ Vehicle Operators

Please see the Office of Risk Management website for Carleton vehicle driver authorization. Should a collaborator's vehicle be used, a Certificate of Insurance must be obtained.

Transportation Type	Vehicle Operator's Name	License Type/Class
Car	Alexandre Guillerez	G
Car	Elliott Skierszkan	G
Car	Joel Cubley	G

I. Permits and/or Ethics Clearance

These include such permissions as internal Animal Care Committee, Biohazard Committee or Research Ethics Board approvals.

Permit/Approval Description	Permit number	Date Obtained	Expiry Date
Yukon Science Research Permit	25-23S&E	23 April 2025	31 December 2025

--	--	--	--

J. Hazard Assessment, Control, and Inspections

Identify possible risks associated with the field activity, the controls that will be applied and the residual risk level. Refer to the Carleton University Field Activity Guidelines Appendix A and Appendix B

Hazard	Consequence	Likelihood	Unmitigated Risk Level (High/Med/Low)	Mitigation	Residual Risk Level (with controls)
Driving	Major	B	H	<ul style="list-style-type: none"> Valid driving license required Obey all traffic laws Do not drive if drowsy Do not drive impaired Do not drive distracted (no cell phone use while driving) Complete driver pre-check list 	L
Interacting with members of the public	Major	D	M	<ul style="list-style-type: none"> Make appointments with property owner ahead of arrival on a private property Have telephone number of property owner on hand Wear high-visibility vest to identify yourself as a worker Greet property owner and confirm permission to work on their property before commencing work 	L
Prolonged exposure to elements resulting from field work	Minor	C	M	<ul style="list-style-type: none"> Always carry communication devices: Cell-phone, or InReach if out of service Carry rain jacket, rainpants, insulating jacket, waterproof boots, longjohns, tuque, gloves, bug-net Always carry first-aid kit Always carry ample drinking water Elliott has wilderness first aid training Carry adequate water, food for day trips around Whitehorse 	L
Heavy Lifting	Minor	B	M	<ul style="list-style-type: none"> Several equipment pieces weigh 40 – 70 lbs Visually identify heavy items prior to lifting Use proper lifting technique Ask for assistance as required for heavy items 	L
Slips, Trips, Falls	Minor	B	M	<ul style="list-style-type: none"> Use caution while walking on uneven terrain Wear sturdy boots Use trekking poles as required (e.g., minor stream crossings) 	L

Working with hazardous chemicals	Minor	C	M	<ul style="list-style-type: none"> • Wear nitrile gloves and protective glasses when handling acids for sample preservation. • Work in well ventilated area while preserving samples with acids. • Where insulating gloves while handling dry ice. • Dry ice quantities will be small enough (<50 lbs) to avoid asphyxiation hazards. • Do not use large amounts of dry ice in poorly ventilated areas. • Review and carry SDS: nitric acid 50 % v/v; sulfuric acid 0.16N 	L
Wildlife encounters: bears, cougars, moose	Major	C	H	<ul style="list-style-type: none"> • Always carry bear mace, bear bangers. Use appropriate holster for bear mace. • Make noise while hiking through bush • Never travel alone 	L
Water Immersion	Minor	B	M	<ul style="list-style-type: none"> • Use caution around creeks, especially on slippery and uneven surfaces. • Do not enter fast-flowing creeks with flow above knee. • Do not enter water if the depth cannot be confirmed (e.g., by probing) • Seek alternate, easier creek crossings if crossings are required. Consider use of hiking poles. 	L
Diabetic emergency	Major	C	M	<ul style="list-style-type: none"> • Team member X has Type 1 diabetes • Refer to Diabetes Management Plan (below) 	L
Cuts	Moderate	C	M	<ul style="list-style-type: none"> • Use cut-resistant gloves while cutting • Think before using blade • Cut away from body • Keep all blades stowed away while not in use • Wear long-pants while hiking through bush 	L
Allergies	Major	C	H	<ul style="list-style-type: none"> • Identify allergies within field-personnel team (e.g., bee stings, food allergies). • Carry at least 2 doses of epipen and anti-histamine (e.g., Benadryl) if there is history of severe allergic reactions (anaphylaxis). 	L
Lightning	Major	D	M	<ul style="list-style-type: none"> • Review available weather reports before entering the field. • Seek refuge in low-lying area; spread out. If possible, return to vehicle. • Avoid large trees if in forest • If at risk, assume lightning position (crouch low, duck head, close eyes wrap arms around legs/cover ears with hands to avoid hands touching ground). <p>Wait > 30 minutes after last lightning strike before moving again.</p>	L
ATV/Side-by-side Use	Major	C	H	<ul style="list-style-type: none"> • Wear helmet • Drive < 20 km/hr • Check gas and engine status prior to leaving • Review safe operation of ATV prior to use • Use GPS to stay oriented while travelling on exploration/mining roads • Avoid driving on trails that are overgrown or washed out. Scout uncertain passages by foot before clearing for quad travel. 	L
Drivepoint Piezometer installation	Minor	C	M	<ul style="list-style-type: none"> • Maintain clear work area before hammering in drivepoint piezometers. • Wear PPE: protective gloves, glasses, sturdy footwear, and ear protection 	L
Crawl spaces	Major	D	M	<ul style="list-style-type: none"> • Verify that space is well ventilated. • Do not enter confined space 	L
Off-road driving	Major	C	H	<ul style="list-style-type: none"> • Use 4x4 high-clearance vehicle • Know when it is appropriate to use 4wd (4Hi, 4Lo) 	L

				<ul style="list-style-type: none"> • Drive slowly • Know vehicle entry/exit angles and ground clearance • Scout out any uncertain areas on foot before driving • Carry self-rescue kit: Shovel, recovery rope, shackle • If possible, drive with two vehicles 	
Rock sampling	Major	D	M	<ul style="list-style-type: none"> • Maintain situational awareness with respect to unstable/loose slopes and proximity of peers • Wear safety glasses while hammering. • Wear hard-hat when working below unstable cliffs. • Do not approach unstable slopes after heavy rain. 	L
Geological sample processing	Major	D	M	<ul style="list-style-type: none"> • Complete YukonU rock prep lab training protocols for rock preparation (crushing, pulverizing) prior to working in rock preparation lab. • Wear appropriate PPE: face shield and safety glasses; respirator, steel-toed boots, hearing protection 	L

K. Waste Disposal

Participants must remove any waste generated or brought to the field location.

Will hazardous waste be generated at the field site?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
If yes, describe the plan for disposal of hazardous waste.		

L. Training

It is the legal responsibility of the supervisor to conduct a training needs assessment and determine the training required to ensure the participant remains safe working around the declared hazards and to confirm completion of the training.

Participant	Training Required	Training Completed
Guillerez, Skierszkan	<u>Training by YukonU rock prep lab supervisor prior to use of rock prep equipment (crusher, pulverizer, saw). Guillerez was trained in 2024 and will obtain a refresher in 2025 before using the equipment.</u>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

		<input type="checkbox"/>
--	--	--------------------------

M. Equipment

It is the legal responsibility of the supervisor to ensure all participants are trained in proper use of all equipment, and that all equipment is maintained and inspected according to the manufacturer's guidelines. All equipment should be listed in the event it is lost, stolen, or damaged to assist in insurance claims

Type (e.g. saw, firearm)	Source (e.g. CU, personal, rental)	Personal Protective Equipment	Written Procedure
Rock Saw	YukonU / YGS	face shield and safety glasses; respirator, steel-toed boots, hearing protection	<input checked="" type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

N. Emergency Contact Information

Emergency Contacts	Name	Contact Number
University Contacts		
Department (On campus point of contact)	Peter Crockford	xxx xxx xxxx
CU Campus Safety Services		(613) 520-3612

CU Environmental Health and Safety/ ORM		
Field Contacts		
Local Contact (e.g., collaborator)	Joel Cubley – YukonU Matt Lindsay - USask	XXX XXX XXXX XXX XXX XXXX
Local Emergency Response Number (e.g. 911)		911
Local Law Enforcement Office	Yukon RCMP: 4100 4th Avenue Whitehorse YT Y1A 1H5	867-667-5555
Designated First Aid Provider	Elliott Skierszkan	XXX XXX XXXX
Other (e.g., local guide)		

O. Canadian Embassy/Consulate

City of the closest Canadian Embassy/Consulate	N/A	Local Emergency Contact Number for closest Canadian Embassy/Consulate	N/A
Canadian Consulate 24- hour email (Ottawa)	sos@international.gc.ca	24-hour Emergency Contact Number (Ottawa)	+1-613-996-8885

P. Emergency Action Plan

Complete the table by listing potential emergencies and describing relevant procedures.

Potential Emergencies	
-----------------------	--

✓ Fire Safety Procedures	<p>Contact the fire department (911) as soon as possible if fire is spotted, and evacuate the affected area</p> <p>Check hot-burning appliances and other potential fire hazards to ensure they are working properly and not running by accident</p>
✓ First Aid Procedures	<p>Contact 911 if the emergency is serious to warrant an ambulance</p> <p>Keep first aid kit on person at all time</p> <p>Familiarize with components of kit</p>
✓ Rescue and Evacuation Procedures	<p>Contact 911 as soon as possible,</p> <p>Stay away from areas too remote for cell signal</p>
✓ Other Potential Emergency Procedures	<p>Traumatic injury or illness or mental health concern while in the field: Perform first aid, contact 911 as soon as possible.</p>
Check In Procedures	<p>This fieldwork takes place in an urban environment (City of Whitehorse) with full services that largely does not require daily safety check-ins.</p> <p>For any field work not in cellphone range, a safety check-in via InReach Messenger will take place with a local emergency contact (TBD). The emergency contact will be given an approximate work area. Check-ins during the day will occur:</p> <ul style="list-style-type: none"> -Upon entering the field, typically in the morning -1 PM (set an alarm) -Upon returning from the field, typically in the evening
Operational Procedures for Emergency Response Equipment	<u>N/A</u>
Accessing Medical Care Procedures	Diabetes procedure at end of form

Q. Communications

	Device type (e.g. satellite, cellular, radio)	Contact Number	Time of day monitored for check-in
With outside			
	Cell Phone InReach	XXX-XXX-XXXX Elliott.skierszkan@inreach.garmin.com	See check-in procedures above
Within Field Group			
	Cell Phone	xxx xxx xxxx, (xxx) xxx xxxx	See check-in procedures above



R. Immunizations/ Prophylaxis

Please indicate all immunizations that are required or recommended for the specific destination.

Travel Immunization/Prophylaxis Requirements		
<input type="checkbox"/> Altitude sickness medication <input type="checkbox"/> Polio <input type="checkbox"/> Diphtheria <input type="checkbox"/> Rabies <input type="checkbox"/> Hepatitis A <input type="checkbox"/> Rubella <input type="checkbox"/> Hepatitis B	<input checked="" type="checkbox"/> Tetanus <input type="checkbox"/> Japanese encephalitis <input type="checkbox"/> Tuberculin testing prior to departure <input type="checkbox"/> Malaria <input type="checkbox"/> Measles <input type="checkbox"/> Typhoid <input type="checkbox"/> Meningococcal	<input type="checkbox"/> Yellow Fever <input type="checkbox"/> COVID-19 Other (specify) <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____

S. Acknowledgement and Attestation

I have been fully informed of the risks of this field activity. I have reviewed the Field Activity Safety Plan and any additional protocols and will comply with established safety procedures.

Name	Signature	Date
Alexandre Guillerez		05/18/2025
Elliott Skierszkan		05/16/2025

T. Approvals

I acknowledge that this safety plan has been prepared in keeping with the requirements of the Carleton University Field Safety Program. The plan accurately describes the scope of the Field Activity, identifies the foreseeable hazards, and documents the control measures to manage the associated risks. I affirm that the participants will be appropriately briefed and will receive appropriate training prior to participating in the activity.

Elliott Skierszkan, Assistant Professor

Name & Title [Principal Investigator/Activity Coordinator]



Signature

Date 05/16/2025

I certify that I have reviewed and approved the above Field Activity Safety Plan.

R. Tim Patterson

Name & Title [Departmental Chair]

Departmental Chair.

Signature *R. Timothy Patterson*

Date

20 May 2025

I certify that I have reviewed and approved the above Field Activity Safety Plan.

Name & Title [Faculty Dean]

Signature

Date

Send the approved Field Activity Safety Plan to the Office of Risk Management at ehs@carleton.ca

1. Diabetes management for Team member X

Team member X is an insulin-dependent type 1 diabetic and uses an insulin pump.

Prior to entering the field, X will discuss his diabetes as per the points listed below with field assistants to train them on diabetic emergency procedures.

The primary concern for type 1 diabetics is low blood sugar, which is a medical emergency and requires immediate treatment. X has low blood sugar if his blood sugar is < 4 mmol/L.

Symptoms of low blood sugar include: fatigue, hunger, difficulty speaking, sweating, difficulty concentrating, confusion, pale skin, irritability. Severe and untreated low blood sugar can lead to irrational behavior, loss of consciousness, seizure, and coma.

Treatment for mild hypoglycemia is consumption of sugar (e.g., candy, juice, pop, honey, etc.) and is self-managed. Symptoms should dissipate within 5-10 minutes and X can resume normal work activity.

Severe hypoglycemia may not be self-manageable (e.g., due to inability to concentrate, or loss of consciousness). Under these circumstances X carries an emergency glucagon kit that can be administered through intramuscular injection into the thigh or buttock. Glucagon preparation and administration instructions are in the kit and should be reviewed with X prior to fieldwork commencing. Hypoglycemia requiring glucagon injection requires evacuation to a hospital for follow-up medical evaluation.

X will carry with him at all times the following diabetes kit: candies and snacks, Dexcom continuous glucose sensor paired with cell phone, blood-test kit, emergency glucagon kit, insulin vial, syringes.

X will monitor his blood sugar as needed (typically every ~3 hours during the day) and if his blood sugar is low, may require a few minutes for treatment with a sugary snack.

NEVER ADMINISTER INSULIN WITHOUT MEDICAL PROFESSIONAL ADVICE (i.e., a doctor).