

Fieldwork Safety Guide for the Department of Earth and Environmental Sciences

Fieldwork is an integral part of studying the natural world, but it also presents unique challenges and potential hazards. This safety guide is designed to help ensure the safety and well-being of all participants during fieldwork activities. Additionally, Instructors, TAs, and students are expected to adhere to the [CU Rules of University conduct](#) and the [University Standards and Discipline](#) while conducting fieldwork. Please read and adhere to the guidelines below carefully.

Before Fieldwork:

1. Register the trip with Columbia if required:

- o Any international trip involving undergraduates must be registered, approved, and follow each school's undergraduate international travel policy.
- o For Columbia travel, instructors need to register the trip at:
<https://globaltravel.columbia.edu/content/register-trip>
- o For international travel, once the trip is registered, each student must register:
<https://travelpolicy.undergrad.columbia.edu/login>
- o International trips through Barnard should follow directions on:
<https://barnard.edu/international-travel#barnard-international-travel-policy>
- o After the undergraduate travel review committee confirms a student's application, they will receive an email.
- o Then they need to login again to:
 - Complete the online UTRC Pre-Departure Orientation
 - Sign the [Assumption of Risk, Waiver, and Release Form](#)
 - Certify that they will follow Columbia Policies abroad
- o Students must also register their travel through International SOS My Trips:
<https://globaltravel.columbia.edu/content/isos-mytrips>

2. Risk Assessment:

- o Conduct a thorough risk assessment of the field site and activities.
- o Identify potential hazards such as terrain, weather conditions, wildlife, and human factors.
- o Communicate risks to students during the beginning of the semester, before the end of the add drop period
- o Make sure each student registered with Columbia and completed the CU Assumption of Risk, Waiver and Release

3. Emergency Plan:

- o Develop an emergency plan prior to leaving that includes procedures and roles for medical emergencies, evacuation, communication, and contacting emergency services.
- o Ensure all participants are familiar with the emergency plan and their roles, and know how to respond in different scenarios.
- o Instructors are to share emergency contact information for all students, TAs, and themselves with the DEES office in case of an emergency (information included in CU Assumption of Risk, Waiver and Release)

4. Communication:

- o Establish a reliable means of communication, such as two-way radios, cell phones, or satellite phones.
- o Maintain regular check-ins with a designated contact person or base camp.
- o Instructors, TAs, and students should share preferred methods of contact (phone number, WhatsApp, GroupMe, etc.) while in the field.
- o Instructors are to check for 100% of participants at the end of each stop on the itinerary.

5. Packing:

- o Instruct students to pack weather-appropriate clothing, gear, and personal care items. Instructors may share a suggested packing list for the field.
- o Assess local customs and sensitivities about clothing and behavior in public places.
- o Assess opportunities for acquiring medication and personal care/hygiene products in the field.
- o Costs for any safety equipment required for the trip will be covered by the Department.

6. Course Information and Itinerary:

- o Prior to trip departure, all students will be informed of the required coursework during fieldwork, and the grading policy that follows. Changes to the required coursework and grading scheme may be made at the discretion of the Instructor.
- o Distribute a detailed itinerary of the trip, including excursions, accommodations, etc. to share with students and DEES office. Instructors should do their best to accommodate and include designated breaks to access restrooms, water, food, etc.
- o Should any student require special accommodations in the field, encourage students to discuss this with Disability Services and the relevant instructor.

During Fieldwork:

1. General Group Safety:

- o Always work in groups of three people at a minimum, especially in remote or hazardous environments.
- o Stay together and maintain visual contact with fellow participants.
- o Assign roles and responsibilities within the group, including a designated leader and first-aid provider.
- o Be mindful of others who may be adapting to physical/mental health challenges in the field
- o Respect all races, ethnicities, genders, and sexualities of all instructors, TAs, students, and locals on the trip to create a safe and inclusive field excursion.
- o Prohibit the consumption of alcohol and other substances while in the field, and before or during the operation of motor vehicles or potentially dangerous equipment.
- o Clean and inspect field equipment after each use.

2. Environmental Awareness:

- o Be aware of your surroundings and potential hazards such as unstable terrain, steep slopes, cliffs, water bodies, and weather changes.

- o Respect wildlife and their habitats. Keep a safe distance and avoid disturbing animals whenever possible.
 - o Adhere to site/park rules when applicable
- 3. Hydration and Nutrition:**
- o Stay hydrated by drinking plenty of water throughout the day, especially in hot or humid conditions.
 - o Bring extra water jugs to store in vehicles.
 - o Pack nutritious snacks and meals to maintain energy levels during fieldwork.
 - o Prohibit the consumption of alcohol and other substances while in the field.
- 4. First Aid and Medical Emergencies:**
- o Carry a well-stocked first aid kit and know how to use its contents. Have the first aid kit placed in an easily accessible area.
 - o Report any injuries or medical concerns to the designated first-aid provider and seek medical attention if needed.
 - o Be prepared to administer basic first aid procedures such as wound care, CPR, and treatment for heat-related illnesses.
- 5. Personal Protective Equipment (PPE):**
- o Wear appropriate clothing, footwear, and protective gear for the field conditions (e.g., sturdy boots, weather-appropriate clothing, gloves, helmets).
 - o Use sunscreen, insect repellent, and other personal care items as needed.
- 6. Weather Conditions:**
- o Monitor weather forecasts before and during fieldwork.
 - o Be prepared for changing weather conditions by bringing appropriate clothing and gear (e.g., rain gear, cold weather clothing, sun protection).
- 7. Protocol for optional excursions:**
- o Portions of the fieldwork/field trip may be made optional for students. Such excursions will be clearly communicated. If students choose to participate in optional excursions, students, TAs, and Instructors are still expected to follow the CU Rules of University Conduct, the University Standards and Discipline, and the guidelines outlined in this document.
- 8. Accommodations:**
- o Accommodations may change throughout the trip depending on the itinerary. Instructors will ask for rooming preferences, or otherwise assign roommates at random. Instructors should ensure that students feel safe and comfortable with roommates and varying levels of privacy.
- 9. Responding to conflict:**
- o Create an environment free from [Discrimination and Discriminatory Harassment](#)
 - o Instructors, TAs, and students are expected to adhere to the [CU Rules of University conduct](#) and the [University Standards and Discipline](#) while conducting fieldwork.
 - o For concerns, please visit the [Office of Institutional Equity website](#).

After Fieldwork:

1. Debriefing:

- o Conduct a debriefing session to discuss the fieldwork experience, lessons learned, and any safety concerns.
 - o Document any incidents, near misses, or hazards encountered during fieldwork.
2. **Equipment Maintenance:**
- o Sort and clean all equipment in preparation for future fieldwork.
 - o Repair or replace damaged equipment as needed to ensure safety for future fieldwork.
3. **Feedback:**
- o Provide opportunity for anonymous feedback on the field course experience, including safety protocols, to forward to course organizers or supervisors.
 - o Suggest improvements for future fieldwork activities based on your observations and experiences.

By following these guidelines and exercising caution and preparedness, we can ensure a safe and successful fieldwork experience for the participants.