



ONTARIO AGRICULTURAL COLLEGE

SCHOOL OF ENVIRONMENTAL SCIENCES

School of Environmental Sciences Safety Orientation

Welcome to the School of Environmental Sciences. The purpose of this document is to provide you with a general safety orientation so that you may acquire the necessary resources to help protect yourself in the work environment. There are many resources available on campus that can assist you with safety knowledge and questions. Our Safety committee can help you with many specific procedures in our department. Environmental Health and Safety is a very comprehensive resource. All students, staff and faculty must complete the online W.H.I.M.S course offered by EHS before they begin work in SES. It is the responsibility of the supervisor, usually the faculty member, to provide a safe workplace for students, staff, and employees. It is also the responsibility of all people working in SES to understand and follow all documented safety procedures. If you do not understand or feel unsafe performing a particular task inform your supervisor, the Safety Committee, or the Director of SES.

Covid 19 protocols are posted online on the University website.

Field & lab activities must be documented in an approved research management plan. Students should review the document before starting their research. Any concerns can be addressed to their supervisor, grad coordinator, Dr. Paul Sibley, Director of SES or Ian Turner SES Admin. Officer.

It is essential that you feel safe and are protected while working at the University. We are here to help you in any way we can. Do not be afraid of asking for assistance.

Emergency Procedures and Workplace Hazards

If you have an accident and require medical attention, take care of that immediately then report all injuries within 24 hours to: Ian Turner our SES admin officer. If there is a fire leave the building immediately through the nearest exit. Do not go back into the building under any circumstances until you are called back. Seek shelter if the weather is inclement. We have designated fire marshals that will direct you out of the building. If there are floods, loss of power, alarms etc. please notify Ian Turner or Peter Smith as soon as possible. If you are working alone be extra aware of your personal safety. It is always advisable to inform someone how long you will be working and when you expect to be home. Try not to attempt potentially dangerous procedures without another person around. Always place your valuables; laptops, cell phones, wallets in a secure place before leaving your office or laboratory and lock your door. Thieves only need a few minutes to acquire your valuables. Do not prop open outside doors. It is very easy to forget you have done so.

School of Environmental Sciences
50 Stone Road East
Guelph, Ontario, Canada N1G 2W1
T 519-824-4120 x56934
example@uoguelph.ca
uoguelph.ca/ses

IMPROVE LIFE.

Laboratory Safety and Protocol

No food or drinks are allowed in laboratories. Most laboratory equipment should have standard operating procedures and training. Do not use equipment if you have not been trained. Some have logbooks that you are required to fill out. If you borrow equipment or chemicals from someone, ask them first. If you damage something inform your supervisor as soon as possible. Always return equipment in the state you found it. When transporting chemicals or glassware use a rubber carrying tote. Only perform sample preparation in designated areas. Be careful transporting balances or other sensitive, expensive instruments.

Chemical, Biological and Physical Safety

Make sure you have taken the W.H.M.I.S course from Environmental Health and Safety. Familiarize yourself with the appropriate M.S.D.S for all chemicals you use in the laboratory. Each lab should have an up-to-date list of all chemicals. Read the M.S.D sheet carefully so that you thoroughly understand the safety protocols associated with every chemical you use. Chemicals should be safely stored so that there are no incompatibility hazards. Solvents and flammable chemicals should be stored separately in the proper cabinet. There are many different grades and quantities of chemicals. Make sure you purchase the appropriate chemical grade and quantity. Always use protective equipment that is suitable for your experiment. Try to wear a lab coat while in the lab and do not wear open toed shoes. Use the proper eye wear, ear protection, gloves, aprons, face shield, masks, fume hoods and ventilators for your experiment and chemical hazard. Make sure you know where the fire extinguisher, spill kits, eyewash stations and showers are in your lab. Ensure that there are no obstructions that prevent you from accessing the eye wash station or shower in case of an emergency. Make sure the fume hood you use is working properly and is free of clutter. Make sure you post an experiment in progress notification that includes your name, supervisor, special precautions, protection, and chemicals in use. Make sure all glassware is labeled with the chemicals in use and the date. Do not put any chemicals or wastes down the sinks. Each lab is responsible for their own waste. EHS has waste forms and protocols for disposing of waste. Do not mix incompatible wastes in the same container. Always label waste. Use the appropriate container for the chemical you are disposing. If you must use compressed gases make sure you transport them safely using a gas cart and ensure they are secure and correctly connected to the proper regulator.

Field Safety and Awareness

Always plan thoroughly ahead for field research. Many field projects are off-site of the University and require substantial travel. Generally, always take more than you need to the field in terms of food, water, and sampling tools/supplies as a lot of time can be wasted if you run short of any of those. Make a list of everything you need including: first aid kit, work boots, gloves, sunscreen, food & water, hard hats, rain gear and insect repellent, etc. If you have a life-threatening allergy, such as to bee stings, make sure the people with whom you are working are aware and know how to access/use any type of life-saving device you have (Epipen). Ticks are becoming a greater issue in Ontario, and as such you should learn how and when to check for ticks when working at a field site.

Remote field sites may be unique in that they can be located a great distance from where you can obtain help. Plan ahead! Some sites are University managed research facilities that require specialized protocols that must be adhered to. Some are on private farms and they too require their own set of conduct that must be followed rigorously. University Research facilities require steel toed work boots. You may need specialized training for

equipment. Do not use equipment if you have not been trained. Make sure you ask for permission before borrowing anything from a Research Stations or private farms. Try not to work alone. Always inform someone of your expected departure and return. Do not attempt to lift objects that you are not comfortable with. Protect your back.

Regardless of whether you are working on a University or private property, you should know the address and have the phone numbers for emergency services for that area. In the case of a UoG Research Station, inform the manager every time you plan to be on-site and have their phone number should an incident or emergency occur. If you do not have a personal cell phone, discuss with your supervisor about having a basic talk/text phone for emergency use. Again, if working by yourself, periodic check-ins are always a good idea.

If you are driving a rented or University vehicle you must have a valid Ontario Class G driver's license, be a UoG employee and have completed the appropriate form. Always check vehicle fluids (gas, oil, windshield wiper fluid) and tire pressure. Special winter precautions include checking wiper blades, clearing snow & ice from all windows, and having a shovel, emergency kit etc. in the vehicle.

Plan your field sampling and sample storage carefully. It is always a good idea to practice field work (sampling, instrument installation, etc.) on or close to campus before your actual field work begins to work out any issues and determine if any additional items are required. Only use milk crates or other stackable containers clearly labeled with your name, date and supervisors name for freezer or refrigerator storage. Consider what analytes you are interested in and choose the appropriate storage temperature. Choose the correct storage vessel for your sample; preferably one that will not contaminate your sample and be leak proof or resistant to breakage if frozen. If freezing water samples, be sure to leave room for expansion in the container.

If working in remote areas plan your itinerary and provide daily check in. Carefully establish all safety requirements including shelter, clothing, food, and emergency first aid equipment. Always allot more time than you think.

Covid 19 has provided an additional difficult challenge for personal safety to us all. We must be extra vigilant and careful in protecting ourselves and each other while working at the University and in SES. This not an easy task but there are many campus resources to help us keep safe. Make sure you know the appropriate resource person when you need help. Do not be afraid to ask for help.

SES Director – (Interim) Paul Sibley psibley@uoguelph.ca

SES Admin Officer sesadmin@uoguelph.ca
(Ian Turner)

SES Health & Safety Chairs -James Longstaffe jlongsta@uoguelph.ca &-Peter Smith smithp@uoguelph.ca

School of Environmental Sciences
50 Stone Road East
Guelph, Ontario, Canada N1G 2W1
T 519-824-4120 x56934
example@uoguelph.ca
uoguelph.ca/ses

IMPROVE LIFE.