INTRODUCTION

The principal objective of EES Field trips is to expose students to Earth and Environmental Science in the natural setting and to teach them to make accurate observations and interpretations based on field relationships. These rules and regulations are designed to maximize the learning environment and maintain the highest safety standards possible for yourself and others. Our field trip rules and guidelines have evolved over a period of many years and we maintain that there are sound reasons for all of them. The instructor(s) will be happy to explain the reasoning behind any of the rules should you have any questions. We will be happy to eliminate or modify any rule that can be shown to be unnecessary as we have no wish to unnecessarily limit your personal freedom and/or enjoyment of our field excursions. Please try to remember this when a rule seems arbitrary, unreasonable or inconvenient. Any and all logic behind a rule or regulation will be explained upon request. Students who violate rules can be dismissed from field trips or field camp and may face disciplinary action at Lehigh University upon return. While on a field trip you are bound by all the rules and regulations in the “Lehigh University Handbook” and by the rules below which are more specifically formulated for field trips. Because a number of people will be traveling in close quarters, special efforts must be made to exercise due regard for the rights and feelings of others. As long as everyone uses a reasonable amount of common sense, there will be no problems.

All rules and regulation apply to both students and staff of Lehigh / EES field trips.

PROCEDURES IN THE EVENT OF AN EMERGENCY

If you are involved in an emergency of any kind, you are to:

1. Stop what you are doing.

2. Check / clear the situation.

3. Call for help, use 911 if a phone is available. Begin a chain of communication that moves both ways from the individual, passed next to your partner, passed next to a TA, then finally to the supervising faculty. During an emergency, you should remain in the same geographic location allowing information to pass efficiently along this chain.

4. If you are qualified or have been trained by the Red Cross or similar accrediting organization, apply appropriate medical treatment. At the very least, keep the victim comfortable, warm, and conscious.
GENERAL RULES

1. Smoking in Lehigh vehicles is not permitted.

2. Everyone must make a special effort to be prepared to leave for the field and other destinations at the appointed time. One person who opts to sleep in, grab a last minute sandwich, or makes a long phone call will hold up the group or possibly get left behind. You should always ride in your assigned vehicle so it will be obvious if you are missing when we leave stop or outcrop.

3. Radios, CD players, iPods, MP3 players, bull sessions, song feasts, and the like are permitted only as long as they don't infringe upon the rights of others to study, sleep, etc. or impair the concentration of the driver to operate the vehicle safely. CD players without earphones are not allowed in the vans—they block out the instruction given over our two-way radios and limit meaningful conversations. CD players (even with earphones) should not be used during active instruction.

4. Efforts should be made to ensure that all equipment is properly cared for. Careless treatment of tents, trailers, personal gear, etc. can result in other members of the group becoming cold, wet, or inconvenienced in some other manner.

5. At all times you should respect the ecology of the areas we visit and show a respect for nature. Do not intentionally damage vegetation or other natural features. Do not pollute lakes and streams and do not deface natural or manmade objects. Do not throw stones or roll boulders down hillslopes.

RULES OF CONDUCT

1. Rules of personal conduct are designed to foster a healthy and prosperous educational environment. Violation of any of the rules listed below constitutes grounds for immediate dismissal from a field trip or field camp.

2. Belligerent-intimidating-or harassment-type of activity will not be tolerated. Any violation of this nature should be reported immediately to a member of the staff. Again, we, as a Lehigh class, are bound by all the rules and regulations concerning harassment laid out in Procedures Rules & Regulations (a copy will be made available upon request).

3. As a co-educational group we must be particularly careful to avoid any behavior or activity that might be considered sexual harassment. Even though such behavior may be unintentional or offered in jest, it cannot be tolerated. A jest for one person can be a deep injury to another. If anyone feels that such a situation is developing or has occurred, they are asked to report it immediately to a faculty or staff member. We ask that you err on the side of caution.

4. No means no. There are no exceptions. No only needs to be said once and there is nothing to explain. No means no.
5. The use of illegal drugs is strictly forbidden; this includes recreational drugs. All controlled substances are forbidden in camps, hotels or in the field. Anyone caught using drugs will be dismissed from the course.

6. Fireworks are not permitted on field trips

7. Students may not possess firearms of any type; violators will be dismissed from the program.

POLICIES CONCERNING ALCOHOL

1. Lehigh does not encourage the use of alcoholic beverages by students. It recognizes that students need to make individual choices concerning the use of alcohol. The university supports the choice not to drink and actively discourages the misuse of alcohol. Intoxication in no way releases a student from full responsibility for their behavior and its consequences.

2. Alcohol consumption is not allowed during instruction.

3. Alcohol consumption is not allowed during the work day (6 AM to 6 PM). Alcohol consumption is allowed after the work day is complete. At no times either within or outside of the normal workday hours (6 AM to 6 PM) when a student or staff is conducting trip or camp activities (like running the kitchen or erecting camp equipment) is alcohol to be consumed.

4. No hard liquor including wine, hard cider, vodka, whiskey, etc. is allowed – in vans, in our camps, in hotels, or in town.

5. Beer is the only alcoholic beverage that is allowed to be consumed by those who are of legal age and then only in moderation and only at appropriate times and places. Public rowdiness and/or drunkenness will not be tolerated. When in camp, beer can only be consumed in the evening, after dinner, and in the area designated for social gathering.

6. Mixed drinks, shots, chugging, and drinking games are not permitted at any time during field trips, even during free time in town.

7. Students are allowed to buy and consume beer only in moderation. Students are limited to six 12-ounce cans of beer/day. Pooling resources to purchase beer for a larger group is not allowed. Students may not provide alcohol to others – whether they are of legal age or not.

8. Consumption of beer in the vans, even when parked, is strictly forbidden.

9. Beer can only be transported in vans in the rear of the vehicle in unbroken units (6 pack, 12 pack, etc.). Broken units will be considered as evidence of consumption in the vans and violators will be dismissed.
SAFETY IN CAMP DURING FIELD TRIPS

1. Propane lanterns, stoves, kitchen gear etc. can be a serious hazard.
   a. Proper usage, care, and maintenance of the stoves and lanterns will be presented to everyone during the early days of field camp; however, using common sense will be the most important accident prevention policy.
   b. NEVER take a lighted lantern into your tent.
   c. If a lantern or stove is not working properly, inform a staff member immediately.
   d. Only the staff members will operate the gasoline-powered generators.

2. For reasons of safety and insurance, only staff members are permitted to operate chain saws, generators, and all terrain vehicles (ATV’s).

3. Large quantities of firewood must be prepared:
   a. A staff member must approve any student use of firewood cutting equipment (hand saws and axes). Always exercise extreme caution when using these tools.
   b. Do not chop wood in an area where there are people nearby who might be struck by an axe, flying wood, or dislodged axe head.
   c. If you have never had any experience with an axe, check with a T.A. prior to using one.
   d. Do not saw or chop into the ground, rocks, nails, etc., a dull axe can be dangerous.
   e. Make every effort to maintain a neat woodpile. Tripping over an outlying log or branch (common at night) may lead to serious injury.
   f. Only authorized staff may operate the chainsaws.

4. Never go barefoot in camp. Rusty nails, broken glass, cacti, etc. are a hazard in any campground and a geologist, who can’t walk, can’t map.

5. Open-toed shoes or sandals are not allowed in the camp kitchen.

6. Ground squirrels – Do not keep food in your tent – squirrels will eat through your tent to get “treats”. Do not trap or kill ground squirrels as they can carry disease.

SAFETY IN THE FIELD

1. Always wear boots in the field. Tennis shoes, etc. are not recommended for fieldwork, as they do not provide adequate ankle support.

2. Use extreme caution in, and when possible stay out of particularly, precipitous areas. Climbing in dangerous areas is not permitted. If you have doubts about whether working/visiting an area could be potentially dangerous "don't do it"(no area, however interesting and/or spectacular, is worth placing your safety at risk). The staff will attempt to identify dangerous (forbidden) areas but you must use good judgment.

3. When climbing, be careful to avoid dislodging loose materials. A rolling rock can be extremely dangerous to the people below
4. Avoid climbing directly above another person or group. If you must pass above them on a slope, always warn the people below of what you intend to do and wait until they get out of the way. If you dislodge a rock, yell, "rock, look out below". If you are below, seek shelter and look upslope for the projectile.

5. Do not place yourself in jeopardy by moving directly below another person or group. If you must traverse a slope below another person, ask them to remain still until you are safely out of the way.

6. **DO NOT ROLL BOULDERS**; there could be other people, cattle, etc. out of sight down slope and a rapidly moving boulder can be fatal.

7. Exercise extreme caution if you smoke in the field. Forest or sage brush fires are an ever-present hazard. Make doubly sure that matches and cigarette butts are extinguished. Better still - don't smoke. This is an opportunity to cut down on a bad habit. There may be times during drought when public lands are posted prohibiting fires of all kinds including smoking. You must honor these special regulations and not smoke.

8. If you become lost when in the field, do not wander looking for the group; that will just make you more lost. Stay where you are. Position yourself near a path or open ground. Do not stay near a raging stream as the noise makes it difficult to hear and be heard. A search party will find you. Take the time to find or acquire the appropriate shelter and water for a night’s stay should that be necessary.

9. You should never be alone when in the field. If you or your partner becomes injured when in the field, do not panic. Check the scene; insure there is no further chance for injury. Determine the extent of the injury. Call for/find help. Do not offer to treat the injury unless you have been trained to do so. Do not move an injured person, especially if the injury involves broken bones. The best course of action is to find help in the form of an instructor or TA as quickly and efficiently as possible.

10. Be careful when crossing fences that you don't break them down (bad for the fence) or cut yourself on the barbed wire (bad for you). Also, ALWAYS leave gates as you found them. If they are open, leave them open. If they are closed, make sure they are closed after you pass through.

11. When you leave for the field be certain you have: 1) a raincoat, 2) a warm parka, and 3) dry matches properly housed. If you have to spend a night in the mountains, these materials are critical.

12. The chain of communication in the field begins with the individual, passed next to your partner, passed next to a TA, then finally to the supervising faculty. During an emergency, you should remain in the same geographic location allowing information to pass efficiently along this chain.
WATER SAFETY

1. All watercraft must be operated according to posted guidelines.

2. Lifejackets must be worn at all times when working in water deeper than 2 meters.

3. No one is allowed to work in lakes or streams without a partner.

4. Streams are not to be forded if the water depth is greater than knee-high, regardless of the flow velocity.

5. Hip waders are to be worn when working in water colder than 15 C. Full body wetsuits must be worn when working in cold waters < 10 C, especially in high latitude or altitude settings.

WEATHER SAFETY

1. Field work is to end and students are to seek shelter when extreme heat, cold, precipitation, or wind descends.

2. Lightning is a particularly serious danger when working at high elevations and in exposed regions. Students are to exercise NO DELAY in seeking shelter and moving from high, exposed regions when thunderstorms are approaching.

3. Hypothermia is a serious life-threatening condition. Students are to dress appropriately for weather conditions, but if faced with hypothermia, are to stop working and do what is necessary to conserve heat. This includes removing wet clothing, seeking shelter, and curling up in a ball to retain body heat.

4. Heat stroke is a similarly serious life-threatening condition. Students are to always have not less than 2 liters of water when they depart for a day in the field. Seeking shelter from the sun, allowing the body to periodically cool off, and being continually hydrated are the best defenses against heat stroke.

5. Sun poisoning occurs all too often, particularly on fair-skinned people. Stay covered with clothing and 30 SPF sun block during field work. Always wear a hat in the field.

ILLNESS OR INJURY

1. Only the individuals involved can make a rational decision about their physical condition and whether or not they should seek medical help. Several courses of action are available.

2. For minor illnesses or injuries such as colds, blisters, minor sprains, etc. the individual must decide whether to "tough it out" or to stay in camp for the day and recover. It should be kept in mind that if you are unable to continue your work in the field, your entire group must stop mapping in order to get you back to camp since mapping groups are not permitted to split up. This must be weighed against the loss of mapping time you yourself suffer if you choose to
remain in camp.

3. Some injuries (e.g. twisted knees, sprained ankles and the like) make it impossible for you to keep up with your group. In this case a decision must be made about whether one or two days rest will get you back on your feet, whether you require medical attention, or whether you will be unable to continue with Field Camp.

4. Any student who feels that he or she should take a "sick day" should report this to the staff. Students are encouraged not to "malinger", but will never be forced into the field. In general, treatment of minor injuries such as small cuts and blisters is the responsibility of the individual.

5. If you need medical attention, every effort will be made to get you to a doctor as quickly as possible. It should be kept in mind that in some cases the nearest doctor could be close to 100 miles away and decisions to get medical help should not be postponed until the situation is critical.

6. In the event of serious illness or injury in the field, the following procedure should be followed if the victim can move under his/her own power:
   a. Use your Van radio to report the problem to other groups and to the staff.
   b. The entire group is to leave the field along the easiest route available.
   c. Once the group has reached a road, it may be necessary for the group to split up (the only conditions under which this is permitted).
   d. The injured person should be made as comfortable as possible and at least one person should remain with him/her.
   e. The remaining person(s) should proceed as quickly as possible to a van (if one is available) or to camp.
   f. If a van is available in the field, return to camp with the victim unless common sense dictates that you should go directly to the hospital (e.g., very severe bleeding).
   g. DO NOT SPEED! An accident only compounds an emergency.

7. In the event of serious illness or injury in the field, the following procedure should be followed if the victim is immobile
   a. Use a van radio to report the problem to other groups and to the staff
   b. Make the victim as comfortable and warm as possible. At least one person should remain with the victim.
   c. Part of the group should return to camp for help as quickly as possible (Again: DO NOT SPEED! If you don't make it to camp you are no help to anyone).
   d. NOTE: If there is a suspicion of a back or neck injury, DO NOT ATTEMPT TO MOVE THE VICTIM.
OPERATION OF VEHICLES IN THE FIELD

1. In general, staff members will drive the field camp vehicles. However, because of the long distances involved (especially on the return trip), occasionally individuals that have been selected by the staff and cleared for driving by Lehigh Transportation Services will be called upon to serve as drivers. The driver of a van is responsible for the safety of at least 10 individuals. For this reason, special efforts will be required to maintain safe driving habits. Reckless or inept driving cannot be tolerated and anyone exhibiting this behavior will be replaced immediately.

2. Only individuals who have filled out a “Driver’s Information Form” and hold a valid driver's license may operate the vehicles. Any person who operates a vehicle must receive permission (each time) from a faculty member.

3. At all times, vans are to be driven at reasonable speeds as dictated by road, weather, and traffic conditions, etc. AT NO TIME are vehicles to be operated in excess of existing speed limits. Speeding tickets and any other violations are the responsibility of the driver—neither Lehigh University nor the field camp will pay fines resulting from violations.

4. No alcoholic beverages or other drugs are permitted in the vans—violation will result in dismissal from the course. This regulation will be enforced!

5. No one is permitted to operate a van after having consumed any alcoholic beverage or other intoxicating substance (legal or illegal drugs) within 5 hours of driving.

6. Vehicles are to be kept neat and in good repair. (Throw out trash at each opportunity.) Report all mechanical problems immediately and treat the vehicles with respect. Do not force or slam doors and keep your feet on the floor.

7. Collect all toll receipts, gas receipts, etc. A staff member will reimburse you later.

8. No activity is permitted in the vans that could interfere with, or infringe on, the rights of other passengers.

9. The person to the right of the driver (co-pilot) is to stay awake and alert at all times. This person is the assistant driver and should handle map reading, tolls, etc. for the driver.

10. No driver is permitted to drive to the point of fatigue.

11. When traveling, all vehicles are to maintain a reasonable spacing—do not lag behind—do not tailgate. Except under emergency conditions, no vehicle is EVER to pass another vehicle in the caravan. If you want to report a problem, use the radio. If it is inoperative, flash your headlights until the caravan pulls over.

12. It is the driver's responsibility to check oil, water, tires, etc. at each gas stop.
13. **ALWAYS** show the credit card to the station attendant before gassing the van to make certain that it will be accepted. If the tanks are filled and the credit card is rejected, you will have to "front the bill" until you can be reimbursed at a later date.

14. The two-way radios are for business communications only. No excessive chatter and no CB jargon are permitted. The radio must be left on at all times so that you can be contacted in the event of an emergency. The AM/FM stereo or other noise in the van must be kept low enough so that any radio transmission can be heard.

15. The western states in particular are overrun with a rodent population such as ground squirrels, prairie dogs, etc. **NEVER** jeopardize the lives of your passengers by swerving or braking to avoid one of these small animals.

16. **Always ride in your assigned van.** Always check to make certain your van has all its passengers when we leave stop so that we don’t drive off and leave someone.

17. Do not ride in the trunk of any car or van. If a van is full, wait for the next one.

18. Vehicles are never to be run or idled to provide music, heat, or air conditioning unless directed to by a staff member.

**CARE OF EQUIPMENT**

1. In an effort to minimize the cost of field camp and ensure safety, we provide equipment that must be used year after year. You are responsible for its safekeeping and proper use.

2. Students are provided with a Brunton compass and carrying case, Pocket PCs and spare batteries, and a Garmin GPS. When issued, the equipment is in perfect working condition (do not accept it if it's not). We expect to receive the equipment in good shape at the end of the course. Normal wear is expected. **If you lose equipment you will be charged its fair market value for replacement.** If you damage it due to carelessness, you will be charged the cost of its repair. Always check to be certain the belt strap on the case is secure for any equipment you carry that way.

3. Each field student is issued a pair of stereo glasses. **Replacement cost is $30.**

4. Each mapping group will be issued a GPS unit for each project. Groups will be charged if $200.00 if he unit is lost or damaged. Replacement batteries are the responsibility of the users.

5. During each project, each mapping group is issued air photo coverage of the area. If any photo is lost or damaged, the mapping group will be charged for loss (black and white air photos, $2 each; color photos, $11.75 each).

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7. Care of your own equipment is also critical to your comfort. Never leave your sleeping bag where it can get wet. Remember that afternoon thunderstorms are common even on the nicest days.

**COOKING, CLEANUP, and MEAL EDIQUETTE**

1. Early on field camp you will be assigned to a cook crew. Each cook crew will have a crew leader who is responsible for the smooth operation of that cook crew.

2. Cook crews prepare breakfast, lay out lunch materials and cook dinner on their cook day. On the day following, they are the cleanup crew.

3. The crew leader is responsible for waking his/her crew early enough to have breakfast finished by 7:45 AM. sharp. This will allow the cleanup crew one half hour for cleanup prior to our 8:30 AM departure for the field. The details of cooking and cleanup are too extensive to review here. They will be reviewed in detail early in the program; however, a few important points are reviewed next.

4. The cook-crew leader will ring the dinner bell when the meal is ready to be served. The cook crew dishes out food to each student and serves themselves after the others are served. The COOK CREW announces "seconds" after THEY have finished eating.

5. Unless you are cooking, stay out of the cooking area. No one is allowed to eat in the cooking area.

6. Reasonable table manners and rules of etiquette are expected of all persons at all times.

**HONESTY**

1. EES 341 and other field-intensive courses are formal University courses and you are bound by all rules pertaining to academic honesty. This includes exams and map preparation. Published geologic maps of the study areas (including copies and photos of same) or student’s maps from previous years are not to be brought on field camp, doing so will likely result in dismissal.

**ADDITIONAL RESOURCES**

A web site dedicated to field trip safety based on OSHA standards and long-term field camp experience can be found at:

http://serc.carleton.edu/NAGTWorkshops/structure/field_forms.html