Safety in the field

Andrew Goodliffe and Laura Pedemacher
The reading of books and the study of specimens will never make the geologist; the geologist is made in the field, not in the laboratory.”

(Himus and Sweeting, 1955)
Learning in the field depends on:

- Placement of field experience in the curriculum/degree program:
  - Early vs late?
  - Integrated vs isolated?
  - Extent of student’s novelty space**
- Cognitive
- Geographic
- Psychological
- Field trip program
- Learning materials
- Structure
Cognitive novelty

- Pre-field skill & knowledge building

http://homepage.smc.edu/grippo_alessandro/struct2.html

http://www4.uwm.edu/course/geosci697/

http://www4.uwm.edu/course/geosci697/sections/tom%20using%20orient%20dev.jpg
Geographic novelty

Prepare students for what they will experience

Prepare yourself for potential hazards

Field Activity Risk Assessment - Potential Hazards Register

<table>
<thead>
<tr>
<th>Potential Hazard</th>
<th>Probability of Occurrence</th>
<th>Comments and Mitigators/Scenarios</th>
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<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
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<td>Rain, snow, lightning, flash flood</td>
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<td>High temperatures (Hot/Cold)</td>
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<td>Sunburn</td>
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<td>Trekking Surfaces</td>
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<td>Risks, vegetation, coral (including high elevation)</td>
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<td>On-Off Road/Trail Traffic</td>
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<td>New Openings/Overhangs</td>
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<td>Sudden changes in water levels (vegetation, pollen)</td>
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<td>Animals, mammals, other</td>
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<td>Cuts, blisters, stings, bites</td>
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<td>Debris flow, landslides, mudslides, rockslides, avalanches</td>
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<td>Floods</td>
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<td>Drowning</td>
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<td>Tornadoes</td>
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<td>Extreme temperatures</td>
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<td>Air quality (smoke from wildfires)</td>
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<tr>
<td>Weather conditions</td>
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<td>Aircraft operations</td>
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<tr>
<td>Movements of moving vehicles, equipment, or personnel</td>
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<td>Pedestrian crossing (for pedestrians)</td>
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Scotland: Pre-Activity Safety Statement

This briefing outlines some of the most common health and safety issues associated with the GESC 105 field experience and serves to inform you of potential risks that may need to be considered during your participation. It is important for you to evaluate the stated risks with regard to your own personal health and modify your participation or attendance accordingly.

Required Actions

1. Read and understand all sections of this Pre-Activity Safety Statement.
2. Complete the Personal Medical Assessment either by printing it out or editing the PDF (download separate form).
3. Print out and sign the Pre-Activity Safety Statement Acknowledgement (on the last page of this document) indicating that you have read the health and safety material provided.
4. Submit a completed Personal Medical Assessment AND a signed Pre-Activity Safety Statement Acknowledgement (last page of this document) to Dr. Burmeister.

Questions
Considerations

Physical health and environmental conditions

- Known allergy to bee stings —> disclose information on Med Form; carry Epipens; Alert instructor to storage location of Epipens
- Seasickness —> disclose on Med Form; see doctor prior to trip for meds

Daily activities

- Unsafe cliffs, overhangs, steep slopes —> Stay away from hazardous surfaces; be aware of people above; avoid climbing when people are below you
- Heavy machinery operation —> Proper attire (steel toe boots, hard hat, safety glasses)

Transportation

- Project work along roadways —> pay careful attention to safety briefings; participants must wear high visibility clothing
Consider Red Cross (or similar training)

University Office of Risk Management (or equivalent)

Workshop participants and other networks

Human Resources

Others?
Psychological novelty

- Prepare students for what they will experience
- Setting the tone of professionalism
Considerations

- Working with people from a variety of backgrounds
  - RV: ship crew, RV pilot, scientist, cook
  - Drill team: crew, scientist, engineer, client
- Time
- Alcohol usage —> clarify rules of field site, know limits, emergency preparedness
- SAFE study
- Harassment/assault in the field
Resources

- Human resources
- Faculty handbook
- Student handbook
- Title IX Office
- Others?

WHAT IS TITLE IX?

No sex discrimination. No sexual assault. Period.

It’s not just about sports.

The law says no sex-based discrimination.

Not just rape — it’s harassment, stalking, threats, too.

People of any sex, gender, identity or expression are protected.