

UNIS safety course 2024



Arve Johnsen
Head instructor safety courses

Purpose of the safety course



To teach basic knowledge, skills and attitudes in safe planning and accomplishment of field work as well as private outings in an Arctic environment.

Monday 15th of January

Time	Subject	Place
12:00 - 13:00:	Course opening/basic safety info	Møysalen
13:00 - 14:30:	Risk theory, accident scene management	Møysalen
14:30 – 15:30:	Weather and clothing in the arctic	Møysalen

Tuesday - Friday

Subject	Place	Time	Tue	Wed	Thu	Fri
First aid Practical Training	Kapp Lee	0800-1200	A	C		
		1230-1630	B	D		
Sea Ice Safety	Kapp Mitra (Tue)	0800-1200	B	D		
	Festningen (Wed)	1230-1630	C	A		
	Outdoors					
Rifle handling	Outdoors,	0800-1200	C	A		
	Rifle range	1230-1630	D	B		
	See bus schedule					
Polar Bear Safety and Case Exercise	Kapp Schoultz (Tue)	0800-1200	D	B		
	Templet (Wed)	1230-1630	A	C		
	Outdoors					

Subject	Place	Time	Tue	Wed	Thu	Fri
Navigation and communication	Computerlab 1	0800-1200			A	C
	Outdoors	1230-1630			B	D
Glacier and Emergency equipment	Festningen (Thu)					
	Kapp Lee (Fri)	0800-1200			B	D
	Outdoors	1230-1630			C	A
	Backside					
Emergency Equipment and Camp	Logistics	0800-1200			C	A
	Outdoors	1230-1630			D	B
Avalanche	Templet (Thu)	0800-1200			D	B
	Kapp Schoultz (Fri)	1230-1630			A	C
	Outdoors					

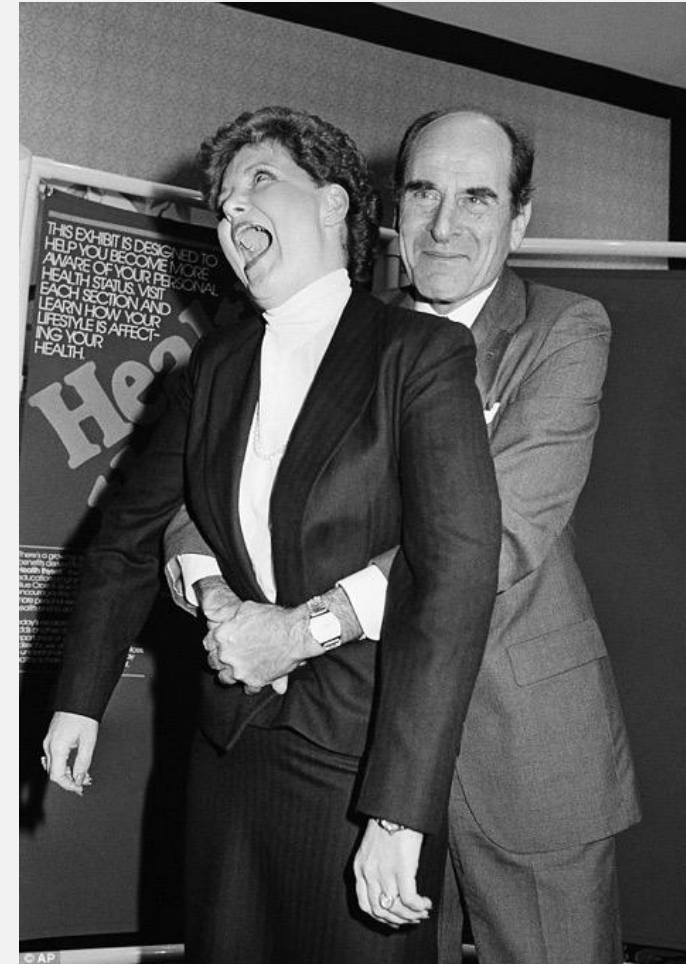
First Aid

Instructor: Aleksander Hovland (Red Cross)
Marie Brekklus (Red Cross)

Content:
First aid, practical training.

Objectives:

- The students should be familiar with:
- (S)ABCDE -Systematic patient examination
- Know how to prevent and treat hypothermia and frost bites.
- Performing cardiopulmonary resuscitation (CPR)
- Prevention and treatment of local burns.
- Prevention and treatment CO poisoning.
- Treatment of fractures and bleedings.



Sea Ice Safety

Instructor: Marcos Porcires
Stuart Thomsen
Trude Hohle
Celina Fester

Content:
Properties of sea ice. Safe movement on sea ice. Rescue work on sea ice.

Objectives:
The main purpose of this lesson is to identify and apply barriers to avoid an incident on sea ice, and to train on self- and buddy rescue.



Sea Ice Safety

After the lesson, the students should:

- Know about the risks of falling through sea ice and into cold water.
- Know that sea ice conditions in Svalbard can change very rapidly, and why.
- Know where to find information regarding sea ice conditions.
- Know about the UNIS-protocol for safe travel on sea ice.
- Have discussed and reflected upon identifying and applying barriers to avoid accidents regarding sea ice.
- Have practical training on how to get up from the water and on to the ice by using the ice spikes.
- Be able to take care of a person who has fallen in water by using the content in the emergency camp kit.



Polar bear safety - Rifle handling

Instructor: Bård Helge Strand
 Einar Eliassen

Content:
Rifle theory, live exercise

Objectives:
The main objective for this lesson is to learn how to handle a rifle and flare gun in a safe way.

After the lesson, the students should:

- Be able to understand and quote the safety regulations for rifle handling.
- Be able to correctly half load a rifle.
- Know how to safely handle and transport a rifle and ammunition.
- From a kneeling position, be able to shoot and hit 4 rounds within a radius of 40 cm at 35 m.
- Be able to maintain the rifle.
- Be able to correct malfunctions on the rifle.
- Know the buddy principle.

Polar bear safety - theory and case exercise

Instructor: Franka Leiterer
 Mikkel Breedveld

Content:
Polar bear theory, pyrotechnics theory, live exercise

Objectives:
The main objective for this lesson is to make sure that the students understand how conflicts between humans and polar bears can be avoided.

After the lesson, the students should:

- Know how polar bears could behave in different situations.
- Know behavior by the polar bear after being shot at.
- Understand how to avoid conflicts and confrontations.
- Be able to act correctly if meeting a polar bear.
- Understand that the polar bear is protected and can be shot in self-defense only.
- Be able to use a flare gun correctly

Navigation and communication

Instructor: Ameliè Roche
Stefan Clas

Content:

Use of VHF radio, Satellite telephone and emergency beacon. Use of map and GPS

Objectives:

- After the lesson, the students should:
- Know how and when to use VHF radio.
- Be able to communicate with a satellite telephone.
- Know when and how to use an emergency beacon.
- Be able to use map to navigate.
- Be able to use a GPS as a navigation aid.
- Be familiar with different coordinate systems and when to use them.
- Know how to use an Inreach.



Emergency Equipment and Camp

Instructor: Mikko Syrjäsuo
Celina Fester
Einar Eliassen

Content:

UNIS Emergency Box demonstration — contents and use of various items in the box. Getting familiar with tents and camp stoves (indoors). Practical exercise (outdoors)

Objectives:

After the lesson, the student should:

- Be familiar with the contents of the UNIS Emergency Box
- Be ready to use the Emergency Box
 - To prevent small problems becoming big problems
 - Whenever required including emergencies
- Be able to set up an emergency camp
 - Tents
 - Use camp stoves safely
 - Polar bear safety



Avalanche

Instructor: Marie Brekkhus
Trude Hohle

Content:

Snow, weather and terrain conditions that lead to increased avalanche danger. Safety and route finding in avalanche terrain. Rescue work in an avalanche accident.

Objectives:

The main objective for this lesson is to make sure that the students can recognize avalanche danger and by doing so, be able to avoid avalanche accidents.

After the lesson, the students should:

- Know the different snow, weather, temperature, and terrain conditions that create avalanche danger.
- Know how changes in the parameters above could make the avalanche danger increase.
- Know avalanche prone terrain around Longyearbyen and the most used trails around Nordenskjold land.
- Know how to travel safely in avalanche prone terrain.
- Be aware of the probability of surviving an avalanche accident.
- Know how to organize and prioritize the rescue work.
- Know how to use an avalanche beacon.
- Know how to use avalanche probes, alone, and as a team.
- Know how to use a shovel and dig out a person in V-formation.

Glacier and Emergency equipment

Instructor: Katja Baum
Mikkel Breedveld

Content:
Identify and apply barriers for safe travel on glaciers. How to use UNIS equipment and rescue techniques in a crevasse accident

Objectives:
The main objective for this lesson is to make sure that the students understand the risks connected glaciers/ ice caves that could be dangerous and that safe movement on glaciers requires specialized knowledge, skills and equipment.



Glacier and Emergency equipment

After the lesson, the students should:

- Know what a glacier is.
- Understand that there are crevasses and melt water channels on all glaciers and why they could be dangerous.
- Understand how crevasses and melt water channels could be detected by map studies, studies in the terrain and by local knowledge.
- Be familiar with the risk aspects when traveling on a glacier by snow scooter, on foot and on skis.
- Be aware of glacier weather conditions; fierce winds, precipitation, colder temperatures and “white out”.
- Have knowledge about what kind of safety equipment and skills safe travel on a glacier requires.
- Be familiar with how and when to use the equipment in the UNIS emergency glacier kit.
- Be familiar with how to organize and how to act if a person falls in a crevasse.



Some important safety issues not dealt with during the course

Rabies outbreak on Svalbard in 2011 and 2018

- Rabies first observed on Svalbard in 1980
- Outbreaks in 2011 and 2018 with sick foxes and reindeers.



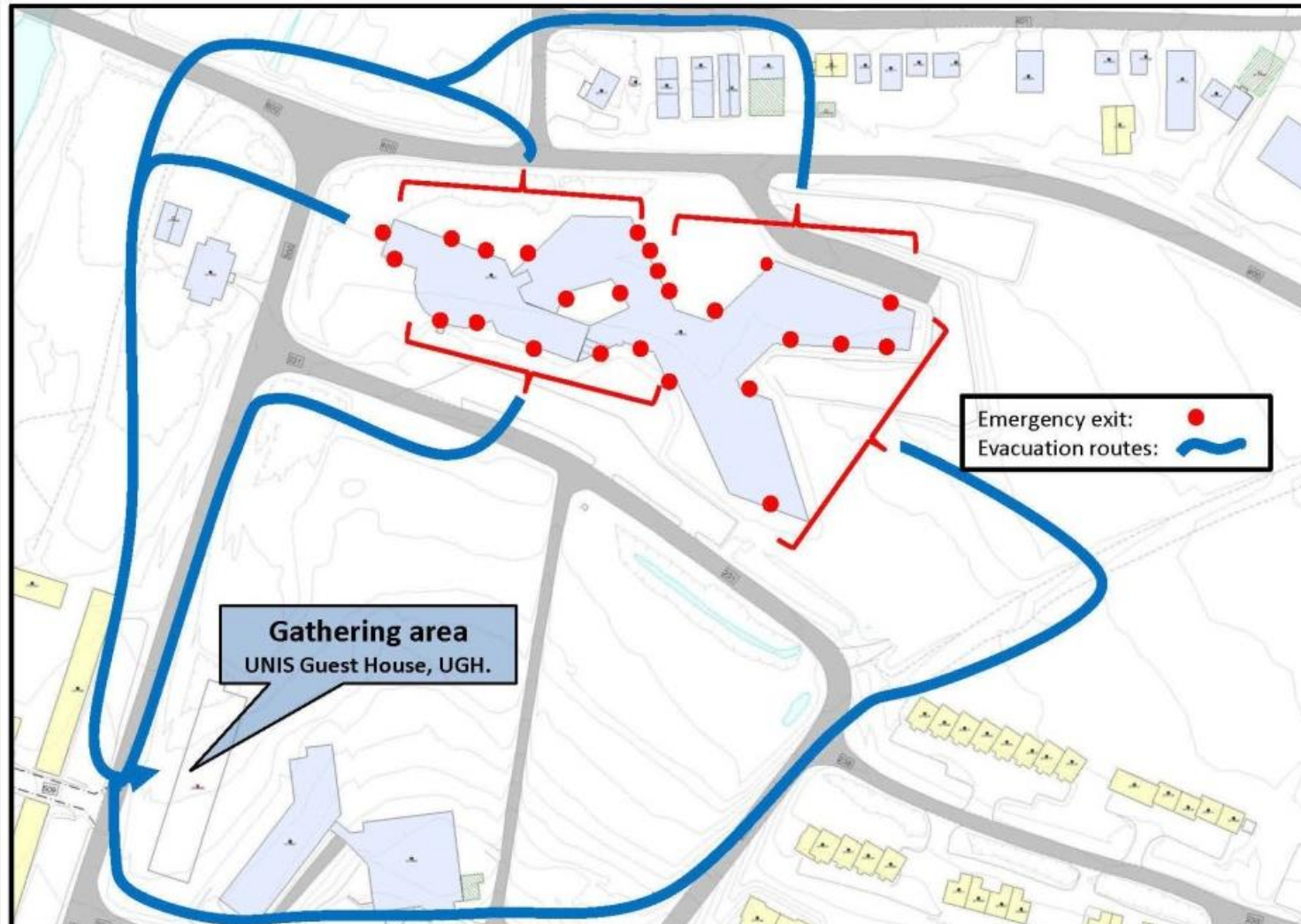
The parasite *Echinococcus multilocularis*

- Could infect humans.
- How to avoid contagion



Behaviour at UNIS in case of fire or another serious incident

General Alarm Evacuation routes from the Science Centre on Svalbard



Behaviour at UNIS in case of fire or another serious incident

Nr	Task in priority
1	Anyone who gets aware of the attack should try to warn as many as possible before evacuating the building. <ul style="list-style-type: none">- Trigger the fire alarm!- Call the police department at number 112 or +47 79 02 12 22
2	Run. Get away from the area. Use the nearest emergency exit point and follow the evacuation routes to the assembly place at UNIS Guest House.
3	If you cannot get away, hide yourself. Barricade and lock yourself in if possible. Put your phone on silent and stay still. Get away if it becomes possible.
4	Report the incident to the police at emergency number 112 as soon as possible. Inform others if you can. If possible, trigger the fire alarm at UNIS.
5	If possible; observe as much as you can: <ul style="list-style-type: none">- How many?- How do they look like?- What type of weapon?- Where did they go?- Where did you see them last?
6	If you have no other choice, and only then, attack the perpetrator.
7	In meeting with armed response / police: <ul style="list-style-type: none">- Stay calm and be aware of that you might be pointed at with a weapon.- Armed response is not there to carry out first aid, but to stop the perpetrator(s).- Keep your hands visible- Follow their instructions and give them the information they need. If you have seen the perpetrators, inform the police.

Issues may occur. Who do I contact?

Contact point at UNIS for HSE matters:

Daytime from 08.30 to 16.00: Study administration.

Phone: Tel: **+47 79 02 33 00**

study@unis.no

Evening/nights from 16.00 to 08.30: On duty officer.

Phone: Tel: **+47 95 28 35 11**

Off campus alternatives:

Longyearbyen hospital: phone nr. **+ 47 79 02 42 00** Emergency phone nr. **113**

Svalbard Church: Phone nr. + 47 79 02 55 60

The Governor on Svalbard (Police): + 47 79 02 43 00 / **+47 79 02 12 22 / 112 (emergency)**

[The «speak up system»](#)

Some useful advices for the week

- Bring extra inner layer for sea ice training
- No indoor toilet at the shooting range
- Bring warm clothing – and some more. Snowmobile suit and shoes can be borrowed
- Head lamp
- Friday dinner – participants/allergies



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