Fieldwork Safety Guidelines

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Kibbutz Sdot Yam
Israel
https://med-lter.haifa.ac.il/index.php/en/

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1. A RESPONSIBLE CLIMATE

The following guidelines focus on establishing a climate in which the safety of the University personnel has primacy, where faculty, staff, and students know the policies, procedures, and guidelines to help create safe practices. Head researchers, lab managers, and operational staff may elect to manage the risks involved with their fieldwork in a different manner to these guidelines. These informal, alternative approaches must provide at least equivalent or better levels of safety and be documented. There is no successful method of guaranteeing the safety of personnel. These guidelines attempt to provide a framework in which it is customary that all possible precautions have been taken and all proper responsibilities met. The major requirements of assessment of risks, planning, training, equipment, communication, responsibilities are addressed in this document. A special note that this document's contents and responsibilities are addressed to each laboratory housed under the Morris Kahn Marine Research Station (hereinafter 'MKMRS').

2. APPLICATION AND SCOPE

"Fieldwork" consists of any activity previously authorized by the University, that is conducted for study, research, or teaching, and undertaken by faculty, staff, students, and authorized volunteers of the University at a location outside the campus of the UH and its off-campus stations and sites. Fieldwork activities, such as those involving isolated or remote coastal or sea areas; extreme weather conditions; hazardous terrain; harmful wildlife; or lack of ready access to emergency services, can expose participants to significant risks to their health, safety, or well-being, at locations outside the direct supervisory control of the University. These guidelines intend to ensure that before undertaking fieldwork:

1) all persons involved are aware of their responsibilities;
2) prior to fieldwork, a joint discussion of risks within the appointed team and station leadership is carried out to identify potential hazards associated with fieldwork and a plan for these scenarios is discussed to eliminate or minimize such hazards;
3) all participants are conducting fieldwork with an understanding of the associated risks and have provided consent to the activities and inherent risks. All relevant health information is shared within the team; if a team member does not disclose this information, the *burden of care* is not placed on any one team member and their participation is voluntary.

Under normal circumstances, these guidelines are not intended for organized off-campus activities such as:

1) Supervised study or work placements with affiliated, external institutions to the University
2) Travel for conferences, seminars, meetings, or visits to other institutions. For all off-campus activities conducted on the premises of or under the control of

another organization or institution, Principal Investigators (PIs) must check the local safety procedures are appropriate to the type of activities being conducted, follow local laws and regulations, and are consistent with the safety standards and practices of the University of Haifa.

3. RESPONSIBILITIES

The responsibilities of the following: 1) Chief of Operations, Chief Scientist, Founders, and Heads of Laboratories; 2) Lab Managers; 3) MKMRS Staff, Students, and Research Fellows and 4) Environmental Health and Safety should be consistent with the various annual trainings that are held and managed by the health & safety department In addition to other occasional trainings given by the lab manager/PI regarding specific risks in the lab. These repeat trainings come in the form of lectures and practicals that each PI, lab manager, and student are responsible to attend, and that is curated to their individual field.

The current head of laboratories include:

1. Professor Dan Tchernov
    a. Chief Scientist and Founder, MKMRS
2. Dr Shai Einbinder
    a. Co-Founder and Chief of Operations MKMRS; seinbinde@univ.haifa.ac.il
3. Professor Michael Krom
    a. Head of Marine Biogeochemistry Laboratory; m.d.krom@leeds.ac.uk
4. Dr Aviad Scheinin
    a. Head of Marine Apex Predators Laboratory; ascheinin@univ.haifa.ac.il
5. Dr Dalit Meron
    a. Head of Marine Microbiome Laboratory; dalitmeron@gmail.com
6. Dr Danny Morick
    a. Head of Marine Pathology; dannymorick@gmail.com

Other administrative contacts include:

1. Dr Leigh Livne
    a. Scientific Coordinator, MKMRS; Leigh.livne@gmail.com
2. Ms Muriel Burg
    a. Administrator, MKMRS; mburg@staff.haifa.ac.il

For fieldwork, the following additional responsibilities are:

1) **TEAM LEADER/LAB MANAGER**: This may be the Lab Manager or a team leader within the laboratory. In their absence, it may be another member of the team who has been designated as such by the PI or head scientist. The Team Leader is responsible for:

a) ensuring implementation of the control established by the PI, including the use of appropriate safety equipment, safety procedures, and medical precautions by team members during fieldwork;
b) noting any safety concerns and constantly updating risk assessments as they arise in the field;
d) connecting with the PI and/or any other University administration/academic contact;
e) informing the PI and/or administrative contact in UH of all accidents, illnesses, or emergencies that occur in the field; and
f) ensuring team members have received adequate health and safety training through UH as applicable and must retain training records
g) are insured through the University and have full permission to work in the field, liaising with the Dr Livne (see above).
h) liaising with the full team for use of the MKMRS truck and checking that all licenses and equipment are up to date.

2) **TEAM MEMBERS**: Each member of the fieldwork is responsible for:
a) acknowledging the risks through iterative discussion and consenting to the particular field project;
b) using the appropriate protective equipment is provided as established by the PI;
c) working safely and with respect to other team members in the field to prevent harm;
d) acknowledging and agreeing to the Requirements for Reasonable Care outlined in Section 4.3;
e) reporting any identified hazards, illness, and accidents to the Team Leader or PI

4. REQUIREMENTS FOR REASONABLE CARE

Any team member must exercise reasonable care as defined as:

A) Only staff, UH students or visiting students, and approved volunteers authorized by the PI or Lab Manager may assist with fieldwork. The PI will take the necessary precaution to check with UH administration regarding insurance for all activities and participants. Friends, pets, and children are prohibited. All affiliates of the university (NGOs, government agencies, SMEs) may join if proper measures are obtained prior to the work (insurance, training, permissions). Visiting researchers, colleagues or students may be authorized to join if proof of insurance is obtained. Always consult with your PI and the Scientific Coordinator regarding eligibility.

B) Accessible first-aid supplies and training must be up-to-date before the fieldwork.

C) All safety equipment and materials must be made available to all team members.

D) Arrangements of appropriate transportation to, at, and returning from the

location of the fieldwork; vehicles must be operated in a manner consistent with Standard Operating Procedures (SOPs) for MKMRS vehicles. Personnel should ask the Mr Eran Rozen of the Dive Center for insurance, test, and driving privileges.

F) Before departure to the site, the order of the tasks and day, and responsibilities assigned to each participant (notably, volunteers) must be briefed and accepted,

G) Knowledge of all health and safety standards and requirements applicable to the jurisdiction in which the fieldwork is being conducted;

H) Discussing of information, risks, and necessary training of any equipment or method related to the fieldwork, and measures of control to deal with them,

I) Provision of appropriate contact information and training for emergency response to accidents involving injuries, damage to property and equipment, spills, leaks, or discharge of hazardous materials;

J) UH recognizes the autonomy and ability of the individual to exercise proper person judgement to prevent harm to oneself, but can only do so with full transparency regarding the nature of the work, understanding of the task, and information on the site,

K) Availability of procedures for contacting the MKMRS and/or University authorities in the event of an emergency.

5. SOLITARY FIELDWORK

Working alone is strongly discouraged, and all work at sea or in the filed requires the 'buddy system' and prior approval from Dr Shai Einbinder or Mr Eran Rozen. However, when solitary work is deemed necessary and unavoidable, a stringent code of practice must be put in place to determine if the worker is able to complete all tasks safely, is aware of risk and emergency procedures, and able to de-brief and report back after the activity. After approval, the solitary worker assumes all responsibilities of the PI and Lab Manager. The worker must have an up-to-date CPR certificate, be responsible and trustworthy, and communicative throughout the fieldwork. The worker must leave their contact information for those who should be informed.

6. REFUSAL OF UNSAFE WORK

Any individual member of a fieldwork team may refuse to participate in any activity before or during the activity itself, if they feel may endanger their health and safety or that of another person. Workers have the right to refuse to do a job if they believe in good faith that they are exposed to an imminent danger. "Good faith" means that even if an imminent danger is not found to exist, the worker had reasonable grounds to believe that it did exist. If possible, the member should communicate with the leadership/PI about the danger, and if may be fixed during the activity, the activity may continue (n.b. the individual may still voice their refusal to continue). If the supervisor disagrees about the extent of the hazard, contact MKRMS leadership (Dr Shai Einbinder/Mr Eran Rozen) to review the standard operating procedures (SOP) of the fieldwork and how the hazards of working in the field can be addressed.

7. GENERAL GUIDELINES

Before fieldwork is conducted, the PI should develop standard operating procedures specific to their fieldwork. The SOPs should include, at a minimum, information required in the following sections. For more information regarding research permits, protocols and justification, standards of care and ethical considerations by lab, please contact:

Laboratory	**Sub- programme**	**Contact Person**
Biogeochemistry	Water Chemistry transect sampling	Anat Tsemel atsemel@gmail.com
Marine Apex Predators	Dolphin surveys	Aviad Scheinin ascheinin@univ.haifa.ac.il
	Tuna tagging	Aviad Scheinin ascheinin@univ.haifa.ac.il Eyal Bigal Eyalbigal@gmail.com
	Shark tagging	Aviad Scheinin ascheinin@univ.haifa.ac.il Eyal Bigal eyalbigal@gmail.com
	Guitarfish handling	Aviad Scheinin ascheinin@univ.haifa.ac.il
	Strandings	Danny Morick dannymorick@gmail.com Aviad Scheinin ascheinin@univ.haifa.ac.il
	Drone surveys	Hagai Nativ hagainativ@gmail.com Aviad Scheinin ascheinin@univ.haifa.ac.il

Rocky Reefs	Beach visual survey	Rami Tsadok ramitsadok@gmail.com
	Shallow-water survey/Dives	Hagai Nativ hagainativ@gmail.com Ziv Zemah-Shamir Zziv2000@gmail.com
Pathology		Danny Morick dannymorick@gmail.com
Microbiome	Sediment sampling	Dalit Meron dalitmeron@gmail.com
Diving	Receiver deployment	Eran Rozen erozen@univ.haifa.ac.il
	Routine transect sampling	
	CCR diving	
	Fish Cages – scuba diving and snorkeling	

7.1 Preparation

Before the individual or team leaves, one of the most important phases of a fieldwork experience is planning and preparation. Here are some suggestions before a person departs:

A) Prior to a fieldwork season, for each lab, the Head of Lab/PI, Lab Manager, and core team sit with MKMRS leaders to prepare a plan for the expeditions, which are written down and stored as minutes with the Scientific Coordinator. Changes to this general plan are updated and communicated before the expedition. This discussion also highlights changes to the laboratory methods and protocols per lab (for individual laboratory analytical protocols, contact the appropriate person above). This plan includes:

1) Your itinerary: locations, arrival and departure dates, names, addresses, and phone numbers of all fieldwork participants.

2) Contact person: Name and phone number of a person to contact in case of emergency.

3) Activities: General nature of activities being conducted. Determine risks and hazards specific to your research or tasks. Determine if your activity requires someone on shore, ready to assist (a safety diver must be present on board for each and every dive).

4) Local contacts: Names of people at or near your fieldwork site who can reach you if necessary, as well as check in/out times. Fieldworkers should regularly check in with their group office and advise of any changes in schedule or points of contact. If possible, field- workers should also inform someone in their lab each day about the daily fieldwork location and the approximate time of return. The local contact should be provided with people's telephone numbers (group office, University contact, etc.) if the workers do not return or report within a predetermined interval of the scheduled return time.

B) Prior to going out, updating yourself of hazardous conditions, wildlife, or weather should be noted

C) Complete a CPR/First Aid Class. Designate fieldwork/boat safety officers before each activity;

D) Assemble safety equipment and go through the lab's checklist before leaving, before you leave (see section 8.0).

E) Whenever possible, fieldwork activities should be done in teams of at least two people. The "buddy" system is the safest way to work.

F) Ensure your insurance covers the activity and note an emergency plan before going to the site.

G) Obtain authorization to access the beach or sea area

H) Obtain permits for any sample collection from respective agencies (i.e., NPA, etc.)

7.2 Medical Care and First Aid

The first aid kit/oxygen in dive-related activities must be always maintained before going to the site. One safety officer (with current certification) must be designated per activity and be in charge of the kit.

Any injury related to the fieldwork, or illness, must be reported to the PI, the Scientific Coordinator, Dive Safety Officer and University administration **and reported to the safety department will also be reported to Tania Zoran tzoran@univ.haifa.ac.il.**

7.3 Travel on Foot or at Sea

A) Wear proper safety gear.

B) Always carry a first aid kit, mode of communication to shore, and water.

C) Be sure that equipment and supplies are carried appropriately, and with respect to each member's ability.

D) Always be aware of what's around you (on the ground and overhead).

E) Be conscious of surroundings – orientate yourself with known, fixed position objects when disoriented. Carry a GPS device or compass/map. Finish activity well before dark, or come properly equipped if night-time fieldwork must be completed.

F) Always be sure someone in the laboratory/research group knows where you are and when you are expected to return.

G) Never overextend your capabilities.
H) Be sure permission is granted before entering private property.
I) Report accidents immediately to your supervisor.
J) Use common sense.

7.4 Other Transportation

7.4.1 Use of Vehicles

Only licensed and appropriately trained drivers should operate the field vehicles. Please contact Mr Eran Rozen (erozen@univ.haifa.ac.il) for a full list of those with driving privileges.

The PI should ensure a system for checking for appropriate and current driving licenses, placing restrictions on the use of vehicles (e.g., for untrained and inexperienced persons), and giving express permission for vehicle use. The PI should have guidelines on the use and limitations of vehicles. Only registered vehicles are to be used. Vehicles used for fieldwork should be well-maintained according to the manufacturer's service specifications and equipped with adequate spare parts and tools, according to the area and length of the trip. When loading vehicles, care must be taken to maintain as low a centre of gravity as possible and to secure items adequately in a cabin. Vehicles must be driven with caution and attention to prevailing road and weather conditions. The vehicle should be selected for the type of terrain likely to be encountered. Drivers should be familiar with the vehicle before setting out on the trip. Drivers intending to use four-wheel drive (4WD) vehicles should receive training in 4WH or demonstrate experience in driving such vehicles.

Drivers should be familiar with routine maintenance procedures such as checking oil, water, tire pressure, coolant, battery, and charging tires. Drivers should also be aware of the fuel capacity and range of the vehicle. Before setting out on the trip, the driver should check the vehicle to ensure it has been adequately maintained and has all the necessary tools, spare parts, and special equipment for the trip. In addition, a check should be made that luggage and other equipment are secure. Rest stops and fuel stops should be used to check that the vehicle is operating normally with respect to tire pressure, engine leaks, etc. and that luggage and equipment remain secure. Every day, before setting out, check oil, water, fuel, battery fluid, coolant, brake fluid, and tire pressures and that controls are working. **Upon return, the car is fully cleaned, and all equipment taken out and stored. Vehicles must be topped up with gas (at least half tank capacity) before returning to the station.**

Driving times and distances should be planned to prevent fatigue. A driver should take periodic breaks after driving for a few hours. During the break, some light physical activity such as walking should be incorporated. Driving at night is more hazardous than during the daytime because of reduced visibility and fatigue and should be minimized. Drivers should always heed applicable road rules, including

those pertaining to the consumption of alcohol. Driving should always be done at safe and legal speeds. Safe speeds depend upon the road and weather conditions, the experience of the driver, time of day, alertness of the driver, and the vehicle itself. Unfamiliarity with the road or conditions and the presence of nocturnal animals contribute to driving hazards. Important safety equipment to bring in your vehicle – please ensure that items on this list are always in the truck:

- Jumper cables
- Tire gauge
- Spare tire, jack
- Map/Directions
- Flashlight or Headlamp
- Reflective vest, safety glasses, grip gloves
- Field Radio or Satellite Communication Devices, extra batteries or
- charger (cellular phones should be used as a back-up only due to
- potential lack of reliable services in the field).
- Fire extinguisher
- Extra dry clothing, blankets
- Useful supplies: Tools (pliers, hex wrench, screwdriver), duct tape, bungee cords, large plastic bags

7.4.2 Use of Boats

When boats are used, the PI in charge must be familiar with relevant national boating laws. Owners or personnel in charge of boats are responsible for ensuring that the appropriate licenses and any appropriate boat registrations are obtained and must obtain approval from Mr Eran Rozen before any expedition (contact: Eran Rozen erozen@univ.haifa.ac.il.

Boats should be well-maintained and equipped with adequate spare parts and tools, according to the area worked and the length of the trip. Prior to setting out, check the vessel for safety equipment, personal flotation devices, fully charged battery, fuel, spark plugs, cotter pins, anchor, and a small bucket for bailing. Vessel operators out of MKMRS need to consult with the Dive Safety Officer Mr Eran Rozen (if diving activity is planned) and follow the requirements of the AAUS Diving Safety Protocols.

7.5 SCUBA Diving

Diving can only be authorized when done in accordance with the University Safety Manual above administered by the University's Diving Safety Officer, and the AAUS diving safety manual (link). Before diving, the PI or team members must contact Mr Eran Rozen erozen@univ.haifa.ac.il (DSO) to ensure the requirements set forth in the UH manual are met.

7.6 Working In Water

Precautions required for fieldwork in the sea vary according to the type of environment and likely weather conditions, including possible weather extremes which may be encountered. Coastal, streams, rivers, and open sea environments present different hazards. The head of each lab has written standard operating procedures (SOPs) for each type of fieldwork it conducts – please contact the Head of Lab from Section). Fieldwork personnel should receive training on SOPs relevant to the environment being visited. When planning work in aquatic environments, information may be obtained from the ISRAMAR website (https://isramar.ocean.org.il/isramar2009/) or the Magic Seaweed site (https://magicseaweed.com/). These include weather forecast, tides, currents, swell/surf break. Also, for rivers and streams, check the most recent gauge height and discharge rates.

7.6.1 Snorkelling and Breath-Hold Diving

When snorkelling and breath-hold diving for University of Haifa sponsored activities, UH establishes the following distinctions:

- Snorkelling: swimming on the surface of the water, using any combination of mask, snorkel, and/or fins, without any breath-holding or submersion.
- Breath-hold diving: swimming on or under the surface of the water, using any combination of mask, snorkel, and/or fins, with occasional or repeated breath-holding excursions to any depth.

Protocols for Snorkelling and Breath-Hold Diving Safety:
General Restrictions:
Unless specifically recommended by the University of Haifa, snorkelling/breath-hold diving generally should not be conducted:

- In areas with potential underwater entanglements
- In areas without immediate access to the surface
- In seas greater than 0.5 meter (after obtaining approval from Mr Rozen and in accordance with AAUS diving protocols)
- In current greater than 0.5 knots (after obtaining approval from Mr Rozen and in accordance with AAUS diving protocols)

Equipment Specifications:
Unless expressly authorized by the team leader for the unique characteristics of the activity or environment, each snorkeler/breath-hold diver should be equipped with:

- Mask
- Fins
- Snorkel
- The ability to achieve permanent, positive floatation on the surface (e.g., life jacket, snorkelling vest, wetsuit)

● A dive flag conforming to AAUS and State of Israel regulations

Snorkelling Procedures:

A. Team Members are encouraged to be transparent and objective when taking on a task in an activity, and assess whether they can accomplish the in-water task safely.

B. The swimming ability of the snorkeler should be assessed or verified as part of the operational planning process (expected currents, waves, distances from exit, etc.). Team Leaders may require individuals to wear life jackets, snorkeling vests, or wetsuits if there is any doubt of an individual's swimming ability. Non-swimmers cannot participate in the fieldwork activity, and it is the responsibility of the PI/Lab Manager to assess this ability.

C. Use the buddy system (i.e., two or more comparably skilled individuals in constant communication at all times). See section 5.0, Solitary Fieldwork, if this guidance cannot be met.

D. Wear personal protective equipment such as closed-toed footwear, gloves, wetsuit, or similar protection.

E. Team Leaders, if not all team members, should be familiarized with in-water rescue techniques.

F. Be aware of and monitor vessel traffic. The daytime signal for divers is an International Code Flag "A". Users are required to stay within 30 m of the flag, but it is recommended to stay closer to the flag in areas of high vessel traffic.

G. Notify appropriate personnel before engaging in activities, especially near working waterfronts. Any boat must hang the appropriate banner with the logos of UH and Leon H Charney School of Marine Sciences.

H. In general, snorkel/breath-hold dive during daylight hours only. If activities are conducted during non-daylight hours, individuals should have a water-proof light and an illuminated dive flag. A shore/boat-based contact that can help identify the exit location and assist in monitoring divers is strongly advised.

I. The Dive Propulsion Vehicle (DPV) is a specialized tool that should only be used in unique circumstances to achieve a specific research goal; please contact Eran Rozen for further information on if and how to operate any DPV (i.e. underwater scooter). The DPV is not a substitute for a boat, and safety consideration of distance from shore should be considered before going to a particular location.

Breath-hold Diving Procedures:

A. Follow the above guidelines.

B. Team Leaders should assess or verify the breath-hold diver's abilities for the task(s) at hand.

C. Breath-hold diving should not be conducted to depths greater than 10 m or for a duration longer than one minute per dive.

D. Use the buddy system with 1 diver up and 1 diver down. If the workload requires repetitive diving, consider a three-person buddy system to allow recovery time between dives. **Three-person buddy teams should only have 1 diver down at all times.**

E. No breath-hold diver should dive to a depth greater than that from which their buddy is capable of recovering them.

F. If you are unable to equalize your ears and sinuses, do not breath-hold dive. Likewise, if your buddy is unable to equalize their ears, they are unable to assist you in a rescue situation, and you should limit your breath-hold diving for the day.

G. Avoid breath-hold diving when water conditions do not allow constant visual contact between a submerged diver and their topside buddy. These conditions can be caused by poor underwater visibility or a sea state above the recommended limits.

H. Excessive work while breath-hold diving should be avoided. Consider using SCUBA if additional work, tasks, or equipment are needed. See section 7.5 for additional information regarding the AAUS Standards.

I. Breath-hold diving after compressed gas diving activities is not recommended.

J. It is recommended that a cutting device be available in case of entanglement. This cutting device should be easily accessible in a timely manner based on the activity.

7.6.2 Coastal and Shallow Water Work

When planning coastal and estuarine work, the status of tides, currents, weather, and other safety factors must be considered. The PI should have developed standard operating procedures for areas worked, including: above the high tide zone, within the intertidal zone, and in the water. The PI should consider the swimming ability of all personnel working in the water or the intertidal zone. If the work area does not have lifeguards on duty, consider how you would extract a team member out of the water without assistance. Ensure that appropriate clothing and footwear are worn by all personnel.

7.6.3 Offshore work

This section is written in two sections – the first is related to the PI or team leader, and their responsibilities on the day of the expedition. The second is related to students or visitors joining the expedition and invited by the laboratory. As the university does not own any research vessel, all members joining the expedition must adhere to all safety regulations and always listen and observe the requests of the boat operator/crew. It is the responsibility of the PI/team leader to ensure that all visitors/students/researchers have obtained proper insurance from the University of Haifa, or their home institution if they are visiting from abroad.

The PI/team leader must:

1. Have a current first aid certificate,
2. Be above 18 years of age, age and,
3. Have extensive experience and physical capability of performing the necessary duties of an individual in charge of the marine research activity,
4. Must be an authorized faculty or staff member of the University.
5. Ensure that each visitor or student understands their assigned tasks onboard and have gone through prior training and a briefing.
6. Ensure each passenger is able to swim.
7. Any research requiring the use of chemicals require that the operator in charge and any persons directly handling the chemicals or waste be trained via the University protocols for chemical safety.
8. Liaise with the boat operator on weather conditions, overview of research to be conducted, and emergency response plan (including a list of next-of-kin, and details of health provider for each visitor coming onboard).
9. When diving operations are apart of the research expedition, a dive safety officer must be present onboard, and all AAUS regulations apply (see relevant section 7.5)
10. Ensure the school's personal satellite phone is fit for use on the day.

Responsibility of the student/visitor/international researcher or student:

1) Disclosing existing medical conditions that could affect the passenger's safety at sea, including the potential for long response times by professional rescuers
2) All garbage on all vessels shall be bagged and returned to shore for proper disposal
3) Reading the below sections regarding response procedures (MOB, fire, sea sickness, etc.)
4) Listen to the boat crew/operator and wear all necessary protective equipment (PPE, life jacket, gloves, etc.) at all times.
5) Take medication if you are prone to seasickness, and alert the PI if you have symptoms onboard.
6) Illegal drugs and alcohol, and smoking, are not permitted on University vessels during research, educational or any other standard marine operations. This does not include legal medication, but if it impairs your abilities onboard, you must inform the team leader.
7) Remain seated when underway
8) Step carefully, do not jump or run onboard.
9) Wear close-toed shoes
10) Do not jump into the water or exit the boat until the boat operator gives you approval

11) Clothing: dress for the weather, and ask your PI if you are not sure what to wear on the day of the expedition.

Safety onboard during offshore work (this section is specific to offshore safety):
It is important to remember that safety falls on everyone. It is the marine operations team's responsibility to provide safe work environment for all employees. It is the responsibility of all employees and passengers to act in the following manner to prevent slips, trips, and falls:

- Take your time and pay attention to where you are going.
- Check behind you before turning or moving backward, and inform other passengers when you are walking behind them (especially carrying hazardous material).
- Make wide turns at corners and change direction slowly
- Always using installed light sources that provide enough light for your tasks.
- Use a flashlight if you enter a dark room where there is no light.
- Ensure that things you are carrying or pushing do not prevent you from seeing any obstructions, spills, etc.
- Wear appropriate footwear with surface specific traction and job specific protection.

Please see section 6 'Refusal to work in unsafe conditions' and assert your right to stop work onboard if you feel the conditions or behaviors are threatening the safety of the mission, and communicate them to the PI and boat crew. Some examples include:

- Change in weather conditions or scope of work
- Emergency (injury, approaching weather, transportation concerns, etc.)
- Improper use of equipment, especially machinery and hydraulics or any over-the-side deployment activities and techniques
- Lack of knowledge, understanding or information
- Near-miss incident – it is the responsibility of the leaders onboard to determine if a 'near miss' is indicative of calling off the work for the day.

Man Overboard (MOB)

If you see another person fall overboard, you must call out "Man Overboard" and keep your eyes on the victim. If directed by the boat crew, deploy a life ring or a high visibility inflatable to mark the position. While the crew is rushing to the victim, as many of the visitors should keep an eye on the victim, and indicate their position by clearly pointing to their position with your arm outstretched. Follow the boat crew's orders at all times. indicate the direction of the victim for the boat operator to follow. It is the responsibility of the PI to immediately inform the appropriate contact at the safety department of the university.

Fire On-board

Exit or stay in an open deck area, and adhere to all instructions by the boat crew/operator.

In the event of falling overboard or abandoning ship (reference: A Pocket Guide to Cold Water Survival by US Coast Guard):

Your chances of survival are much greater if you are well prepared before you abandon ship. Even in worst cases, it usually takes 15 to 30 minutes to fully submerge a vessel. Put on as much warm clothing as possible, making sure to cover head, neck, hands and feet. Put on a life jacket and be sure to secure it correctly. If lifeboats are available, board lifeboat by ladder or rope. Unless it is unavoidable, do not jump from higher than 16 feet (5 meters) into the water. Try to minimize the shock of sudden cold immersion.

Rather than jumping into cold water, try to lower yourself gradually. A sudden plunge into cold water can cause rapid death or an uncontrollable rise in breathing rate. If you must jump, keep your elbows at your sides, cover your nose and mouth with one hand while holding the wrist or elbow firmly with the other hand. Once in the water, orientate yourself to the boat and other people or objects. If unable to prepare yourself before entering the water, button up clothing now. In cold water, you may experience violent shivering and great pain. These natural body reflexes are not dangerous. While afloat in water, do not attempt to swim unless it is to reach a nearby craft, a fellow survivor or floating object. Unnecessary swimming will increase the rate of body-heat loss. It is important to remain as still as possible in cold water. This can be painful. Pain will not kill you, heat loss can. The body position you assume in the water is also very important in conserving heat. Float as still as possible with your legs together, elbows close to your sides and arms folded across the front of your life jacket. This position minimizes the exposure of the body surface to the cold water. Try to keep your head and neck out of the cold water. If other people are in the water, huddle closely together to conserve body heat. Try to shorten your immersion time by boarding a raft or floating object, if possible. Keep a positive attitude while waiting to be rescued. Common sense says dress appropriate for the weather, but some care in selection of clothes can make a difference in survival. If possible, wear many layers of clothing, including a waterproof outer layer. Make certain that the neck, wrist and ankle portions of the clothing are snugfitting. Woolen clothes are better insulators that cotton, especially when wet. Wear an outer garment that is bright in color.

The treatment for hypothermia will depend on both the conditions of the survivor and the facilities available. If the person is rational and capable of recounting his/her experiences, although shivering severely, remove all wet clothes, replace with dry clothes or blankets and have the victim rest in a warm environment. If the person is semi-conscious, unconscious or apparently dead, contact should be made as soon as possible with Emergency Medical Services (EMS).

- Administer first-aid care while waiting for help to arrive.
- Remove the victim from the cold and check for the presence of breathing and heartbeat. If the victim is not breathing and has no heartbeat, immediately begin cardiopulmonary resuscitation (CPR). Remove the victim's clothes with a minimum of body movement.
- Cut away the clothes, if necessary. Do not massage the victim. Lay the unconscious or semi-conscious victim in a level, face-up position.
- If vomiting occurs, turn the victim's head to one side. Be sure to check the victim's breathing and heartbeat frequently.
- Insulate the victim from further heat loss by wrapping the victim in a blanket. Do not attempt to aggressively rewarm the unconscious victim.
- Definitive rewarming should be attempted in a hospital.
- Do not give the victim alcohol.

Hopefully, you will never experience these situations but advanced planning, preparation and thought on your part can be the most significant factor in your successful struggle with cold water immersion.

7.6.4 Entrance to Streams

When working in or near streams, always be aware of the weather conditions, notably in the winter season (flooding). Other precautions to consider are:

A) Wear footwear appropriate for the tasks, e.g., rubber boots for wading). Do not jump from rock to rock. Be careful to ensure that your footing is safe.

B) If, after working in or near a stream or in some way associated with water, you experience flu-like symptoms that persist, consult your physician and inform the PI of the lab.

C) Never drink water from streams.

7.7 Use of Chemicals

A) If your work requires you to use chemicals, you must either work under the supervision of a person who has a chemical application certificate or a current certificate yourself. **No solitary laboratory work is allowed on the MKMRS premises.** In addition, you must abide by the instructions on the label.

B) You must always wear the appropriate safety equipment and clothing and are responsible for maintaining your equipment and clothing.

C) Contact Anat Tsemel (atsemel@gmail.com), Lab Manager of the Marine Biogeochemistry Lab for the full chemical hygiene plan, hazard communication protocol and health and safety requirements when working with chemicals.

D) In case of an accident, notify the supervisor immediately, especially in which chemicals on the skin are involved.

E) In case of an accident on LHC school grounds, please report to Tania Zoran tzoran@univ.haifa.ac.il immediately.

7.8 Working in protected areas

If you are working in a national park, designated MPA, etc. and there is an emergency, you may be asked to participate in emergency operations. Obey the incident commander of other responsible official(s). **Participation in such emergencies is optional, but you are encouraged to support the emergency operation**. During the period of the emergency, you will be covered under the emergency regulations.

7.9 Working and Handling Animals

Check with the lead PI of each laboratory and the Institutional Animal Care Use Committee (IACUC) for additional approval and guidance when anticipating working with or around animals.

7.9.1 Exposure to body fluids:

If you may be exposed to body fluids from these animals, you must take a variety of precautions during tagging or interactions. If you must handle live animals (this should be avoided except when required), use protective bite-proof gloves with disposable gloves underneath. Use non-allergic disposable gloves for handling carcasses. Dispose of one-time-use gloves afterward by enclosing them in a plastic bag, like a "Ziploc" bag. If you are not leaving the carcass in the field, place it in a sealed bag. If you are examining stomach samples or other body parts, use disposable gloves, eye or lab glasses with side covers, and a mask to prevent fluids from hitting your eyes, nose, and mouth.

7.9.2 Exposure to skin:

Any exposure to the skin should be washed off with an antibacterial soap. Contact with eyes, nose, or mouth should be washed out with saline solution (eyes) or regular water (mouth). Such examinations should take place in a well-vented room or outside. People with suppressed immune systems or who are pregnant should avoid close contact with alive/dead specimens. It should be treated as an incident or accident and reported to the safety department at Tania Zoran or Livnat Naprestek lnaparste@univ.haifa.ac.il.

7.14 Other Environmental Hazards

In addition to pests, other fieldwork exposures can be hazardous:

A) Exposure to Elements – Sunburn is a common and easily preventable hazard. Chronic exposure to the sun can increase one's risk of skin cancer.
People differ in their susceptibility to the sun due to their skin pigmentation.

To prevent sunburn, cover exposed skin and liberally apply sunblock creams. Wearing a long-sleeved shirt and hat will also provide protection from the sun.
B) Heat Exhaustion – which can even affect individuals in excellent physical condition, is caused by prolonged physical exertion in a hot environment (such as strenuous hiking in the desert during the summer). Heat exhaustion symptoms include fatigue, excessive thirst, heavy sweating, and cool and clammy skin and are similar to shock symptoms. If these symptoms are present, cool the victim, treat the shock, and give water or electrolyte replacement slowly but steadily if the victim can drink. If heat exhaustion is not treated, the victim can suffer heatstroke. Heatstroke is far more severe than heat exhaustion. The blood vessels in the skin can become so dilated that the blood vessels to the brain and other vital organs are reduced to inadequate levels, causing the individual to become exhausted and faint; the skin becomes bright red and very warm to the touch. This is a potentially fatal condition that requires immediate attention. Cool the victim at once, in any way possible, replenish fluids as with heat exhaustion, and seek medical attention immediately. Failure to gradually acclimate to heat or even minor degrees of dehydration or salt deficiency makes an individual more susceptible to heat exhaustion. To prevent heat exhaustion, drink plenty of liquids (electrolyte replacers) and take frequent rest breaks.
C) Wildlife Safety - To protect yourself and stay safe in the field, know the potential wild animals you may come upon while doing fieldwork, understand their behavior, and prepare yourself for potential encounters. Wild animals generally avoid human contact, but if you encounter them in the wild, maintain your distance as best as possible. Do not attempt to feed, catch or pet a wild animal. In the ocean, know the state and federal regulations and species-specific laws when interacting or encountering ocean animals or marine mammals. Be prepared for stings, bites, and encounters with wild animals on land or in the ocean.

8. EQUIPMENT AND COMMUNICATION

8.1 Equipment

Safety equipment must be inspected and tested prior to the trip to ensure that it is in good operating condition, with fully charged batteries (if applicable), sufficient fuel (if applicable), and that all appropriate parts, tools, and manuals are available.
Ensure that the equipment and material needed has been carefully thought about, made available and that everyone knows how to use it. If anyone in the group has specific medical conditions requiring medication or has allergies to anything that may occur during the work, make sure someone else knows.
Assemble safety equipment and other provisions and check everything before leaving. These may include (but are not limited to):

- First aid kit and first aid manual
- Medications taken on a regular basis

- Sunscreen and hat
- Water Jug (2 L)
- Personal protective equipment (PPE) such as safety glasses/goggles, gloves, hard hats, work boots, etc.
- Flashlight or Headlamp, extra batteries
- Whistle, Signal/Mirror
- Matches
- Field Radio or Satellite Communication Devices, extra batteries or charger (cellular phones should be used as a back-up only due to potential lack of reliable services in the field).
- Map, Compass, or GPS
- Knife or Multi-tool
- Extra food and snacks
- Insect repellent (optional)
- Seasickness tablets
- Your field safety plan with emergency procedures

8.2 Personal Protective Equipment

Depending on the type of work, the area to be visited, and the likely weather conditions, special Personal Protective Equipment (PPE) may be required. This may include such items as hard hats, steel toe boots, safety glasses, gloves, respirators, etc. The PI should select PPE based on the evaluation of hazards expected.

8.3 Communication Equipment

Training and licensing must be obtained before use of certain types of radios for PI and Lab Managers. The leaders must give a brief overview of how to use this equipment before setting out to an expedition. If cellular phones are used, or applications such as the Delphis app in the Marine Apex Predators Lab, one volunteer or researcher must be designated on board before the activity starts. Battery power for communication equipment should be sufficient to last beyond the expected duration of the fieldwork.

8.4 Contacts and Continuity of Contact

No trip may take place without full approval from fieldwork team and the PI informing MKMRS leadership (Dr Einbinder, Mr Eran Rozen). Before setting out to fieldwork, the schedules, and methods for maintaining contact with the University and other contacts must be established and understood by everyone involved. Contacts at the University and elsewhere must be informed about the fieldwork location, the expected duration of work, how to contact field personnel, the planned time of return, and at what time a subsequent alarm will be raised. For long fieldwork, arrangements must be made to make contact on a regular basis, such as daily or some other regular

interval if daily contact is impractical. The frequency of the regular contacts will depend on the length of the trip and where it is, how many personnel are involved, and what sort of communication is available.

If plans change, members of the fieldwork team should alert their designated contact to prevent false alarms and waste of time. Before any trip with a new member or volunteer, the contacts and team must have agreed on how an alarm would be given under any worst-case scenario (e.g., the boat sinks, a vehicle fire) when the planned means of communication is no longer feasible. An alternative means of communication should be agreed upon, and a trial run conducted to test its effectiveness.

9. EMERGENCY PLAN

Contacts at the University, at home, and at a location near the fieldwork (i.e. contact at Michmoret if taking a vessel from their marina) should be notified of the intended route(s), timing and number of people involved in the work, etc., to provide the information and help to direct search and rescue attempts. **This is the responsibility of the PI and/or Lab Manager**. Maps and plans showing the locations of work should be provided to the designated contact person(s). Anyone designated as the contact person for particular fieldwork must be organized and know what is required.

Schedules for communication, the timing, and method of raising alarms if contact is not made, the circumstances of the work (e.g. the registration numbers of vehicles, or boats, the place where boats are to be launched) should be documented so that the contact person(s) can find them quickly if required.

No designated contact may pass on the responsibility simply by leaving a message for someone else to take over – if something changes, the new contact must be told personally and all the relevant information provided so that there is no break in the communication. The team leader/PI/Lab Manager also be informed of the change of contact person.

Suggested SOP for emergencies may follow the following:
a) Contact person initiates the emergency alert if the fieldwork team fails to return when scheduled. The response may involve the following steps:

- Call the appropriate emergency number and give the name(s), location, type of emergency, and required help.
  - Police 100.
  - Ambulance 101.
  - Fire Service 102.
  - Electric Company 103.
- Notify any supervisory personnel and provide them with the same information. If working in a national park or other protected areas, notify the local manager.

b) Thirty (30) minutes from call-in time, an alert is issued. Contact person or another person should stay near the phone at the fieldworker's office or lab.
c) One hour from call-in time, search procedures should begin.
d) One person should remain near the phone, and one familiar with the field area should begin tracking the scheduled route.
e) Tracking person should call back to the lab/office every 20 minutes to see if the fieldworker has made contact.
f) Tracking continues until the person is found or word is received that they are safe.

FORMS FOR VOLUNTEERING

University of Haifa, 199 Aba Khoushy Ave, Mount Carmel,
Haifa, Israel 3498838, Multi-Purpose Building, Room 273

אוניברסיטת חיפה, שד' אבא חושי 199, הר הכרמל, חיפה 3498838,
ישראל, בנין רב תכליתי, חדר 273

Sdotyam.scicoordinator@gmail.com Fax: 04-8288267 פקס: , Phone: 046647933 טל':

INFORMATION FOR VOLUNTEERING WITH MKMRS

Information for international visitors (students, researchers) less than 90 days' stay

Liel Shahar-Drufin | Welcome Center | M.A

International School - University of Haifa

Student Building, Room 225 | 199 Abba Hushi Blvd. Mount Carmel,

Haifa 3498838

Tel: +972 4-824-0043 | Fax: +972 4-824-0391

Email: lshahar@univ.haifa.ac.il

IF your visit exceeds 90 days, please contact sdotyam.scicoordinator@gmail.com for assistance with long-term visits.

Joining MKMRS as a student of the Department of Marine Biology (Israeli citizen)

Departmental secretary, Ms Anat Overlander aojalvo@staff.haifa.ac.il

Personal Details Sheet for Volunteers

a. *Make sure to fill-in all details in legible handwriting. All fields are mandatory.*

b. *Fill-in "Volunteer's Statement" attached herewith.*

1. **Personal Details**

Last Name	First Name	Father's Name	Birth Country	Date of Birth D D / M M / Y Y	ID/Passport Number (9 digits, inc. control digit)

2. **Marital Status** ***(mark 'x' where appropriate)***

☐ Single	☐ Married	☐ Divorced	☐ Widowed
	As of _____		

3. **Gender** ***(mark 'x' where appropriate)***	
☐ Male	☐ Female

4. **Address and Phone Number**

Street & House No.	City	Postal Code (Required)	Phone No.	
			Home	
			Mobile	

5. **In case of emergency, contact:**

Relation	Full Name	Address	Phone No.	
			Home	
			Mobile	

6. Volunteer Statement

a. I hereby declare that the details given above are correct.

b. I accept full and sole responsibility for filling all details clearly and accurately.

c. I undertake to maintain the confidentiality of any information I obtain.

Name	Date	Signature

Volunteer's Statement

To: The unit manager

By (volunteer's private and family names): _____

S t a t e m e n t

1. I the undersigned hereby offer my services as a volunteer in the position of _____ starting _____ working _____ hours per week.

2. I know and accept that I will not be entitled to compensation of any kind for volunteering, and that I will not be insured with National Security or any other insurance service, and take full responsibility for all involved with my volunteer work for the university (including any injury and/or damage I may incur while volunteering).

3. I hereby undertake to the university to maintain the confidentiality of any information I may obtain as a volunteer, and to divulge it to no one, excepting those lawfully entitled to it, even after the termination of my volunteer work for the university.

4. I hereby declare that to the best of my knowledge I am in good health.

Should any change in my health occur, I will report it the manager of the unit where I volunteer.

_____ _____

Date Volunteer's Signature

University of Haifa, 199 Aba Khoushy Ave, Mount Carmel, Haifa, Israel 3498838, Multi-Purpose Building, Room 273

אוניברסיטת חיפה, שד' אבא חושי 199, הר הכרמל, חיפה 3498838, ישראל, בנין רב תכליתי, חדר 273

Sdotyam.scicoordinator@gmail.com Fax: 04-8288267 פקס: , Phone: 046647933 טל':

TRANSLATION OF SAFETY GUIDELINES FROM ALL MARINE RESEARCH-RELATED ACTIVITIES

Safety guidelines for all marine field research activities

General:

Each activity will have a responsible researcher who is a senior faculty member in the Leon H Charney School of Marine Science unit to which s/he belongs.

Under the responsibility of the investigator in charge, the responsible researcher must:

A. Ensure that the vessel has a paid work permit in accordance with the law.

B. Ensure the following the implementation of the following safety guidelines:

1. Every educational and/or physical activity planned under LHCS will have a dedicated safety appendix attached to these guidelines. In this appendix, all the risks identified for the activity will be specified, including dangers of drowning, falling from a height, fire, electric shock (etc.), and how to minimize these risks.
2. These safety aspects are general aspects of marine activity / other educational activities. If the activity includes diving, to these guidelines will be added safety guidelines for diving as set by the Dive Safety Officer in charge.
3. Marine excavations must follow all safety measures defined by national law and the AAUS diving guidelines.
4. Each activity must be prepared with an emergency plan that will also include medical evacuation instructions, including knowing which center will treat various injuries related to the marine activity (e.g. for diving, the nearest decompression chamber)
5. For groups larger than 50 people going out for marine activities, a certified first aid provider will join the activity
6. At the beginning of the activity, there will be a briefing that will include a safety briefing for all participants of the activity to be performed by the person in charge of the activity, and another briefing on the vessel will be performed by the person operating the boat / vessel.
7. Only used tested and approved equipment / tools will be used as necessary. Any lifting equipment (cranes, etc.) shall have a valid, certified tester certificate.
8. The appropriate tools will be used with any dedicated tools for the work performed. No "Improvisations" will be made that may pose a safety risk to the user, their environment or the facility.
9. In the event of a malfunction in the equipment that requires specific safety protocols, the operation of the equipment will be stopped and repaired by a qualified person.

☐ We hereby confirm that we have read the safety guidelines for going out to sea and / or for research study activities and marine excavations.

☐ We undertake to ensure that the activity is conducted in accordance with these guidelines, university procedures, safety standards listed in the law, or any additional instructions that will be forwarded to us below by the Safety Department.

☐ We guarantee that all employees and volunteers at the site will undergo safety training, and that the project manager will verify compliance to the safety guidelines.

Name of the site:_____

Location: _____

Dates of activity: _____

You are asked to fill out this form and return it to the Safety and Health Department by

Fax: 04-8240465 or by email:
Nir Yoslavsky - ynir@univ.haifa.ac.il
or to the Security Security Secretariat - lmoshe@univ.haifa.ac.il

FORMS RELATED TO GOING OUT TO SEA

(HEBREW, THEN ENGLISH)

University of Haifa, 199 Aba Khoushy Ave, Mount Carmel,
Haifa, Israel 3498838, Multi-Purpose Building, Room 273

אוניברסיטת חיפה, שד' אבא חושי 199, הר הכרמל, חיפה 3498838,
ישראל, בנין רב תכליתי, חדר 273

Sdotyam.scicoordinator@gmail.com Fax: 04-8288267 פקס: , Phone: 046647933 טל':

<u>הנחיות יציאה לים בכלי שיט שבבעלות האוניברסיטה</u>

לכבוד
מחלקת בטיחות
אגף הנדסה תשתיות ובטחון
SecurityC@univ.haifa.ac.il

04-8240723 (2723 פנימי)

סוג כלי השיט: _____

מגבלות כלי השיט: _____

תוקף רישיון כלי השיט: _____

תוקף ביטוח כלי השיט: _____

<u>ציוד חובה על כלי השיט:</u>

שימוש בסירה:

- הסירה צריכה להיות מצוידת בכל ציוד הבטיחות וימאות בתוקף, על פי רשיון כושר השיט
- חובה להצטייד בטלפון נייד ו/או אמצעי התקשרות אחר, אטום בשקית אטומה יעודית.

אפודת ציפה	4	עוגן 3 ק"ג	1
ערכת עזרה ראשונה	1	חבל עגינה10 מ"מ באורך 70 מטר	1
ידית עשן כתום 60 שניות MK8A	1	גגון, משוטים	1
מראת איתות	1	בקבוק מים 1 ליטר לאדם	ע"פ מספר המפליגים
מטפה אבק 3 ק"ג	1	דגל צוללים	כאשר מתקיימת צלילה
מיכל דלק 4 ליטר	1	מכשיר קשר + טלפון נייד	
כלי חיתוך/ סכין	1	ערכת חמצן	כאשר מתקיימת צלילה

שימוש בקיאק:

משוט הקיאק מאובטח לגוף הקיאק
מערך עגינה לקיאק
מכשיר קשר/ טלפון נייד בשקית אטומה
אפודת ציפה
סכין/ כלי חיתוך
חובה לוודא שהקיאק בבעלות האוניברסיטה

חתימת משיט הסירה/ הקיאק:

שם פרטי	שם משפחה	תאריך	חתימה
_____	_____	_____	_____

פירוט הפעילות המתוכננת:

תאריך מתוכנן ליציאה לים	
משתתפים	
מטרת הפעילות	

יוזם הפעילות ישלח מייל, לפחות 48 שעות לפני הפעילות לקצין הצלילה, המפרט:

- ☐ מטרת הפעילות
- ☐ ציוד נדרש.
- ☐ הכנות ובדיקות הנדרשות במעבדה.
- ☐ התייחסות לסיכוני בטיחות במהלך הפעילות

בסיום הפעילות יש להקפיד:

- ☐ שטיפת כל הציוד ואחסנתו במארזים המקוריים.
- ☐ ידווח לקצין הצלילה ולמוקד הבטיחות של האוניברסיטה על חזרה

ציוד בטיחות אישי,

נעלי צלילה ובמידת הצורך קרם הגנה וכובע

מגבלות שידור על צוללים, במידה ויש, נא לפרט תדרים ועוצמת שידור:

_____

<u>אישור יציאה לים (ייחתם בסמוך ליציאה לים)</u>

תאריך: _____ שעה: _____

מהירות וכיוון רוח _____ גובה גלים: _____

כמו בכל פעילות האחריות על הבטיחות האישית היא בראש ובראשונה אחריותו האישית של כל משתתף. חובה על כל מפליג להכיר את מגבלות הבטיחות של הסירה וסיכונים בפעילות, והינו כשיר רפואית למשימה.

התייחסות לסיכונים:

_____

_____

_____

_____

שם המפליג ..... תאריך ..... חתימה .....

שם המפליג ..... תאריך ..... חתימה .....

שם המפליג ..... תאריך ..... חתימה .....

שם המפליג ..... תאריך ..... חתימה .....

הריני מאשר בזאת את הפעילות

_____	_____	_____
שם החוקר	חתימה	תאריך

<u>אישור הפעילות על ידי קצין הצלילה</u>

נושא		מאשר	תאריך
כשירות הסירה	ציוד חובה, תוקף ועמידה במגבלות		
פעילות	התאמת הפעילות למגבלות		

הערות מפליגים לאחר ביצוע הפעילות:

_____

_____

_____

_____

Guidelines for going out to sea on a university-owned vessel

Type of vessel: _____

Vessel restrictions: _____

Validity of the vessel license: _____

Validity of vessel insurance: _____

Mandatory equipment on the vessel:

Boat use:

- The boat must be equipped with all safety equipment and valid seafarers, according to the sailing license
- It is mandatory to be equipped with a mobile phone and / or other means of communication, sealed in a dedicated airtight bag.

Life Vests	4	3 kg anchor	1
First Aid Kit	1	10 mm mooring rope 70 in length	1
Orange smoke handle 60' MK8A	1	Shade (beach or boat) Oars (in case of engine malfunction)	1
Signal mirror	1	1 L water per person	
Dust extinguisher 3 kg	1	Dive Flag	When a dive takes place
4 liter fuel tank	1	Walkie-talkie + cell phone	
Cutting tool / knife	1	Oxygen kit	When a dive takes place

Use of a kayak: When using a kayak, it is mandatory:

- The kayak paddle is secured to the kayak body
- Kayak docking system
- Walkie-talkie / mobile phone in an airtight bag
- Life Vest
- Knife / cutting tool
- It is mandatory to make sure that the kayak is owned by the university

Details of the planned activity:

Scheduled date for departure to the sea	
Participants	
The purpose of the activity	
The initiator of the activity will send an email, at least 48 hours before the activity to the diving officer, specifying: • Purpose of the activity • Equipment required.	

• Preparations and tests required in the laboratory. • Addressing safety risks during the activity
At the end of the activity, make sure: • Washing all equipment and storing it in the original cases. • Report back to the dive officer and the safety center of the university

Personal safety equipment: hat, diving shoes and, if necessary, sunscreen.

Transmission restrictions on divers, if any, please specify frequencies and transmission intensity:

_____

Permit to go to sea (will be signed onshore before activity begins)

Date: _____ Time: _____

Wind speed and direction _____ Wave height _____

As with any activity the responsibility for personal safety is first and foremost the personal responsibility of all participants.

Every sailor must know the safety limits of the boat and the risks in the activity and is medically fit for the task.

Risk reference:

_____
_____
_____
_____

Sailor Name: ..... Date .... Signature .....

Sailor Name: ..... Date .... Signature .....

Sailor Name: ..... Date .... Signature .....

Sailor Name: ..... Date .... Signature .....

Dive Safety Officer Approval for the Activity

Researcher's name: _____ Date: ..... Signature ....

Approval of the activity by the diving officer:

Subject		Approval	Date
As a boat service	Mandatory equipment Validity and compliance with active restrictions		
Activities	Adapting activity to constraints		

Notes after performing the activity at sea: