



Occupational Health and Safety (OHS) and Fire Protection (FP) Training for applicants and participants in Lifelong Learning		
Name and surname		
Date		Student's signature

OHS

The employer's obligation to ensure occupational health and safety applies not only to employees but also to all natural persons who are present on the employer's premises with the employer's knowledge. This makes it necessary to acquaint students with the basics of OHS and the risks of the work areas of the Faculty of Mathematics and Physics at Charles University.

Furthermore, university students and participants in Lifelong Learning (hereinafter referred to as "student") are subject to the general regulations of OHS and female employees' working conditions when carrying out practical training.

General OHS principles and obligations

- Exercise caution when walking in buildings and workplaces, use only designated pathways, stairways, entrances and exits, and do not linger in workplaces that are not related to study activities. When using staircases, use the handrail and always walk on the right.
- Undertake only those activities that have been designated by the relevant academic staff member or are related to the performance of study duties.
- Maintain order in the laboratories and report any deficiencies to the appropriate academic staff member without delay.
- Do not tamper with technical equipment (electrical, gas, pressure equipment, etc.) that is not intended to be used by students.
- Use electrical appliances and equipment in accordance with the applicable regulations and operating instructions.
- Before using technical equipment, check for defects.
- Report any emergency (fire, accident, etc.) to the appropriate academic staff member immediately.

1. Basic student responsibilities

All students are obliged to take care, to the best of their ability, of their own safety and the safety and health of persons immediately affected by their actions.

Students are also obliged to:

- Familiarize themselves with all applicable OHS regulations, obligations, guidelines and established plans at the faculty; comply with them and not circumvent them.
- Not consume alcoholic beverages or abuse other addictive substances on faculty premises and not enter faculty premises under their influence.
- Promptly notify the appropriate academic staff member of injuries or accidents; if physically possible, help with the investigation of the cause and circumstances of the accident.
- Report to the relevant academic staff member or other responsible faculty staff member any identified OHS deficiencies or any defect that threatens occupational safety.
- When working with chemical substances and mixtures in the building, follow the instructions on the safety data sheets for chemical substances and mixtures, use the designated packaging, as well as the designated places and storage areas. In particular, take care not to mistake the chemical substance or mixture for a foodstuff, either by using the wrong packaging or by improper placement (the packaging



must be labelled). Store these substances in such a way that they cannot (even in spite of a lack of knowledge of how they are used) cause damage to someone's health.

- Submit to such specified medical examinations and tests as may be required by the faculty administration.
- **Smoking is prohibited in all faculty buildings.**

2. Principles of work in the laboratory

- When working in the laboratory, the student must be familiar with the potential hazards of all chemicals and mixtures, apparatuses and equipment used. In this context, the student shall be instructed of the need to use the protective equipment specified for the laboratory on the basis of a risk assessment.
- Students can take the things they need for their work to the lab. Students are required to come to the lab on time and be properly prepared for class.
- The nature of the laboratory and the work in the laboratory must be matched by the student's clothing and appearance (i.e., adjusting the length of hair to keep it free of chemicals).
- It is forbidden to eat, drink, or smoke in the laboratories. It is also forbidden to use laboratory utensils for eating, drinking or storing food.
- When handling chemicals and mixtures, it is prohibited to pour chemicals and mixtures into food packaging.
- Damaged laboratory glassware must not be used and must be discarded immediately.
- Chemical substances and mixtures must not be poured down sinks and drains if they are corrosives, toxic substances, etc.
- When leaving the laboratory it is necessary to put the workplace in order and follow the laboratory's operating rules.
- Observe safety when working with technical gases - cylinders must be secured so that they cannot fall, e.g. with a chain. Cylinders over 30 kg must not be carried, they may be rolled along their bottom edges or transported by a trolley designed for this purpose. It is forbidden to use damaged cylinders, gas pipes, or hoses.

3. First aid

First aid must always be given quickly and promptly. All accidents must be reported to the appropriate teacher, who will provide first aid and medical treatment as necessary.

Cuts - apply a sterile dressing or plaster, in case of heavy bleeding apply pressure or tourniquet, provide medical treatment.

Burns - cool with running water or ice through a bandage (or clean foil bandage), provide medical treatment.

Abrasions - rinse the damaged area with running water, arrange medical treatment.

Ingestion of a toxic substance - do not induce vomiting when unconscious. After the ingestion of acids or alkalis etc., dilute stomach contents with water or water with activated charcoal (if the affected person is conscious). Inducing vomiting is effective only within two hours of the ingestion of liquids and within four hours of the ingestion of solids. Arrange medical treatment.

Inhalation of toxic substances - take the victim out into the fresh air and remove contaminated clothing, provide medical treatment as soon as possible.

Penetration of a corrosive substance into the eye - perform an intensive flushing of the eye with water (15 minutes) -then arrange medical treatment. If the burn is caused by a solid substance, first try to remove it from the eye. The eye must not be washed with soap. Ensure medical treatment.

Electric shock - **remove the** victim from the reach of the electric current with an insulated object. If the victim is not breathing, perform indirect cardiac massage. Arrange medical treatment.



4. School accident

- A student accident is an accident that happened to students at the faculty during theoretical and practical teaching or during activities directly related to teaching.
- Any accident occurring during teaching or teaching-related activities must be reported by the student to the relevant academic staff member, who will record the accident in the Student Accident Book.

FIRE PROTECTION

1. Duties of students in ensuring fire protection

- Observe the established fire safety regulations and measures (no smoking and handling of open flames), do not block material means of fire protection (fire extinguishers, hydrants).
- Act in such a way as not to cause a fire or otherwise endanger the life and health of persons, animals and property.
- Familiarize yourself with fire hazards in the workplace and do not enter areas that are not related to the performance of your study duties.
- Familiarize yourself with fire protection documentation - **fire regulations** at the workplace, **fire alarm directives and fire evacuation plans**.
- Become familiar with the location and use of physical fire protection equipment in the workplace.
- When dealing with fire, natural disasters and other emergencies, provide personal and material assistance - extinguish the fire or prevent its spread with available extinguishing agents.

2. Possibilities of starting a fire

- Failure to comply with the ban on smoking and handling fire.
- The operation of unauthorised thermal appliances (cookers, etc.).
- The use of damaged electrical and gas appliances.
- Negligence in the operation of thermal appliances - appliances not switched off, failure to keep a safe distance from combustible objects.
- Improper execution when repairing el. installation and gas distribution.

3. Prohibited Activities:

- It is forbidden to deliberately call the fire brigade without reason.
- It is forbidden to misuse the emergency line.
- It is forbidden to carry out work that may lead to accidents, fires or emergency conditions.
- It is forbidden to damage, misuse or otherwise prevent the use of fire extinguishers, hydrants and fire safety equipment, main shut-offs and switches (electricity, water, gas), e.g. by storing materials in front of these devices, blocking furniture, etc.





ATTENTION! In case of evacuation it is forbidden to use lifts due to the possible interruption of the electricity supply and smoke in the lift shaft!!!

4. Use of a portable fire extinguisher:

- Use when extinguishing flames at a distance of up to 1.5 - 2 m.
- Pull the locking catch out of the handle.
- Point the nozzle at the fire.
- Press the extinguisher handle (turn the control wheel on old HP CO₂ types).
- Direct the jet of extinguishing agent to the lower part of the flame and gradually from the front or from the side towards the centre to extinguish the flame.



Selection of the type of portable fire extinguisher:

<p><u>Water extinguisher</u></p> 	<p><u>Suitable for:</u></p> <p>Extinguishing solid substances burning with a flame or smouldering (e.g. wood, paper, straw, textiles, coal, plastics, rubber).</p>	<p><u>Do not use on:</u></p> <p><u>Live electrical equipment</u>, flammable liquids, flammable gases, light metals (aluminium, manganese, magnesium).</p>
<p><u>Foam fire extinguisher</u></p> 	<p><u>Suitable for:</u></p> <p>Extinguishing solid substances burning with a flame or smouldering (e.g. wood, paper, straw, textile, coal, rubber) and liquid substances burning with a flame (e.g. petrol, diesel, oil, benzene, varnish, alcohol).</p>	<p><u>Do not use on:</u></p> <p><u>Live electrical equipment</u>, flammable liquids, flammable gases, light metals (aluminium, manganese, magnesium).</p>
<p><u>Powder extinguisher</u></p> 	<p><u>Suitable for:</u></p> <p>Extinguishing solids burning with a flame (universal use) or smouldering (e.g. wood, paper, straw, textiles, coal, rubber), liquid substances burning with a flame (e.g. petrol, diesel, oil, benzene, varnish, alcohol), gaseous substances burning with a flame (e.g. methane, propane, luminescent gas, hydrogen, acetylene) and on live electrical equipment.</p>	<p><u>Do not use on:</u></p> <p>Wood dust, coal, textile dust, light and flammable alkali metals.</p>
<p><u>Snow extinguisher</u></p> 	<p><u>Suitable for:</u></p> <p>Electrical equipment under current, flammable liquids (gasoline, diesel, oils, etc.), solid materials (plastics), fine mechanical equipment.</p>	<p><u>Do not use on:</u></p> <p>Light and flammable alkali metals, flammable dusts, bulk substances. Not very suitable for extinguishing solids (wood, textiles, coal).</p>

ATTENTION! Water, foam or water extinguishers or hydrants must not be used to extinguish live equipment due to the risk of electric shock! Water must also not be used to extinguish fires involving flammable liquids!

5. Important phone numbers

Fire Rescue Service of the Czech Republic	150	
Emergency Medical Service	155	
Police of the Czech Republic	158	
Municipal Police		156
Single European emergency number	112	

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