

## **Principles in biochemistry classes**

1. Chemistry classes are mandatory.
2. Excused absence from exercise requires complement, or passing the topic in mode agreed with the teacher (only in exceptional cases and only once per semester)
3. Classes must be attended on time. Students coming more than 15 minutes late will not be allowed to attend the exercise, and such cases will be treated as absence.
4. During every class, before proceeding to the practical part, theoretical test will be held, on the topics regarding current exercises. The topics of exercises and the summary of theoretical part will be available at least one week prior to the date of exercise on the website of Department of Biochemistry.
5. Each exercise ends with passing the credit, failed credits must be completed.
6. Two classes per semester are reserved for theoretical tests covering material presented in lectures and classes, according to the issues included on the website of Department of Biochemistry.
7. Degrees and points gained during exercises and theoretical tests, as well as passing practical exercise are required for entering final exam.
8. To participate in chemistry classes, students are required to participate in health and safety briefing confirmed by their signature. Students are obliged to obey safety rules and guidelines in the Laboratory of the Department of Biochemistry.
9. Charges for the culpable destruction or damage of laboratory equipment (according to their actual value) will be incurred.
10. At the end of each class students are required to leave their working place clean and dry



## **Safety rules in the biochemical laboratory**

1. Students can work in the laboratory only under the supervision of teacher.
2. Smoking, eating and drinking in the laboratory are forbidden.
3. It is also forbidden to try by taste any chemical substances.
4. During the exercises Students should wear protective aprons (white coat, gloves).
5. All reactions that can cause the release of the toxic (harmful), vapors and gases, must be carried out in a fume cupboard.
6. Students should not leave on unattended burners and/or heating devices and should pay attention whether gas leaks in the laboratory. In this last case, gas should be closed off, all burning torches put out, the ventilation run and windows opened.
7. Students should not suck in any solutions and reagents by mouth. This should be done with special tips for pipettes or rubber pears.
8. Solutions of concentrated acids or concentrated alkalis, should be pipetted to test tubes or other vessels in fume cupboard. It is forbidden to transfer bottles with concentrated acids and bases to other places.
9. While heating the substance in glass tube its outlet should be safely directed to wall instead of other students. It should be filled in up to 1/3 of tube and test tube should be hold in wooden claws. During heating tubes should be shaken constantly. If possible Students should wear protective glasses.
10. Students should follow the instructions, be careful all time and remember that the lack of accuracy, inattention, insufficient familiarity with the equipment and reagents - can cause an accident.

## **First aid in emergencies**

1. Accidents such as: mutilation, burns by concentrated acids or bases, thermal burns, poisoning by harmful substances and many others may occur during laboratory work. First aid

in these cases is based on simple procedures and providing with it is the responsibility of teachers conducting the classes. For this purpose, first aid kit, placed in a prominent position and fitted with a set of medicines, dressings and instructions for their use is necessary (near door).

2. The aid during injuries entails cleaning the wound, disinfection and stopping the flow of blood. When the wound is contaminated it must be washed first. Decontamination of the wounds can be carried out using hydrogen peroxide, iodine or other solutions mentioned in the instructions supplied with the first aid kit. After this dressing to a wound and a sterile gauze and bandage should be applied. Bruises require cold compress.
3. When a solution of chemical reagent will get into eye immediate and thorough washing the eye with water stream from the eye scrubber which is located at each laboratory table is necessary. If concentrated acid or concentrated base was the pollutant, student must be sent to an ophthalmologist after receiving first aid.
4. During skin burns by concentrated acids or bases - the procedure is as in case of getting a chemical reagent into eye.
5. During thermal burns of the skin affected area should be immediately cooled with cold water. In the case of lighter burns, sprinkle with table salt or use a compress of high-proof alcohol. In the case of severe burns, apply a poultice of 5% solution of  $\text{KMnO}_4$  and direct the victim immediately to the doctor.
6. A solution of calcium hydroxide, fats and ointments are not recommend to use on skin burns, because these agents further impede outpatient treatment.
7. In cases of poisoning with heavy metal salts immediately give the patient milk or raw egg.
8. Electrical installation inside the laboratory is now modernized and safe. If there had been an electric shock of the operator of device powered by electricity then the closest person of the victim should immediately disconnect the power cord or turn off the fuses. If electrocuted is unconscious artificial resuscitation must be performed and an ambulance called immediately. Skin burns caused by an

electrical short-circuit electricity should be treated in the same way as thermal burns.

