

**FACULTY OF VETERINARY MEDICINΕ**

**DIVISION OF LABORATORY DIAGNOSTICS**

**LABORATORY OF MICROBIOLOGY AND PARASITOLOGY**

1. **HEALTH AND SAFETY OF STUDENTS IN THE LABORATORY OF MICROBIOLOGY AND PARASITOLOGY AND PRINCIPLES OF GOOD LABORATORY PRACTICE**

**GENERAL SAFETY RULES AND GUIDELINES IN THE LABORATORY OF MICROBIOLOGY AND PARASITOLOGY**

* Clean and in good condition protective clothing (Lab Coat) is required while in the Laboratory grounds. Exiting the Laboratory wearing protective clothing is forbidden.
* Handwashing is mandatory prior and after completing work, following WC use and leaving the Laboratory.
* Use gloves and protective glasses when the task requires so.
* Avoid talking, coughing etc. while executing tasks.
* Long hair should be tacked accordingly to avoid catching fire or being entangled in equipment.
* Use of footwear that exposes feet is forbidden.
* Food, drinks and smoking are forbidden in Laboratory grounds.

**GOOD LABORATORY PRACTICE CODEX IN THE LABORATORY OF MICROBIOLOGY AND PARASITOLOGY**

* Unauthorized personnel are forbidden in Laboratory grounds.
* The laboratory should be kept tight and void of useless materials.
* Laboratory spaces must be kept clean.
* Cupboards and drawers must be kept clean and free from insects.
* Personal items must be kept away from Laboratory space (bags, clothing, etc.)
* All tasks must be performed with single use gloves.
* Used instruments must be cleaned thoroughly.
* Floors must be mopped regularly and in particular cases e.g. broken glass material with microbial culture or reagent, acid or alkali, specific procedures must take place to clean and disinfect.
* Laboratory instruments are forbidden to get in mouth contact.
* Samples and various solid waste should be collected in proper bags and be disposed of with sterilization upon completion of tasks, so they will be thrown away with common trash.
* All microorganisms should be considered as potentially pathogenic regarding their environmental disposal.
* Materials with microbial cultures must be destroyed with sterilization upon completion of tasks.
* Chemical reagents should be collected in proper glass vials and be delivered for removal upon completion of tasks.
* Polluted surfaces with contaminated fluids should be dealt with cleaning and disinfection.
* Accidents that lead to surface pollution with acids and alkali should be dealt with immediately and the substance be neutralized.
* Glass shards and sharp objects must be disposed of in separate vessels.
* At the Microbiology Lab only grade 1 Bio-safety microbial cultures can be used.
* Working with such cultures can be done on an open bench or in a biosafety chamber (laminar flow cabinet) owned by the laboratory.
* Reagent vials, solutions etc. and culture plates must be sealed with caps or covered.
* Inoculation rings, blades and needles must be sterilized on Bunsen burner before and after use. When possible single use rings must be used.
* Bunsen burner must be turned off with care when not in use.
* When working with the burner, flammable materials must not be around, and hair must be tacked to avoid accidents.
* Biosafety cabinets cannot be used as a fume hood for toxic or volatile substances.
* The laminar flow cabinets must be turned on at least 5 minutes before task commences.
* The cabinet’s working surface must be sterilized before the start of the task and after completion, having removed any objects inside.
* No tasks must be conducted with ultraviolet light in operation. It is extremely harmful for the eyes
* Place whatever is needed for your task inside the cabinet, before beginning your task.
* Do not place objects on the cabinet racks because air flow is obstructed.
* Always wear the lab coat and work at least 10 cm inwards the chamber space.
* The burner used inside the cabinet must be placed at the back, to avoid creating turbulent flow.
* After completing the tasks, benches must be cleaned with chlorine solutions (35 ppm active chlorine) or ethyl alcohol (70%).
* All sample containers must bear proper labelling.
* All solution vials must bear proper labelling.
* All containers are placed sealed in the refrigerators.
* All culture plates must be sealed with parafilm and placed in plastic bags, in order to be kept in the refrigerator.
* Whatever is stored in the refrigerator for conservation should be packed before. Solution vials should be sealed airtight.
* Refrigerator temperature must be checked with a thermometer inside its chamber.
* Food and drinks for consumption must not be stored inside the refrigerators.
* Refrigerators must be kept clean and regularly be cleaned with detergent.
* Chlorine must be no use in refrigerator cleaning.
* Various instruments and apparatuses must not be cleaned with chlorine, but with ETH solution 70 %.
* Laboratory scientific equipment must be used by trained personnel, following manufacturer’s instructions.
* **First aid.** In case of minor injuries, a Medkit is available inside the Laboratory.
* **Medical assistance is provided at General Hospital of Karditsa (Emergency Care Unit). Telephone: 2441351520 / ΕΚΑΒ (National Service of Emergency Care) Telephone: 166.**
* **In case of fire. A Dry powder extinguisher exists on the room / Fire Service Telephone: 199.**

**Keep the laboratory grounds and equipment always clean.**