Abu Bekr Belkaid Tlemcen University
Institute of Applied Sciences and Techniques -ISTA
1st year LMD
Module: Analytical Tools for Chemistry, Biochemistry and Safety

I. General Recommendations

1. Wearing a lab coat during the entire practical session is mandatory.
2. It is essential to prepare for the practical session: carefully read the corresponding section in the lab manual before the session.
3. Each student is required to clean their workbench at the end of each session.

II. Precautions to Be Taken

1. Do not contaminate reagents by introducing dirty pipettes into the stock bottles.
2. Close bottles immediately after use and return them to their proper place.
3. Never pipette toxic or corrosive reagents (strong acids, strong bases, and organic solvents) by mouth. Use a pipette filler or propipette.
4. Do not fill burettes directly from large reagent bottles. Use a small beaker.
5. Do not close the top of the pipette with your thumb, but with your index finger.
6. Reserve the last 10 minutes of the session for cleaning and organizing your workbench.
7. Rinse pipettes with distilled water and place them tilted on the edge of the tray.
8. Empty the burette and rinse it with distilled water.
9. Wash glassware (beakers, Erlenmeyer flasks, test tubes, etc.) with soapy water and rinse with distilled water.
10. Wipe the bench with a clean sponge.
11. Do not throw papers or reagents into the sinks.

III. Recommendations for Writing Your Report

The report you submit to the instructor is the main component on which you will be graded.

It must include, at the top left of the first page: your first and last name, year of study, subgroup, date, and title of the session.

You must take great care in writing your report. The outline is predefined by the questions found at the end of each practical procedure.

The evaluation of the report (graded out of 20) will follow these criteria:

1. Answer the questions in the order they are asked.
2. Provide precise, clear, and concise answers.

Example: If you are asked to state the purpose and principle of the experiment, include them in the introduction—exactly what is requested. Superfluous details will be penalized.
3. The grade will also take into account the care shown during the experiment, the cleanliness of the workbench, and the presentation of the report.

Rules to Be Observed During Practical Work

1. Before coming to the laboratory, each student must have prepared at home the practical work topic to be carried out during the session. The provided chemistry textbook should be used according to the prescribed study plan.

2. Before starting the experiment in the laboratory, it is essential to:
   a. Carefully read the procedure in the practical work manual.
   b. Prepare all materials needed for the experiment.
   c. Include the date and title of the experiment on the report.

3. Follow the experiment carefully to observe and note all phenomena that occur.

4. At the end of the experiment, record in your report:
   - Personal observations
   - Chemical reaction equations
   - Diagrams of the devices and systems used
   - Conclusions drawn

5. It is forbidden to bring communal reagents to your workstation.

6. When withdrawing a reagent from a bottle or container, hold it so that the label faces upward to prevent it from being damaged by dripping liquid.

7. It is forbidden to return excess reagent to the original bottle. Any excess should be disposed of properly (e.g., poured down the sink if safe to do so). The same rule applies to dry reagents.

8. Dry reagents should only be removed using a clean spatula.

9. After taking the required quantities of reagents, immediately recap the bottles and return them to their proper place.

10. Use only the minimum quantities of reagents necessary to carry out the experiments.

11. Students are forbidden from conducting experiments not included in the program or without the teacher's authorization. This is for obvious safety reasons.

12. Before leaving the laboratory, each student must wash all glassware they have used and leave their workstation clean and tidy.