

KIM1010 GENERAL CHEMISTRY LABORATORY
GENERAL INSTRUCTIONS

1. It is ***extremely important*** that you read each experiment and basic references prior to the lab because the experiments are not synchronized with the classroom lectures. *The lab instructor will ask general questions during the lab to test your understanding of the experiment.*
2. The data, calculations, observations, results and graphs are to be recorded ***directly, in ink*** in your bound laboratory textbook. You can ***neatly*** cross out mistakes. This procedure is applied in most technical jobs.
3. Students must attend each lab on the specified date unless arranged differently with the course instructor. The students will be admitted to the lab within the ***first 10 min.***
4. Students without ***lab coats*** will not be admitted to the laboratory.
5. A quiz (for approximately 10 minutes) will be given at the beginning of each experiment.

6. Instructions for Lab Reports

Students are responsible to prepare a lab report in the lab. The report sheet will be distributed by the assistant. After preparing the **group report**, return it to your assistant. The nature of working in groups implies that there should be cooperation and discussion between members of the group and the lab instructor.

7. The course grade will be based on the following:

(a) Reports (neatness, organization, accuracy, discussion of results and answers to written questions), preparation for each experiment, answer to oral questions, technique and execution of lab.

(b) Quiz

(c) Final Examination (40% Final grade).

The purpose of this final examination is simply to verify that you have absorbed the important points. ***Most of the questions (~75%) will be related with what you have answered in the lab reports.*** In addition, the knowledge acquired in General Chemistry course will be the basis for the remainder of the exam questions.

8. Students can take maximum 2 Make-ups, only if they have medical reports. Those who have no reports will not be able to take a Make-Up for the experiment they have missed. Even if you have a medical report; you are not allowed to take a Make-Up for the third time.

9. Laboratory reports and quizzes will be evaluated as a midterm which is composed of five separate exams. The following table shows the name of the experiments. For instance, after you submit your report for the first experiment (Identifying substances by their properties), it will be graded together with your quiz grade as a 1/5th of your midterm grade.

<u>Exams</u>	<u>Experiment Name</u>
1	Identification of Substances According to Their Properties
	Solution Preparation
2	Determination of Molecular Mass of Volatile Liquids
	Thermal Decomposition of Potassium Chlorate and Determination of the Molar Volume of Oxygen
3	Intermolecular Interactions: Dissolution of alcohols in water and ether
	Colligative Properties: Freezing point depression and boiling point elevation
4	Titration of Weak Acids, pH and Buffers
	Investigation of Factors Affecting Reaction Rate
5	Chemical Equilibrium and Determination of Equilibrium Constant
	Redox Reactions: Investigation of metal activities

10. Laboratory grades will be evaluated as,

Report: 40 %

Quiz: 60 %

11. Final grading

60% of MIDTERM exam (composed of 5 exams, 20% each) + 40% of FINAL exam=FINAL GRADE