

CHEM L112 – GENERAL CHEMISTRY II LAB (1 credit)

Text

Notebook given by the teacher before each lab session.

Grading

Lab reports: 85%

Lab notebook: 15%

Lab safety

Safety rules in the lab will be given at the beginning of the course. Every student is expected to follow all these rules while working in the lab. Specially important is to wear goggles at all time during lab sessions. Accidents or individual or medical problems must be notified the instructor.

Care of equipment

All laboratory equipment, particularly delicate equipment like the analytical balance, must be handled with care. Students who deliberately mishandle lab equipment will be penalized with a lower grade for the course.

Lab notebooks

Each student must maintain a laboratory notebook. Loose leaf notebooks are not acceptable. Keep a table of contents on the first page. During the lab session all observations and data are to be recorded clearly and in order in the notebook. Each student must have his or her lab notebook signed by the instructor at the end of each lab session. The notebook grade is 10% of the total grade.

Attendance

Attendance in each lab session is mandatory. Each student must sign the attendance sheet for each lab session. A missed lab will be recuperated only due to a forced reason.

Pre-lab assignments

A pre-lab assignment is part of the report for all labs. It is due at the pre-lab lecture on the first day the lab is to be performed.

Lab reports

Lab reports are due on the day of the next lab session after the lab is completed. Hand the reports directly to me or put them in my mailbox in Viña 3.

Students who turn in two lab reports late without an excuse, will receive a grade reduced by one-third of a grade level, e.g. A to A-. If three lab reports are handed in late, the grade will be reduced by two-thirds of a grade, e.g. A to B+, and so forth. One excused lab will be made up during the make-up session at the end of the term. A grade of zero will be given for more than one excused labs and for missing reports at the end of the term.

Laboratory Schedule

Week	Topic	Skills to be Acquired
1	No lab	
2	1- Check-in, 2- Laboratory techniques, 3- Safety in the Laboratory	1- Recognizing names and functions of basic equipment, 2- Training in basic lab procedures, 3- Training in recognizing and using safety equipment following safety procedures.
3	Calibration of glassware	To realize the maximum precision to be achieved with some glass devices.
4	Acid base titration	To learn how to prepare a solid solute solution and how to proceed for a dilution.
5	Acid base titration	To learn how to perform a titration with indicators, to know the concentration of an unknown.
6	No lab	
7	Determination of the solubility of Calcium hydroxide by titration	To learn uses of titration others than to know concentrations.
8	Kinetics of the decomposition of Hydrogen peroxide	To calculate the rate of a reaction.
9	A colorimetric determination of aspirine in commercial preparations.	To learn how to deal with spectrometer and how to use it in quantitative determinations.
10	"	"
11	Determination of pKa of an acid-base indicator	To learn how to use pH meters and the use of the measurements done.
12	Studying the effect of buffering on the resistance of a solution to pH change.	"
13	Make-up and Check-out	