Course description: Experiments illustrate crucial chemical concepts discussed in lectures and highlight current interpretations of experimental data, based on modern lab techniques.

Textbook: College of Staten Island Laboratory Manual for CHM 127

Grading: 40 % Lab reports, pre-labs, and in-class quizzes
24 % Midterms (two examinations; 20-30 min for each)
26 % Departmental final
10 % Lab techniques and attitude

Note: Your final grade depends on your overall performance, NOT only on your reports or tests.

Pre-lab: (10 points; it may be placed by in-class quizzes.) Answer the pre-lab questions for each experiment in the laboratory manual. The answers, formulas and/or calculations should be printed clearly. For the experiment without pre-lab questions, type (using any computer word processors) a paragraph (around 200-300 words; double spaced) to summarize the purpose and brief procedures of that experiment. The pre-lab should be handed in to your instructor at the time you enter the lab. Please make a copy of the prelab for your use before handing it in.

Lab report: Your lab report is due at the time you enter the lab in the following week. Any late report, without legitimate reason, will NOT be graded. However, if you are absent for a valid, documented reason, you can turn in the previous week’s report when you return to the lab the following week.

Prepare a cover sheet to include the course, the title of the experiment, your name, date, and the name(s) of your partner(s).

Grade is based on 100-point scale including 10 points for each pre-lab. The general rule is as follows.

1) Data (25 points; no pencil is allowed): Print your result directly on the data sheet on the day of your experiment. Have your instructor initialed your data before leaving the lab or the report is unacceptable.

2) Calculations (25 points): Print the formula and number, including units, clearly in a separate sheet. The final numerical work can be done on a calculator. Indicate the appropriate significant figures.
For example, Mass = Density x Volume
Mass = 0.987 g/mL x 0.1523 mL = 0.150 g

3) Post lab questions (32 points): Print your answers clearly on the lab manual. Your answers should be unique. If your answer is the same as your partner’s or someone else’s both will receive shared points.

4) Discussion (8 points): Type the summary of the experiment in one page (around 200-300 words and double spaced) by the following order: (a) the purpose of the lab; (b) the fundamental principle or theory behind the experiment; (c) the brief procedure(s) or methods) to reach the goal of the experiment; (d) discussion about the possible experimental error(s). Do not give detailed procedures and detailed results in discussion.
Notes:
(a) It is your responsibility to keep your pre-lab and lab reports tidy and readable. A significant penalty will be imposed on your grade if your pre-lab or lab reports are disorganized and/or unreadable.
(b) No reports will be re-graded except grading errors.
(c) Lab reports will NOT be graded without the calculations
(d) Any forms of cheating (such as copying or plagiarism) in report writing or tests will result in a zero point for your assignment. Also, any academic dishonesty will be reported to the college authority
(e) Arrange your time in advance. Do not wait for the last minute. If you have any questions, contact your instructor BEFORE the lab report is due.
(f) The format of lab reports and the point distribution would vary based on the content of each experiment.

Attendance:
* It is your responsibility to attend the class on time. No excuses for being late. The in-class quizzes will be held in the beginning of your class.
* Anyone missing the lecture portion of the lab will not be allowed to attend the lab.
* No make-up labs, quizzes and exams will be arranged.
* Missing two or more labs (for any reasons) will result in F for this course. You are allowed to miss only one lab if you have a legitimate reason. Present the proof to your instructor; otherwise, a zero point will be assigned to your pre-lab/lab report.
* You will need to hand in your pre-lab or report (from the previous week) in the next school day if you are absent from a lab.

Safety: You need to follow the safety rules and regulations all the time while you are in lab. After your instructor completes the lecture, you will need to wear safety goggles at any time during the lab session. You will be expelled from the lab if you do NOT comply with this safety rule. Reading the procedures carefully before you enter the lab is extremely important for you to prevent any unnecessary accidents and property damages. Attending the lecture is mandatory because the lab instructor will provide important safety issues for each lab.

Attitude: Disruptive behavior is unacceptable in the lab, and will NOT be tolerated, such as latecomers, noisy devices, inconsiderate behavior, and talking during lectures, etc. Dispute of scientific issues is highly welcome to advance our knowledge, but emotional arguments and quarrels are highly prohibited.

After labs: Each lab has some links with the concepts presented in the current or future lectures of the General Chemistry courses. To master your knowledge, it is important for you to conduct critical thinking for understanding the quality and meaning of your experimental data. This is a great opportunity for you to review what you have learned or will learn in CHM 141 & 142, by making the links. Also, it is a crucial practice for you to repeat the experimental procedures during the lab hours to make sure you know how to operate each instrument and obtain the most precise measurements. This lab will be the first step for you to build up your scientific career.