

Temple University
Department of Chemistry
Main Campus
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Laboratory Coordinator

Introduction to Chemistry Laboratory
(Chemistry CO63)
Fall Semester 2005
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Keep this syllabus; it contains important information which you will need to know in order to succeed in this course.

Chemistry CO63 is the first semester of Introduction to Chemistry Laboratory. This broad survey course in chemistry is designed primarily for non-science majors and those planning careers in allied health or horticulture. Introduction to Chemistry is a core curriculum course; however, it is not accepted by medical or dental schools, and cannot normally be used as a prerequisite for Chemistry 121 (Organic Chemistry). If you expect to take Science and Technology courses in Chemistry (100 level or above), you should take the 71-74 sequence (General Chemistry) rather than this course.

A student will not be permitted to enroll in Chemistry 63 unless that student also enrolls in Chemistry 61, or has previously completed Chemistry 61 or its equivalent with a passing grade. Any student who has a need for accommodation based upon the impact of a disability should contact his or her course instructor privately to discuss their specific situation as soon as possible; also it is advisable for them to contact Disability Resources and Services at 215-204-1280.

LABORATORY TEXTS AND BLACKBOARD: 1. Laboratory Manual for Fundamentals of General, Organic, and Biological Chemistry, 6th Ed. by Holum and Olmsted.
2. Module 3 and other lab handouts will be available on Blackboard or supplied by your laboratory instructor. Module 3: Acid-Base Chemistry and other laboratory handouts.
3. Students should check Blackboard and their Temple e-mail accounts each week for possible announcements and possible supplementary materials.

GRADING: Grades will be based on a possible 1000 points for Chemistry 63. The grade breakdowns are given below:

CHEMISTRY 63	
Midterm	200 points
Final	200 points
Lab. Reports	500 points
Lab Quizzes	100 points

Total	1000 points

GENERAL COURSE INFORMATION: First class: Monday, August 29, 2005.

Last day to drop (tuition refund available): Monday, September 12, 2005.

Last day to withdraw (no refund): Monday, October 31, 2005. Students who have previously withdrawn from the same course, or who have already withdrawn from 5 courses since September 2003 may not withdraw. Drops and withdrawals are handled by the student's college office.

The Fall Semester ends on Saturday, December 17, 2005.

ABSENCES: Excessive unexcused absences from any part of Chemistry 63 can result in a student receiving an F as a final grade. It is the responsibility of the student to make sure that his/her absence is recorded as excused if such is the case.

LABORATORY PREPARATION: Students should expect to spend an average of 3 hours each week outside of lab, lecture, or recitation preparing for Chem 63 laboratory. This preparation includes preparing for or doing prelaboratory assignments, prelab quizzes, laboratory reports, research papers, midterm and final examinations.

WITHDRAWALS: Students may withdraw from the course with a grade of W at any time up to and including Monday, October 31, 2005. No withdrawal is possible after that date. A student who withdraws from Chemistry 61 may or may not withdraw from Chemistry 63. Those who elect to withdraw from Chemistry 63 must check out of laboratory before their withdrawal slips are signed. No withdrawal slips will be signed after Monday, October 31, 2005. Only Dr. Bloxton will sign laboratory withdrawal slips. Dr. Bloxton can be contacted by phone and e-mail, 215-204-7129 and jdb84@temple.edu. The full university policy on withdrawals can be found at <http://policies.temple.edu> under section 02.10.14.

INCOMPLETES: The grade of I (Incomplete) will only be considered in cases of end of semester emergency situations where at least 60% of the term's work has already been completed with a passing grade, and only for reasons beyond the student's control. To receive a grade of I, the student first must sign a written agreement with the instructor involved and the Chemistry department, specifying the manner by which the missed work will be completed. Notify Dr. Bloxton if you believe you have a valid reason to obtain a grade of I in Chemistry 63. The full university policy on incompletes can be found at <http://policies.temple.edu> under section 02.10.13.

ELECTRONIC CALCULATORS: Although the types of calculations employed in Chemistry 63 are generally quite simple, you may find that a pocket calculator (properly operated) will improve your accuracy. If you wish to invest in a calculator, it is suggested that you select a model which can deal with logarithms and scientific notation. Be certain that if you use a calculator, it is kept in good condition, especially for quizzes and examinations. Calculator failure will not be accepted as an excuse for a poor quiz or examination. The sharing of calculators, use of information storage devices, cell phones, pagers and other communication devices during quizzes or examinations is prohibited. Students may not use programmable calculators or calculators that are in their cell phones.

OFFICE HOURS: Office hours for each instructor in Chemistry 63 will be announced at the beginning of the second week of classes.

MID TERM REPORTS: The University requires, for submission to them, a mid term report for this course for each student. These reports will be used to advise and council students on seeking appropriate assistance in their studies.

LABORATORY GRADING: A student's laboratory grade will be based upon the student's overall performance in laboratory quizzes (10%), as well as on the laboratory exercises, that is, the laboratory reports (50%), and the student's grades on a midterm examination (20%) and a final examination (20%). These quizzes and examinations will be taken in the laboratory room.

LABORATORY QUIZZES (10%): There will be a total of eleven laboratory quizzes (starting Tuesday, 9/6/05) that will be given at the beginning of the laboratory period. These laboratory quizzes can cover theory, laboratory techniques, calculations, and laboratory procedures for the experiment that students are doing in that laboratory period. The lowest laboratory quiz will be dropped. If one laboratory quiz is missed, a score of zero will be assigned for the missed laboratory quiz and this laboratory quiz will be dropped instead of the lowest laboratory quiz. Only one laboratory quiz is dropped.

LABORATORY QUIZZES CONTINUED: If a student misses two or more laboratory quizzes, scores of zero will be assigned for all missed laboratory quizzes. The laboratory quiz cannot be given to a student that comes in to class after another student has already finished and left the quiz room or after everyone in the quiz room has finished the quiz. If a student misses a laboratory quiz, they may take the quiz in another section of Chem 63 laboratory that is taking the quiz on the same material. Otherwise makeup quizzes are not given. The makeup quiz must be given to the instructor that gave the makeup quiz. Makeup quizzes are not given during laboratory makeup times. Copying, talking and other forms of communication between students during a laboratory quiz are prohibited. The sharing of calculators, use of information storage devices, cell phones, pagers and other communication devices during quizzes is prohibited. Students may not use programmable calculators or calculators that are in their cell phones.

MIDTERM EXAMINATION (20%) AND FINAL EXAMINATION (20%): The midterm examination is scheduled for Tuesday 10/25/05 through Monday 10/31/05. The final examination is scheduled for Thursday 12/1/05 through Wednesday 12/7/05. If a student misses the midterm or final examination they may take the midterm or final examination in another section of Chem 63 that is taking the midterm or final examination. If a student has an excusable reason for missing a midterm or final examination a makeup midterm or final examination can be given. If, however, a student misses taking a midterm or final exam, during the exam times when it is given, then a grade of zero will be given if a student has no excused absence for missing the midterm or final exam. For an absence to be considered excusable, the student must provide the laboratory instructor with a written documented note, explaining the reason for the absence; whereupon, the instructor will notify the student whether or not the absence is considered excusable. The midterm or final examination cannot be given to a student that comes in to class after another student has already finished and left the exam room. Copying, talking and other forms of communication between students during a midterm or final examination are prohibited. The sharing of calculators, use of information storage devices, cell phones, pagers and other communication devices during a midterm or final examination is prohibited. Students may not use programmable calculators or calculators that are in their cell phones.

LABORATORY REPORTS (50%): Prelaboratory report sheets are due at the beginning of every laboratory period. The laboratory instructor will look to see if the students attempted to answer all of the prelaboratory questions and a score will be assigned. These same prelaboratory questions will also be handed in with the rest of the laboratory report and will be graded. Laboratory reports are due the the laboratory period after a lab is scheduled for completion. Students are to work by themselves instead of with partners or in groups whenever possible. All students that work in pairs or in larger groups than indicated by the laboratory instructor will lose 35% of the total value of the laboratory report. Students that turn in a laboratory report that they didn't perform will receive a score of 0% for the entire laboratory report. Students that miss a laboratory can makeup the missed laboratory in another section of Chem 63 that is doing the same laboratory experiment. Students can also makeup a missed laboratory during the makeup laboratory sessions during Tuesday 10/25/05 through Monday 10/31/05 and during Thursday 12/1/05 through Wednesday 12/7/05 after the midterm and final examinations are completed.

LABORATORY SAFETY: It is expected that everyone in the lab will conduct themselves in a professional manner. All students are required to wear departmentally approved safety glasses or safety goggles during lab. Students that don't wear or have safety glasses or goggles will not be allowed to work in the laboratory. It is the responsibility of the student to purchase and keep their own safety glasses. Appropriate clothing and shoes are to be worn in the laboratory. No shorts, mini-skirts, sandals or open toe shoes. Laboratory coats or laboratory aprons are optional items. Anyone who wears contact lenses should inform their instructor; we strongly suggest you not wear them in lab.

LABORATORY SAFETY CONTINUED: Any student who is pregnant or may become pregnant during the course of the semester should consult a physician to decide whether or not it is advisable to continue in the course. Any students with any medical conditions that might require special treatment in the event of injury should inform their instructor, so that in the event of an emergency we may respond appropriately. All students are required to purchase, read, understand and sign the Temple University Student and Laboratory Use General Guidelines for CST (University Copy Center 601 Conwell Hall). Students will not be permitted to continue working in the labs after Tuesday, September 13, 2005, without this signed document. Previously signed documents from past Chem 63 labs may not be used. A new document is required for Chem 63 lab.

TENATIVE CHEM 63 LABORATORY SCHEDULE

WEEK DAY

1. M 8/29 - F 9/2 Check in; Safety
2. T 9/6 - M 9/12 Holum: Exp.1. SI Quantities; Exp 2. Density
Module 1: Specific Gravity Determination By Urinometer
3. T 9/13 - M 9/19 Holum: Exp 23, 24. Colloidal Dispersions and Dialysis
Module 1: Calculations Involving Solutions Preparation and Properties
4. T 9/20 - M 9/26 Holum: Exp. 26. Ionic Reactions
Holum: Exp. 27. Solubility
5. T 9/27 - M 10/3 Module 2: Chromatography of Spinach or Carrots
6. T 10/4 - M 10/10 Holum: Exp. 5, 6. Chemical Change
Holum: Exp 11. Mass Relations
7. T 10/11 - M 10/17 Schwartz: Specific Heat of Metals
8. T 10/18 - M 10/24 Module 3: Determination of pKa of a Drug Product
Midterm Examination Review
9. T 10/25 - M 10/31 Laboratory Midterm Examination on Experiments in Weeks 2-6.
Makeup Laboratory
10. T 11/1 - M 11/7 Module 3: Buffers Part A
11. T 11/8 - M 11/14 Module 3: Buffers Part B
12. T 11/15 - M 11/21 Module 3: Acidosis-Alkalosis Part A
13. T 11/22 - W 11/30* Module 3: Acidosis-Alkalosis Part B
Final Examination Review
14. Th 12/1 - W 12/7 Laboratory Final Examination on Experiments in Weeks 7-13
Makeup Laboratory

* Tuesday 11/22 will follow a Thursday schedule, Wednesday 11/23 will follow a Friday schedule, Monday 11/28, Tuesday 11/29 and Wednesday 11/30 will follow their regular schedules.