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Main Campus  
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Introduction to Chemistry Laboratory  
(Chemistry CO63)  
Fall Semester 2006  
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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. Holum, J.R., 1998, Olmsted, S.L, Laboratory Manual for Fundamentals of General, Organic, and Biological Chemistry, 6th Ed., Wiley & Sons, New York.

2. Holum, J.R., 1998, Fundamentals of General, Organic and Biological Chemistry, 6th Ed., Wiley & Sons, New York.

Note: Laboratory Texts 1 and 2 may possibly be sold as one Course Package.

3. Bloxton, J.D., 2006, Chemistry 63 Introductory Chemistry Laboratory Manual, XanEdu, Louisville.

4. 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
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Total	1000 points

**GENERAL COURSE INFORMATION:** First class: Monday, August 28, 2006.

Last day to drop (tuition refund available): Monday, September 11, 2006.

Last day to withdraw (no refund): Monday, October 30, 2006. 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 16, 2006.

**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, 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 30, 2006. No withdrawal is possible after that date. A student who withdraws from Chemistry 61 may or may not withdraw from Chemistry 63. Withdrawals are handled by the student's advisor. 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 50% 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, 9/5/06) 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 or material that was previously covered to help prepare for midterm and final exams.

**LABORATORY QUIZZES CONTINUED:** A laboratory quiz will also be given during the midterm and final exam review sessions. (Note: These laboratory quizzes during the midterm and final exam review sessions are not makeup laboratory quizzes.) 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. 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 laboratory midterm examination is scheduled for Tuesday 10/17/06 through Monday 10/23/06. The final examination is scheduled for Thursday 11/30/06 through Wednesday 12/6/06. 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. A student can only take the midterm or final examination once.

**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 laboratory period after a lab is scheduled for completion. Chem 63 laboratory instructors will initial the data sheets for the laboratory reports at the end of the laboratory period. These original data sheets are to be turned in as part of the student's laboratory report. The complete laboratory report includes the prelaboratory questions and the original laboratory report sheets. 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 25% 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.

**MAKEUP LABORATORY SESSIONS AND REPORTS:** 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 on Tuesday, 10/10/06 through Monday, 10/16/06, and on Tuesday, 10/17/06 through Monday, 10/23/06, after the midterm examination review sessions and midterm examinations are completed. Students can also makeup a missed laboratory during the makeup laboratory sessions on Tuesday, 11/21/06 through Wednesday, 11/29/06, and on Thursday, 11/30/06 through Wednesday, 12/6/06, after the final examination review sessions and final examinations are completed. A laboratory makeup documentation form is required if a student does a makeup laboratory. This laboratory makeup documentation form is to be turned in with the makeup laboratory report. Makeup laboratory reports that are turned in without this laboratory makeup documentation form will receive a score of zero. A student must be prepared to do a makeup laboratory. This preparation includes but is not limited to the following: 1. Having their own safety glasses with them. 2. Knowing what experiment(s) they need to makeup. 3. Having the necessary laboratory course materials with them before the start of the makeup laboratory session. 4. Reading the laboratory materials before the start of the makeup laboratory session. 5. Completing the prelaboratory questions before the start of the makeup laboratory session. Students will receive a score of zero for the initial check of the prelaboratory questions if these prelaboratory questions are not completed at the beginning of the laboratory makeup session. If a student needs to do more than one makeup laboratory, the student should be prepared to attend more than one makeup laboratory session.

**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. Students are required to wear laboratory coats and the laboratory coats will be supplied by the Chemistry Department. Appropriate clothing and shoes are to be worn in the laboratory. Shorts, mini-skirts, tank tops, clothing that exposes bare midriffs, sandals or open toe shoes are not permitted. Anyone who wears contact lenses should inform their instructor; we strongly suggest you not wear them in lab. 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 beginning with laboratory meeting 3, Tuesday, September 12, 2006, 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.

**TEMPLE'S POLICY ON STUDENT AND FACULTY ACADEMIC RIGHTS AND RESPONSIBILITIES:** Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed through the following link: [http://policies.temple.edu/getdoc.asp?policy\\_no=03.70.02](http://policies.temple.edu/getdoc.asp?policy_no=03.70.02).

**ACADEMIC HONESTY:** The contents of this section are from Temple University's 2005-2006 Undergraduate Bulletin in the Students Responsibilities part of Responsibilities section. The web address is [http://www.temple.edu/bulletin/Responsibilities\\_rights/responsibilities/responsibilities.shtm#honesty](http://www.temple.edu/bulletin/Responsibilities_rights/responsibilities/responsibilities.shtm#honesty).

Temple University believes strongly in academic honesty and integrity. Plagiarism and academic cheating are, therefore, prohibited. Essential to intellectual growth is the development of independent thought and a respect for the thoughts of others. The prohibition against plagiarism and cheating is intended to foster this independence and respect.

Plagiarism is the unacknowledged use of another person's labor, another person's ideas, another person's words, another person's assistance. Normally, all work done for courses -- papers, examinations, homework exercises, laboratory reports, oral presentations -- is expected to be the individual effort of the student presenting the work. Any assistance must be reported to the instructor. If the work has entailed consulting other resources -- journals, books, or other media --, these resources must be cited in a manner appropriate to the course. It is the instructor's responsibility to indicate the appropriate manner of citation. Everything used from other sources -- suggestions for organization of ideas, ideas themselves, or actual language -- must be cited. Failure to cite borrowed material constitutes plagiarism. Undocumented use of materials from the World Wide Web is plagiarism.

Academic cheating is, generally, the thwarting or breaking of the general rules of academic work or the specific rules of the individual courses. It includes falsifying data; submitting, without the instructor's approval, work in one course which was done for another; helping others to plagiarize or cheat from one's own or another's work; or actually doing the work of another person.

The penalty for academic dishonesty can vary from receiving a reprimand and a failing grade for a particular assignment, to a failing grade in the course, to suspension or expulsion from the University. The penalty varies with the nature of the offense, the individual instructor, the department, and the school or college.

Students who believe that they have been unfairly accused may appeal through the School or College's academic grievance procedure. See Grievances under Students Rights in this section.

## **TENATIVE CHEM 63 LABORATORY SCHEDULE**

### **WEEK DAY**

1. M 8/28 - F 9/1            Check in; Safety

2. T 9/5 - M 9/11      Holum: Exp 2. The Measurement of Mass. Determination of Density  
Bloxtton: Density and Specific Gravity
3. T 9/12 - M 9/18      Holum: Exp 5. Chemical Change: Heat Energy  
Holum: Exp 6. Chemical Change: Oxidation and Reduction  
Bloxtton: Supplement to Holum Experiments 5 And 6
4. T 9/19 - M 9/25      Holum: Exp. 11. Mass Relationships in Chemical Changes  
Bloxtton: Determination of Percent Yield of a Redox Reaction
5. T 9/26 - M 10/2      Bloxtton: WARD'S Kidney Dialysis Simulation Lab Activity  
Bloxtton: Solutions Preparation and Properties
6. T 10/3 - M 10/9      Holum: Exp. 26B. Reactions of Hydronium Ions: Behavior of Aqueous  
Hydronium Ions with Metal Hydroxides, Carbonates, and Bicarbonates.  
Bloxtton: Nomenclature and Molecular, Full Ionic and Net Ionic Equations  
Bloxtton: Solutions Preparation and Properties
7. T 10/10 - M 10/16      Midterm Examination Review  
Makeup Laboratory
8. T 10/17 - M 10/23      Laboratory Midterm Examination on Experiments in Weeks 2-6  
And Part Of Solutions Preparation and Properties  
Makeup Laboratory
9. T 10/24 - M 10/30      Bloxtton: Module 3 Acid-Base Chemistry:  
Part I: Determination Of pKa Of a Drug Product  
Bloxtton: Solutions Preparation and Properties
10. T 10/31 - M 11/6      Bloxtton: Module 3: Part II: Buffers  
Bloxtton: Solutions Preparation and Properties
11. T 11/7 - M 11/13      Bloxtton: Module 3: Parts III and IV: Acidosis and Alkalosis
12. T 11/14 - M 11/20      Holum: Exp 41: Studies In Structural Organic Chemistry: Isomerism  
Holum: Exp 59: Study Of Isomerism via Molecular Models  
Bloxtton: Prelab Questions and Supplement to Holum Experiments 41 And 59
13. T 11/21 - W 11/29\*      Final Examination Review  
Makeup Laboratory
14. Th 11/30 - W 12/6      Laboratory Final Examination on Experiments in Weeks 9-12  
And Part Of Solutions Preparation and Properties  
Makeup Laboratory

\* Tuesday 11/21 will follow a Thursday schedule, Wednesday 11/22 will follow a Friday schedule, Monday 11/27, Tuesday 11/28 and Wednesday 11/29 will follow their regular schedules.