

Chemistry 14 : Experimental Chemistry
Fall 2000
Dr. Carey S. Reed

Office: C-127 Smith, Office Hours will be announced

Telephone: ext. 5752.

General Information

Text required: Experimental Chemistry Laboratory Manual for Chemistry 14, Altoona Edition, July 1997.

Supplementary Books: Laboratory Notebook with permanently numbered pages and duplicate carbon pages. Your Chem 12 text.

Safety: Goggles will be worn at all times. Gloves will be worn any time chemicals are being handled or glassware is washed.

Calculator required: Electronic calculator capable of handling logarithms and exponential notation.

Prerequisites: Chem 12.

Attendance: University regulations state that a student should attend **every** scheduled class (Policies and Rules for Students section 42-27). Frequent absence from class is unacceptable. If you miss a class it is **your** responsibility to determine what material, announcements, handouts, graded papers, etc., were missed due to your absence. You should arrange for one of your classmates to hold returned papers in the event you are absent when papers are returned. I do not assume responsibility for holding papers if you are not there to pick them up, or have not made arrangements for someone else to pick them up. I will, of course, **try** to hold unclaimed papers for a few days.

Makeups: At my convenience before the end of the semester. If you cannot makeup the lab before the semester ends you will be given a 0 for the lab.

Lab Report due dates: Usually one week from the completion of the experimental work.

Lab with partners: Separate reports will be written. If the lab data was collected only by one of the partners then the partner without the data will obtain a Xerox copy of the original data and include it with their report. Partners lab reports have to be turned in together.

Lab Data: All original data measurements must be promptly and properly recorded directly into the lab notebook. Data recorded elsewhere is subject to confiscation.

Lab Reports: The following is part of the laboratory report:

- Cover page
 - Original data pages/graphs
 - Tables/Graphs
 - Sample calculations
 - Error estimates/sources of error
 - Conclusions and results
 - Safety Hazards of the Experiment
- Each item will be explained in class.

Quizzes: Written quizzes may be given at the beginning of any laboratory period. They will not be announced. They will cover the laboratory and reading material assigned or announced for that day. The number of quizzes is unspecified.

Grading:

<u>Material</u>	<u>Points</u>
Expt. #1	10
Expt. #2	20
Expt. #3	40
Handout	40
Expt. #5	10
Buret Test	10
Attendance	-5 each class missed -3 for signif. tardiness
Lab Quizzes	± 1 per question
Locker Condition	10
Max. Points	120 \pm lab quiz grades

Computing the Course Grade:

<u>Percentage</u>	<u>Grade</u>
95 or more	A
92 or more	A-
88 or more	B+
85 or more	B
82 or more	B-
75 or more	C+
70 or more	C
60 or more	D
Less than 60	F

Dropping the Course: Contact the Office of the Registrar, Mr. Petak, in room 111 Smith. No course can be dropped after the end of the drop period. This date, and your final exam time and date, as well as other useful information is always appended to the copy of course offerings for any semester. This usually occurs just before or just after the THIRD scheduled examination in this course (This semester, the third exam is scheduled before the last day to drop). **Caution!** in dropping courses is advised because of a maximum (during your entire PSU tenure) allowed number of credits you may drop between the end of the "free" drop period until the end of the allowed drop period (when you have to pay to drop).

The Assignment Schedule for the course is attached. The Schedule is approximate.

Campus Statement on Academic Integrity, adopted by the Altoona Campus Faculty Senate on March 19, 1985.

"Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Academic dishonesty includes, but is not limited to cheating, plagiarism, fabrication of information or citation, facilitating acts of academic dishonesty by others, unauthorised prior possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students." (Policies and Rules for Students, Section 49-20)

Consequences of Academic Dishonesty:

"The penalty for academic dishonesty in less serious cases consists of a failing grade for the work or test where this misconduct occurred. *This decision is made by the instructor.* For more serious cases of dishonesty, the penalties are more severe, (including automatic failure for the course, probation, suspension or expulsion from the University), and formal due process procedures are available for the student and faculty involved. Section 49-20 of the Policies and Rules for Students provides the details on these procedures."

Scheduled Classes Not Met:

In **Extraordinary** circumstances (which have occurred from time to time in the past, and which will occur from time to time in the future), when classes are missed due to reasons other than instructor illness, power failures, weather, and the like, in which the missed classes are not made up), missed classes will be rescheduled if possible, in conjunction with the Office of the Registrar. Any such rearranging and rescheduling would be announced in class so that appropriate arrangement could be made by all.

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Tentative Weekly Assignment Schedule For Fall 2000 Semester

Lab Periods	Initial Date	Assignments
1	Aug. 24	Administrative details, introduction, desk assignments.
2	Aug. 31	Expt. #1, Hess' Law. Read Lab Text 3-14; 21-23, 31-37.
3,4	Sept. 7-14	Expt. #3, Parts I and IIA. Lab Text 43-49. Preparation of complex salt and standardization of potassium permanganate.
5,6	Sept. 21-28	Expt. #3, Parts IIB and IIC. Lab Text 49-67. Analysis for oxalate and iron. Calculation of the formula of the salt and percent yield. Read Gas Law Chapter in your Chem 12 text.
7,8	Oct. 5-12	Expt. #2: Gas Volume-Weight Relations. Lab Text 24-29, 37-43. Absolute and Relative Errors in a single measurement.
NO CLASS OCTOBER 9-10 !!!!!!!!!!!!!!!!		
9-12	Oct. 19 -Nov. 9	Handout: Semiquantitative Analysis, Identification of cations.
13, 14	Nov. 16-30	Expt. #5 Chemical Kinetics. Lab Text 61-6. Discussion of kinetics.
15	Dec. 7	Available for additional experiments, consultation, or makeups. Locker checkout.
