

CHEMISTRY 1070-1080 FALL AND SPRING SEMESTERS 2010-2011

- Instructors:** Prof. Ronald O. Ragsdale and Charles H. Atwood  
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Office Hours immediately after lecture  
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- Lecture:** Each lab week we will hold a one hour lecture on that week's experiment. Tuesday lectures are held in the Talmage Building room 140. Saturday lectures are held in the Eyring Building room 2008. Three quizzes will be given during the course of the semester. Quizzes are cumulative covering all of the experiments performed in the prior weeks.
- Lab:** Labs are held in the general chemistry labs on the first floor of the Eyring Building. Each lab normally takes 2 to 3 hours to complete. You will head off to lab immediately after the lecture has completed.
- Grades:** Grades in CHEM 1060-1070 will be determined based upon the following criteria. 1) Lab Effort 2) Summary of lab experiments 3) Lab notebook 4) Completion and correctness of lab experiments and 5) quizzes.

**Lab Schedule:**

<b>Experiment</b>				
<u>Lab No.</u>	<u>Tuesday</u>	<u>Saturday</u>	<u>No.</u>	<u>Title of Experiment</u>
1	Sept. 20	Sept. 24	1	Check-in and Density of a Salt Solution.
2	Sep. 27	Oct. 1	2	Quantitative Analysis of a Hydrate.
3	Oct. 11	Oct. 15	6	Analysis of a $\text{KClO}_3$ Mixture and the Determination of the Molar Volume of Oxygen.
4	Nov. 1	Nov. 5	3	Hess' Law and the First Law of Thermodynamics.
5 <b>Quiz</b>	Nov. 15	Nov. 19	10	Writing a Chemical Equation from Titration Data.
6	Nov. 29	Dec. 3	17	Volumetric Analysis. The Titration of Acids and Bases.
7	Dec. 13	Dec. 17	8	Colligative Properties. Determination of the Molecular Weight of an Organic Solid by Freezing Point Depression.

8	Jan. 3	Jan. 7	4	Ionic and Covalent Compounds.
9 <b>Quiz</b>	Jan. 17	Jan. 21	11	Reactions of the Permanganate Ion, $\text{MnO}_4^-$ .
10	Jan. 31	Feb. 4	14	Chemical Kinetics. The Study of the Decomposition of Hydrogen Peroxide.
11	Feb. 7	Feb. 11	15	Determining the Extent to Which an Acid Ionizes in Aqueous Solution.
12	Feb. 28	Mar. 3	16	Hydrolysis, Indicator Selection, and Titration.
14		Mar. 10*	22	The Qualitative Analysis Scheme. Group I: The Silver Group.
13 <b>Quiz</b>	Mar. 13	Mar. 17	29	Organic Chemistry and Some Functional Groups.

**\*MAKE-UP LAB** - One session only on Saturday for the make-up lab. **It will start at 8:00 a.m.**

SAT Test Dates are Oct 1\*\*, Nov 5\*\*, Dec 3\*\*, Jan 28, Mar 10\*\*, May 5, June 2

\*\*Conflict with AP Lab.

ACT Test Dates are Sept. 10, Oct. 22, Dec.10, Feb. 11\*\*\*, Apr. 14, June 9

\*\*\* Conflict with AP Lab.