

Tentative Chem 36 (CRN 10112) Syllabus using Atkins, Jones, and Laverman (AJL), Seventh Edition.

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Office hours in Room 109A Cook; MWF 9-10:30 AM and 1-2 PM, others by appointment. 10.11.13(y)-24iA)17.7(7-1.33(y)-24R)14n9

1/18, 1/19. **Week 1 Lab.** K_{eq} of $Fe(SCN)_x$.

1/18. CHEMICAL EQUILIBRIUM. AJL

2/15, 2/16. **Week 5 Lab.** Avogadro's Number?

2/15. "Catch-up".

2/17. "Catch-up".

2/20. Review for exam (Holiday?).

2/21. **Exam 1** Will cover the assigned topics in Chapters ("Foci") 5 and 6.

No Tutorials or Problem Sets this week.

2/22, 2/23. **Week 6 Lab.** Chemical Kinetics. Iodination of Acetone.

2/22. KINETICS. Topic 7A. Reaction rate.

2/24. Topic 7B. Integrated rate laws. Half-lives.

2/27. Topic 7C. Elementary steps. Reaction mechanisms.

Sapling tasks, as before. Problem Set 5 due 3/3. Topics 7A, B, C

3/1, 3/2. **Week 7 Lab.** Chemical Kinetics. Dimerization of NO_2 ?

3/1. KINETICS. Topic 7D. Models of reactions.

3/3. Topic 7E. Catalysis.

3/6. "Catch-up".

Sapling tasks, as before. Problem Set 6 due 3/10. Topics 7D, E

3/8, 3/9. **Week 8 Lab.** Activation Energy of a Chemical Reaction? Clock Reactions???

3/8. MAIN GROUP CHEMISTRY. Topics 8A, 8B, 8C, and 8D. Periodic trends, alkalis and alkaline earths.

3/10. Topics 8E, 8F, and 8G. The boron, carbon, and nitrogen families.

3/20. Topics 8H, 8I, and 8J. The oxygen, halogen, and noble gas families.

Sapling tasks, as before. Problem Set 7 due 3/24. All Chapter 8 Topics.

Spring Break 3/13-3/17.

3/22, 3/23.

4/26, 4/27. **Week 14 Lab.** Making Polymers.

4/26. Topics.... Macromolecular architecture, shapes, and properties.

4/28. Topics.... Physical and mechanical properties of polymers.

Problem Set 11 due 4/28. Reaction mechanisms and polymers.

5/3, 5/4. **Week 15 Lab.** ACS Standardized Exam.

5/1. Topics.... Biopolymers. Sugars and Carbohydrates. Lipids.

5/3. Topics.... Amino acids and Proteins.

5/5. Topics.... Nucleic acids and the Genetic Code. Recombinant technology.

Problem Set 12 due 5/5. Biochemistry.

Final Exam date, time, and location to be determined.