

MWF, 9:30-10:20, Lilly 003

**Instructor:** Steve Scheiner, Chemistry Building 273  
797-7419, [scheiner@cc.usu.edu](mailto:scheiner@cc.usu.edu)

**Office Hours:** M, Th, 10:30 - 11:20; other times by appointment.

**Text:** "Physical Chemistry for the Life Sciences, by Atkins & de Paula, Freeman Pub.

**Content:** The course will cover topics presented in Chapters 1-14 of the text. Students are encouraged to read the chapters and work the practice problems in the text.

**Grading:** Students will be evaluated in a number of ways.

**In-Class Exams:** 300 points.

There will be four 50-min exams. Each student may drop the lowest of their four grades. Students who take only 3 exams will have all three grades count. Students missing more than 1 exam will receive a grade of 0 on any missed in excess of 1.

**Quizzes:** ~130 points

Some lecture classes will begin or end with a short quiz. These quizzes will not be announced in advance, so students should come prepared to take a quiz each day (please bring a calculator). There will be roughly 14 such quizzes during the semester, each worth 10 points. Each student taking all quizzes will be able to drop their lowest grade.

**Problem Sets:** ~200 points

Students will be required to turn in problem sets during the semester, approximately 10 such sets. Each will be worth 20 points. No grades will be dropped.

**Final Exam:** 200 points. This exam will be comprehensive, covering material from the entire course. It is scheduled for **Mon, Dec 11, 9:30- 11:20 AM**.

**Learning Objectives** Students will learn to do the following:

Use thermodynamic reasoning and quantities to explain biological processes

Apply kinetic equations to predict rates of reactions

Explain the fundamental nature of bonding between atoms and molecules

Use concepts of statistics to explain molecular motion and energetics

Explain the fundamentals underlying biochemical spectroscopy

**Assessment** Assessment of student learning will be performed via gain-score exams

In accordance with the Americans with Disabilities Act, and in cooperation with the Disability Resource Center, reasonable accommodation will be provided for students with disabilities. Please meet with the instructor during the first week of class to make arrangements. Alternative format print materials, large print, audio, diskette or Braille, will be available through the Disability Resource Center.

*The last day to add this class is the 15th day of the semester, Sept 18. Attending this class beyond that date without being officially registered will not be approved by the Dean's Office.*

**CALENDAR****NOTE: ALL DATES ARE APPROXIMATE AND SUBJECT TO CHANGE**

Chapter	Begins
1	Aug 30
2	Sept 8
3	Sept 13
4	Sept 22
5	Sept 29
6	Oct 4
7	Oct 13
8	Oct 23
9	Oct 30
10	Nov 8
11	Nov 15
12	Nov 20
13	Dec 1
14	Dec 6

Exam Covering Chapters	Date
1-3	Sept 20
4-6	Oct 11
7-9	Nov 6
10-12	Nov 29