

Chemistry 141

Fall 2007

Instructor: Sarah Burroughs, sburrou@emory.edu 2-8680

Materials:

- Chemistry 9th ed by Chang
- Scientific calculator WITHOUT keyboard
- Laboratory manual by Parker (available from Chemistry Department)
- Carbon-copy lab notebook
- Safety glasses

You must have all materials for lab before your first lab meeting

Course Objectives: This course aims to not only teach basic concepts of chemistry, but also advance critical thinking and problem solving skills, which will benefit you greatly in your academic and professional careers.

We will cover the following topics in this course:

- The scientific method
- Conversion between different measuring systems
- Significant figures
- The structure of the atom
- Nomenclature
- Molecular mass and moles
- Stoichiometry
- Reactions in aqueous solution
- Molarity
- Gases
- Thermochemistry
- Quantum theory and electromagnetic radiation
- Electron configuration
- The periodic table
- Bonding
- Molecular geometry and hybridization
- Intermolecular forces
- Phases of matter

Syllabus: Chapters 1-10 and part of 24 in Chang will be covered this semester.

Attendance: Attendance is mandatory in both lecture and laboratory. You may miss up to three lectures without being penalized. Please contact me if you will be absent due to illness or other emergencies. You are still responsible for all material covered during your absence. If you exceed the 3 absence limit, you will lose 1 point for the next absence, 2 for the next, and 3 points for each subsequent absence. These points will be deducted from your final average.

There are no absences allowed in lab.

There will be no make-up exams. If you miss an exam with an approved excuse, your final will count in place of that exam. If you do not have an approved excuse, you will receive a zero on the exam. The instructor reserves the right to determine whether an excuse is valid. You must give prior notice for missing an exam. Missing an exam also counts as an absence from the course.

Attendance will be taken at the beginning of class. If you come in 10 minutes late, you will be counted tardy. Any later than that, you will be counted absent. 3 tardies equals one absence. Keep in mind that sleeping in class or leaving early may also be counted as absences. You need to be present in more than just body.

No cell phones or pagers are allowed in either lecture or lab. There is no eating or drinking in lab.

Tests: There will be 4 exams given in class. Each exam will last 50 minutes. You may use your calculator and pen or pencil, but all other items must be left in the front of the room. You may not have any cell phone, ipod, or other electronic device with you during an exam. The exam begins and finishes with the class time, so do not be late – you will not receive extra time. The honor code applies to all exams.

Exam Schedule: Each exam will be given on a Friday, during the lecture. The instructor may change the exam dates, but adequate notice will be given in class and on learnlink.

Exam 1: September 21

Exam 2: October 12

Exam 3: November 9

Exam 4: December 7

There will be a comprehensive final exam given during the final exam period, at the time assigned for this class.

Learnlink: There is a 141 Burroughs conference that you all should add to your desktop and read often. I will post important information, problems to work, helpful hints, etc. You are responsible for any and all information on the course conference.

Honor Code: All students must adhere to the honor code. You will sign your pledge on your exams. Any and all honor code issues will be taken to the honor council.

Grading: The final will count as two exam grades, giving you a total of 6 grades. The lowest one will be dropped and the remaining 5 will be averaged together. The lab portion of your grade will be counted in one of two ways:

1) If your lab average is a 90 to 92.9, you will receive one point added to your final grade. If your lab average is a 93 or higher, you will receive two points.

2) Your total course grade will consist of 80% lecture and 20% lab.

I will calculate your grade both ways and give you the higher of the two. You must pass both lecture and lab to pass the course.

Grading Scale: I will follow the typical grading scheme:

93 – 100 A	77 – 79 C+
90 – 92 A-	73 – 76 C
87 – 89 B+	70 – 72 C-
83 – 86 B	67 – 69 D+
80 – 82 B-	60 – 66 D
	below 60 F