CHEMISTry 141 *Dr. Saadein* *Fall 2011*

1. Learning Goals. In this course, you will have an opportunity to master the following skills:

1. Problem-Solving
2. Critical Thinking
3. Logic
4. Calculation/Computation
5. Investigation
6. Analysis of data

2. Content goals. You will be expected to master these areas of chemistry:

- 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 configurations
- The periodic table
- Bonding
- Molecular geometry and hybridization

3. Materials. You will need:

Textbook: "Chemistry" 10th ed., by Chang (including study guide and solutions manual).

Scientific calculator. You will find it impossible to work problems without a scientific calculator. Calculators which can download and/or store information, which can automatically solve equations, or which can be programmed, are not allowed.

For lab: Laboratory manual: sold by the Chemistry Department.

Carbon-copy lab notebook.

Safety glasses

You must have all three materials for lab <u>before</u> your first lab meeting.

4. Attendance. All students are expected to attend all lecture and laboratory sessions. However, it is recognized that emergencies can arise which may result in absence from class. You should notify me if an absence is due to illness or other emergency. You are responsible for all material covered in lecture if absent.

You are allowed 2 absences in lecture and NO ABSENCES in lab.

If you exceed the 2 absence limit in lecture for whatever reason, you will lose 1 point for the next absence (number 3), 2 points for the next absence (number 4), and 3 points for each additional absence (numbers 5 and up). These points will be deducted from the final course average. Note that there are no "excused" absences.

Make-up exams are not given, regardless of the reason an exam was missed. If you miss an exam and present me with an acceptable excuse, the grade on the final exam will count in place of the missed exam grade. <u>You must notify me by the day and time of the exam that you will not be present and you must give me the reason for the absence.</u> If the excuse is not considered acceptable, the exam grade will be a zero. As the instructor, I make the determination as to whether an excuse is acceptable. In general, illness or an emergency situation are the only acceptable excuses for missing an exam. Missing an exam also counts as an absence in the course.

Being late to class is rude and distracting. Therefore, 3 tardies will be considered equal to 1 absence. If you come in more than 15 minutes tardy, you will be counted absent. If you come in late, it is your responsibility to see me <u>immediately</u> after class to ensure that you are marked tardy and not absent. No adjustments will be made at a later time. When you are in class, you must be attentive and not disturb others. Leaving a class early counts as an absence, as does sleeping through a class or being generally inattentive.

In class, you should be concentrating on learning. Anything that distracts from this is contrary to the educational process. Therefore, cell phones and pagers are not allowed in class. Should you bring one and it goes off, or should you use it in any way, you will leave the class and be counted absent. If this happens a second time, you may not return to class. For the same reason, food and drink should not be brought to class.

5. Problems. At the end of each chapter, there are problems which you should work to help you in understanding the material. These problems are for your benefit only; they will not be taken up or graded. Since general chemistry is a problem-oriented course, and the tests will consist mainly of problems, it is essential that you become proficient in working problems such as those found at the end of the chapters. You should work problems as you encounter the material. You should also attempt each problem before seeking help from the book, your notes, or the answer. It is not sufficient to be able to follow how a problem is worked; on a test, you will have to work a problem all the way through, and the only way you will be able to do this is if you have worked numerous practice problems.

6. Tests. There will be 4 exams. Make sure your calculator is one which is allowed, that it is working, and that you know how to use it. Calculators will not be loaned or shared. You must take the exam during your regular class time. If you come in late, you will not be given extra time to finish the exam. The honor code applies to all exams (see the Honor Code Pledge handout).

7. **Honor Code**. It is assumed that all Oxford College students will adhere to the highest standards of academic honesty and will uphold the Oxford College Honor Code.
8.

On exams, you may not use any material not distributed with the exam itself except for your own calculator and pencils/pens. You may not have any other material with you – this includes books, notebooks, book bags, papers, etc.; they must be left at the front of the room. You may not have a cell phone or other electronic device with you; if you bring these, they must be left at the front of the room also (and must be turned off). During an examination, you may not give or receive assistance. On assignments for outside class (essays, lab reports), the work is to be your work alone – you may not give or receive any assistance, and you may use only materials authorized. Since absences and tardies can affect your grade, giving false information regarding absences or tardies is a violation of the Honor Code. Note also that the Oxford College Honor Code expects students to report any violations of the Code they know of. See the Honor Code Pledge handout for more information.

8. Exam schedule.

Exam I Friday, September 16,
Exam II Friday, October 7,
Exam III Friday, November 4,
Exam IV Friday, December 2,

Exams may be moved forwards or backwards as necessary; this will be announced in class and on the class LearnLink conference. All exams are given at 2:00 pm on Friday afternoons.

9. **Final Exam.** There will be a final exam, covering the semester's material. This will be given during the regularly scheduled final exam period. Final exams are not returned.

10. Schedule.

Ch. 1	Ch. 5	Ch. 9
Ch. 2	Ch. 6	Ch.10
Ch. 3	Ch.7	
Ch. 4	Ch.8	

Note that this schedule is subject to change. The sections covered for each exam will be announced in class.

11. Review sessions. A review session will be held before each exam; the date and time will be announced in class. If held outside of class, these sessions are optional and voluntary; no new material will be covered. If held in class, attendance will count as it would for a regular class session, since the review normally will not take the entire class period.

12. Laboratory. At your first lab meeting, I will explain the lab procedures to you. The lecture and laboratory are designed to coordinate so that you will have covered material in class before being required to use that material in lab. Note under Grading below, how your lab average affects your course grade.

13. Office Hours. My office is Pierce 216. I will be available to answer your questions on Tuesday and Wednesday afternoons from 3:30-5:00. You can also make an appointment with me if you cannot see me on the designated office hours.

14. Grading. The final will count as two exam grades, giving a total of 6 (4 exams + final counting twice). The lowest of these 6 grades will be dropped. This average will constitute the lecture portion of your course grade.

Your lab grade will count in one of two ways, whichever results in a higher grade in the course for you:

(1) Your course grade will be computed by adjusting your grade on the lecture portion using your lab average as shown below. This method normally benefits students whose exam average is a high B or an A, and only applies to those with lab averages above 90.

Lab average	Lecture grade adjustment
90 to 92	+1
93 and up	+2

---------- **OR** ----------

(2) Your course grade will be computed by taking 80% of your lecture grade and 20% of your lab grade. This method usually benefits students whose exam average is a B or lower.

15. Grading scale. Grades are normally assigned as follows, without rounding:

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

Your exam average AND your lab average must both be passing or you will receive a grade of F in the course regardless of your final numerical average. Grades are assigned based on your performance in the course (exams, lab, attendance) and are not open for discussion after being assigned. If you are on a border, consideration is given to attendance, improvement, and class participation.