Chemistry 141 Dr. Parker Spring 2013

If I have seen farther, it is by

standing on the shoulders of giants.

-- Sir Isaac Newton

1. Oxford College and Liberal Arts. Oxford College is dedicated to a liberal arts education, and science, including chemistry, is an integral part of the liberal arts.

2. Learning Goals. The primary learning goals for this class are for you to:

- Utilize critical thought and reasoning to understand chemical behavior at the microscopic and macroscopic levels.
- From your knowledge of chemistry and chemical systems, be able to develop solutions to problems which you have not encountered before.

3. 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
- Organic chemistry

4. Materials. You will need:

Textbook: "Chemistry" 11th ed., by Chang.
Optional: study guide, student solutions manual.
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 before your first lab meeting.

5. Proper Behavior in Class. Class is a learning environment; expected behavior includes:

- Coming to class on time and being attentive in class.
- Not going in and out of class (unless you're sick) – please get a drink or use the restroom before or after class.
- Not eating or drinking in class.
- Not bringing your cell phone to class.
- Not working on material for another class.
- Participating in class.

Not respecting the learning environment in class can affect your grade and future recommendations.

6. 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.

- Besides missing class, these also count as an absence:

1. Being late to class TWICE. (This means coming in after I've finished checking the class roster.) If you come in late, it is your responsibility to see me immediately after class to ensure that you are marked as being tardy and not absent. No adjustments will be made at a later time.
2. Coming to class more than 15 minutes late
3. Leaving class early
4. Going in and out of class
5. Being inattentive in class or working on other assignments in class

- You are allowed 3 absences in class. If you exceed the 3 absence limit for any reason, by any combination of absences or tardies, you will:

  (a) Lose 2 points for the next 2 absences (numbers 4 and 5);
  (b) Lose 3 points for each additional absence (numbers 6 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. 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. If the excuse is not considered acceptable, the exam grade will be a zero. In general, illness or an emergency situation are the only acceptable excuses for missing an exam. If you are going to miss an exam for a religious holiday or for a school-related activity, you must make arrangements to take the exam early. Missing an exam also counts as an absence in the course unless advance arrangements are made.

- Cell phones 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. Laptop computers may also not be brought to class. If there is a reason you need a computer to assist you in the class, you must make arrangements with me.

7. 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. See the "Survivor's Guide" for more information.

8. LearnLink. This class uses LearnLink (not Blackboard). You are expected to read the class LearnLink conference (Chem 141 Spring Parker, under Oxford Chemistry) regularly, as well as any subconferences within it. You are also expected to check your e-mail regularly. Failure to read a message sent to you or to the class conference is not an acceptable excuse for your action or inaction.

9. Tests. There will be 4 exams, given in class. 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. If you have to go back and get

your calculator, you will not be given extra time to finish the exam. The honor code applies to all exams (see the Honor Code Pledge handout).

If you finish an exam before the end of the class period and I am not there, stay at your desk with your test until I am in the room. Do not leave your test at the front of the room unless I am there to collect it.

Oxford College has adopted as part of its Mission Statement that its curriculum is designed to teach students to "embrace responsible citizenship." In addition, as part of its Purpose Statement, the College lists "to augment the student's ... intellectual awareness of the world". To encourage you to become aware of the world around you, most exams will have a bonus question or two on "current events."

10. 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. Accordingly, I do not proctor exams unless I have reason to believe the Honor Code is being violated.

On exams, you may not use any material not distributed with the exam itself except for a calculator and pencils/pens. Any other material you bring into the room must be left at the front of the room, including a cell phone or other electronic device. During an examination, you may not give or receive assistance. 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.

11. Schedule.

Ch. 1
Ch. 2
Ch. 3
Ch. 4
Ch. 5
Ch. 6
Ch. 7
Ch. 8
Ch. 9
Ch. 10
Ch. 24-25 (brief overview)

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

12. Exam Schedule.

Exam I Monday, Feb. 11
Exam II Friday, Mar. 1
Exam III Wednesday, Mar. 27
Exam IV Monday, Apr. 22

Exams may be moved forwards or backwards as necessary; this will be announced in class and on the class LearnLink conference.

13. 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.

14. Laboratory. At your first lab meeting, the lab procedures will be explained 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.

15. Office Hours. My office is Pierce 217. I am usually in my office and available from 9-5 every day. Exceptions are around lunch time (11:30-1:00) and during class and labs.

16. Grading.

(a) 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.

(b) Your course grade will be computed by taking 80% of your lecture grade and 20% of your lab grade. as reported by your lab instructor.

17. Grading scale. Grades are normally assigned as follows:

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-	63 - 66 D
	below 63 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. There is no automatic rounding. If you are on a border, consideration is given to attendance, improvement, and class participation.

18. Special note 1. If your chemistry placement required you to take a math or science class before taking Chemistry 141, and you did not make at least a B, you will probably have a difficult time in this course and should consider not taking it at this time.

19. Special note 2. Student work submitted as part of this course may be reviewed by Oxford and Emory faculty/staff for the purposes of improving instruction and enhancing Emory education.