

# Chemistry 221 Fall 2010

Instructor: Dr. Eric Sheagley

Office: Science Building II, Room 330

Email: **sheagley@pdx.edu** (this should be the primary means of contact). Also, Blackboard has a Discussion List feature that allows communication with your classmates. I will be making a point to regularly check the Discussion Board.

Office Hours: Monday 1:00 - 2:00 and Tuesday, Thursday 4:00 – 5:00

Text: Chemistry, A Molecular Approach, Second Edition, Nivaldo Tro, Pearson/Prentice Hall (2010).

Exams: There will be two one-hour midterms (100 pts each), five short post chapter quizzes (10 pts each), 5 even shorter pre chapter quizzes (5 pts each) and a two-hour final (180 pts) (see schedule). The final exam will be cumulative. The material to be covered during each exam is shown on the schedule.

Homework: Two different types of homework will be assigned:

First, Practice Problems: there will be problem assignments out of the book. These will *not* be graded. Some quiz and midterm problems *may* be taken from these problem sets. The answers to these problems are provided in the back of the text and in the solutions manual. **Success in this course is strongly correlated with time spent working problems.** Waiting until just before a test to work problems rarely results in success.

Second, Scored Homework: There are two options for receiving the 60 homework points available towards your overall grade. You can receive the homework credit by participating in the chemistry workshop or doing the online homework through MasteringChemistry.

MasteringChemistry assignments will be assigned most weeks. Directions for accessing MasteringChemistry are available on my blackboard site. **Deadlines for these assignments WILL NOT BE EXTENDED – NO EXCEPTION WILL BE MADE!** If you miss a deadline, you will receive a score of zero for the assignment. Your overall homework score will be based upon a 60 point maximum. You will receive maximum credit if you score at least 75% of the overall total available points. You will have access to each assignment one week before the due date. The deadlines for the assignment will be in the evening at 11:00 PM.

Quizzes: At the end of each chapter, there will be a 10 point post-quiz given at the end of a class. The lowest score of the five quizzes will be dropped. **THERE WILL BE NO MAKE-UP POST-QUIZZES.** At the beginning of each chapter there will be a pre-quiz due at the beginning of class the first day that we begin covering the material. It will either be an online or on-paper quiz (available on blackboard). **THERE WILL BE NO MAKE-UP PRE-QUIZZES.**

General Info: You are responsible for all information given during class times. This includes homework assignments and any special announcements or schedule changes. Deadlines and course information will frequently be posted on the class WEBCT calendar page or on the announcement page. *I strongly encourage you to enroll in workshops.*

Grading: There will be a total of 505 points possible for this class (60 points for homework, 65 points for quizzes, 200 points for the midterms and 180 points for the final). Your grade will be assigned based on the percentage of total points scored in the class approximating the following scale:

Grade	A	B	C	D	F
Score	≥ 90%	≥ 80%	≥ 65%	≥ 55%	< 55%

Note: this scale may change based on class performance.

Success: Success in this class comes from within. I do not give you a grade, you earn the grade. Before beginning this class, decide what you hope to accomplish in this class. Actively participate in the class. The homework, Workshop or MasteringChemistry, is by no means enough practice to develop the skills necessary to succeed in this class. It is necessary to challenge yourself with as many problems as you can from many resources. Ask for help, use your classmates, use blackboard, use the Chem Commons, use my office hours. Make every attempt to be an active learner because chemistry does not *just come* to the vast majority, most have to work to understand it. Finally, make sure you are doing everything you can to figure out what works for you by reflecting on how you learn the material.

Policies: 1. Missing an Exam: If you miss an exam, please contact me within 24 hours. I will allow you to reschedule your exam only if your absence was excused, EXCEPT in the following cases, where you will need to take the exam ahead of time:

- a) Previously scheduled work or family commitments
- b) School-sponsored field trips or athletic events

Illness, work conflicts and family emergencies are considered excused absences. Other instances will be evaluated on a case by case basis. All exams must be made up before the exams are passed back in class. Failure to notify me of the reason for your absence, as well as unacceptable excuses, will result in a score of zero for that exam.

2. Professional Demeanor: It is expected that you will act with professional demeanor and attitude at all times. This includes, but is not limited to, being respectful at all times to the instructor and to your colleagues. **It also expected that you refrain excessive talking, cell phone use, or disruptive internet use in class.**

3. Mistakes are sometimes made while grading exams; the good news is that they are usually addition errors, which I will happily fix. Exam scores have a margin of error. If you believe there has been a serious mistake on grading your exam, you may ask me, **IN WRITING**, to regrade exam *up to one week after the exam is returned*. If you turn in an exam to be re-graded, I reserve the right to re-grade the entire exam and may assign a score either higher or lower than the original score.

4. Dishonesty: I expect that the work you do in this course is your own. Academic dishonesty, which includes a variety of actions, will not be tolerated in this course. Cheating during any examination will be reported and the student(s) will receive an "F" for the exam.

5. Accommodation: If you have a physical or learning disability and you need extra accommodation, please be certain you are registered with Disability Services and make appropriate arrangements with me.

### Chemistry 221 Schedule

Date	Activity	Unit
9/28		Ch 1
9/30		Ch 1, Ch 2
10/05	Post Quiz Ch 1, Ch 2	Ch 2
10/07	Pre Quiz Ch 3, MC Ch1,2 due	Ch 3
10/12		Ch 3
10/14	Post Quiz Ch 3/ Pre Quiz Ch 4 / MC Ch 3 due	Ch 3, Ch4
10/19	Midterm 1	Ch 1-3
10/21		Ch 4
10/26	Post Quiz Ch 4 / MC Ch 4 due	Ch 4, Ch 7
10/28	Pre Quiz Ch 7	Ch 7
11/02	MC Ch 7 due	Ch 7
11/04	Pre Quiz Ch 8	Ch 8
11/09	Post Quiz Ch 7	Ch 8
11/11	Vacation	
11/16	Pre Quiz Ch 9 / MC Ch 8 due	Ch 8, Ch 9
11/18	Midterm 2	Ch 7-8
11/23		Ch 9
11/25	Vacation / MC Ch 9 due	
11/30		Ch 10
12/02	Post Quiz Ch 9, Ch 10 / MC Ch 10 due	Ch 10, review
Final Exam, Tues., December 7 1730-1920		

**Disclaimer:** As the instructor of this course, I reserve the right to change the tentative schedule of topics, number and length of examinations, point distribution, course requirements, and percentages required for letter grades in order to better facilitate the learning process.

## **Text Homework:**

*For each chapter you should complete the “For practice” and “For More Practice” problems*

Chapter 1: End of Chapter Problems: 37, 39, 43, 47, 51, 57, 63, 65, 71, 77, 79, 83, 85, 87, 89, 95, 97, 105, 117, 119, 121

Chapter 2: End of Chapter Problems: 31, 41, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 69, 71, 79, 81, 83, 85, 91, 93, 95, 97, 99, 102, 103, 107, 111,

Chapter 3: End of Chapter Problems: 2, 4, 5, 10, 1723, 25, 27, 29, 33, 35, 37, 39, 41, 43, 45, 49, 51, 53, 55, 57, 59, 61, 63, 65, 69, 75, 77, 79, 81, 85, 87, 89, 91, 97, 99, 109, 113, 115, 117, 119, 121, 124, 125, 129, 131, 133, 135

Chapter 4: End of Chapter Problems: 6, 7, 11, 13, 19, 25, 27, 29, 31, 33, 35, 37, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 75, 77, 79, 83, 85, 87, 93, 95, 97, 101, 103, 105, 107, 109, 111, 113, 115, 117

Chapter 7: End of Chapter Problems: 7, 8, 12, 14, 15, 16, 29, 30, 31, 32, 37, 39, 41, 43, 45, 47, 51, 55, 57, 58, 59, 60, 63, 65, 67, 76, 77, 91

Chapter 8: End of Chapter Problems: 13, 14, 25, 26, 31, 32, 41, 43, 45, 47, 49, 51, 53, 55, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 83, 85, 97, 89, 91, 93, 97, 105, 120

Chapter 9: End of Chapter Problems: 6, 17, 18, 22, 27, 30, 32, 37, 39, 41, 49, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 79, 81, 89, 93 The section titled “Using Average Bond Energies to Estimate Enthalpy Changes for Reactions” will not be covered.

Chapter 10: End of Chapter Problems: 4, 5, 7, 13, 15, 16, 25, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 55, 57, 59, 63, 65, 69, 73, 75, 81, 83, 85, 87, 91,