Chemistry 221 (sec 1)

Tentative Syllabus
Fall 2005

Instructor: Dr. Gwen Shusterman
Science Building II, Room 350, 725-3897, email: shustermang@pdx.edu
Web page: web.pdx.edu/~shusteg

Office Hours: tentatively, Mon 11:30-1, Wednesday 9-10, Thurs 10-11

Text: Chemistry, McMurray and Fay, Prentice Hall/Pearson, 4th Edition.

Exams: There will be two one-hour midterms, two short quizzes and a two-hour final (see schedule). The final exam will be cumulative. The material to be covered during each exam is shown on the schedule.

Homework: There will be regular problem assignments given during class. These will *not* be turned in for grading. Some quiz and midterm problems may be taken from these problems sets. The answers to these problems are provided in the back of the text and in the solutions manual. Feel free to work additional problems to practice your problem solving skills**. Success in this course is strongly correlated with time spent working problems.**

Participation Participation points will be given for being present and participating in the in-class activity and problem sessions (approximately every other week) and completing the class web assignments/quizzes. In addition, you may choose to *either* enroll in workshops, CH 299, or completing the chapter quizzes provided on the text CD. Exercises/activities not received on time will be given 1/2 credit if received by the beginning of the next lecture meeting.

General Info: You are responsible for all information given during class times. This includes homework assignments and any special announcements or schedule changes.

Grading: Grades will be based on the cumulative scores of exams and quizzes, plus participation points (approximately 15% of the grade). The following scores guarantee the grade shown; however, the instructor may choose to revise these percentiles downwards if class performance warrants it. Plusses and minuses will be given.

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

Updated: 9/05

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 tack the exam ahead of time:

a) Leaving early for a vacation or the weekend
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 or cell phone use in class.

3. "Margin of Error Percent": Mistakes are sometimes made while grading exams; the good news is that they are usually addition errors, which I will happily "fix at no charge." On any given exam, you may not perform up to your potential and your exam may not show how much you know. Exam scores have a margin of error, I only worry about the plus side. If you believe there has been a serious mistake on grading your exam, you may ask me to regrade the entire exam *up to one week after the exam is returned,* **but you forfeit** your margin of error percent. If you choose not to ask for regrades on exams (this does not include addition errors), a bonus of 2% is added to your overall score at the end of the term. ONLY ONE option if possible. *It is also possible to lose your margin of error percent due to unprofessional behavior.*

4. Dishonesty: I trust 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 and "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.

6. Success: It is definitely possible to do well in this course. I am here to help you in any way that I can. I enjoy helping a willing student learn the material in this course. *Note that if you become frustrated with the course for any reason, please do not hesitate to contact me one-on-one either by email, phone or in my office.*

Chemistry 221

Lecture and Exam Schedule

Subject to Change

Week 1

Date	Meeting/Day	Activity	Chapter	Material
Sept 26	1 / M	Lecture	1	Introduction
Sept 28	2 / W	Lecture/Problem	1	Elements – periodic table
Sept 30	3 / F	Lecture	1	Sig figs / Measurement

Week 2

Date	Meeting/Day	Activity	Chapter	Material
Oct 3	4 / M	Lecture	2	Elements - Mole
Oct 5	5 / W	Lecture/Problem	2	Nomenclature
Oct 7	6 / F	**Lecture/Quiz**	2/1	Nomenclature

Week 3

Date	Meeting/Day	Time	Chapter	Material
Oct 10	7 / M	Lecture	3	Molar Mass Stoichiometry
Oct 12	8 / W	Lecture	3	Limiting Reactants
Oct 14	9 / F	Review	1-3	

Week 4

Date	Meeting/Day	Activity	Chapter	Material
Oct 17	10 / M	**Midterm**	1-3.6	
Oct 19	11 / W	Lecture	3	Solutions/Titrations
Oct 21	12 / F	Lecture	3	Empirical Formulas / % composition

Week 5

Date	Meeting/Day	Activity	Chapter	Material
Oct 24	13 / M	Lecture	3	Chemical Reactions
Oct 26	14 / W	Lecture/Problem	4	Solutions
Oct 28	15 / F	**Quiz/Lecture**	3 &4/5	Quantum Mechanics

Updated: 9/05

Week 6

Date	Meeting/Day	Time	Activity	Material
Oct 31	16 / M	Lecture	5	Quantum Mechanics
Nov 2	17 / W	Lecture	5	Hydrogen Atom
Nov 4	18 / F	Lecture	5	Periodic Table/Properties

Week 7

Date	Meeting/Day	Activity	Chapter	Material
Nov 7	19 / M	Lecture	5	Periodic Trends
Nov 9	20 / W	Lecture/Review	6	Ionic Bonds
Nov 11	21 / F	Holiday	6	

Week 8

Date	Meeting/Day	Activity	Chapter	Material
Nov 14	22 / M	**Midterm**	5-6	
Nov 16	23 / W	Lecture	7	Electron Densities/Bonding
Nov 18	24 / F	Lecture/Problems	7	Lewis Structures

Week 9

Date	Meeting/Day	Activity	Chapter	Material
Nov 21	25 / M	Lecture	7	Lewis/Covalent Bonds
Nov 23	26 / W	Lecture	7	Bonding/Geometries
Nov 25	27 / F	**Holiday**		

Week 10

Date	Meeting/Day	Activity	Chapter	Material
Nov 28	28 / M	Lecture	7	Hybridization
Nov 30	29 / W	Lecture	7	Bonding Models / MO
Dec 2	30 / F	**Review**	1-7	All

Final Exam

Date	Day	Time	Activity	Material
Dec 7	W	10:15-12:05	**Exam**	Chap 1-7

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.

Updated: 9/05