Chemistry 221 (section 3)

Syllabus
Fall 2010

Instructor: Dr. Tracey Scherban
Science Building 2, Room 306, email: scherban@pdx.edu

Office Hours: Monday, Wednesday 1-1:50 pm, SB2-306

Text: Chemistry, A Molecular Approach, Tro, 2nd edition, Pearson/Prentice Hall (2010). The student may use the 1st edition but is responsible for determining if problems differ from the new edition.

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

Homework: Homework credit may be earned in one of two ways:
(1) Students may attend the General Chemistry Workshop (CH284), a series of peer-led problem-solving sessions. A grade of "pass" is required.
(2) Students may complete the Mastering Chemistry assignments, using the Mastering Chemistry Course ID: MCSCHERBAN48943. (A Mastering Chemistry account may be purchased with new text books. The web address is www.masteringchemistry.com). Assignments completed by the due date earn full credit; *no credit will be given for late assignments.* There will also be practice problems assigned in Mastering Chemistry which will be non-credit. Students are encouraged to do end-of-chapter problems in the text book; selected problems have answers given in the back of the book. Some quiz and midterm problems may be taken from these problems sets. **Success in this course is strongly correlated with time spent solving problems.**

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

Student Resources: Course materials will be posted in Blackboard, General Chemistry CH221 - 003

Chemistry tutors are available at SMSU 439 at the following times for Fall 2010 Term:
Monday: 10:30 am – 1:30 pm, 4 – 8 pm
Tuesday: 9-11:30 am, 2 – 4 pm, 6:30 – 8:30 pm
Wednesday: 9:30 am – 12:30 pm, 4 – 8 pm
Thursday: 9 – 11:30 am, 2 – 4 pm, 6 – 8 pm
Friday: 9:30 am – 4 pm
Sunday: 12 – 4 pm in Millar Library, 2nd floor

Grading: The grade for the course will be comprised of the following contributions:

Homework: 10%
Quizzes: 10%
2 Midterms: 20% each
Final: 40%

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

Policies:

1. Missing an Exam (or Quiz): Make-up exams are allowed only in the case of excused absences such as illness or emergency. The professor must be contacted within 24 hours of the exam with reason for absence. Make-up exams will be scheduled at professor's discretion. In cases where it is not possible to schedule a makeup exam and the absence is excused, the final exam may be used to count for the missed midterm. Failure to notify professor of the reason for the absence, as well as unacceptable excuses, will result in a score of zero for that exam.

2. Professional Demeanor: It is expected that the student act with professional demeanor and attitude. Students must be respectful of the professor and fellow students. Laptop use is permitted during lecture *in support of classroom learning only*. Cell phone use is not permitted; phones should be muted or turned off during class. Please note that respectful communications are also expected when using email or the course discussion board.

3. Communications/e-mails: Students will be informed of course requirements, assignments, schedules and exams in class or through blackboard. For questions on course content, use the tutoring center or the professor's office hours. If an email is necessary, include "CH221" in subject heading and keep messages brief and to the point.

4. Dishonesty: Academic dishonesty will not be tolerated in this course. Cheating during any exam will be reported and the student will receive an "F" for the exam.

5. Accommodation: A physical or learning disability which requires extra accommodation should be registered with Disability Services and appropriate arrangements made with the instructor.

Chemistry 221

Lecture and Exam Schedule (Subject to Change)

Week 1

Date	Meeting/Day	Activity	Chapter	Material
Sept 27	1 / M	Lecture	1	Introduction
Sept 29	2 / W	Lecture	1	Elements – periodic table
Oct 1	3 / F	Lecture	1	Sig figs / Measurement

Week 2

Date	Meeting/Day	Activity	Chapter	Material
Oct 4	4 / M	Lecture	2	Elements - Mole
Oct 6	5 / W	Lecture	2-3	Nomenclature
Oct 8	6 / F	**Quiz**/Lecture	**1-2**/3	Nomenclature

Week 3

Date	Meeting/Day	Activity	Chapter	Material
Oct 11	7 / M	Lecture	3	Molar Mass / % composition
Oct 13	8 / W	Lecture	3	Empirical Formulas – Balanced Reactions
Oct 15	9 / F	Review	1-3	

Week 4

Date	Meeting/Day	Activity	Chapter	Material
Oct 18	10 / M	**Midterm**	**1-3**	
Oct 20	11 / W	Lecture	4	Stoichiometry - Limiting Reactants
Oct 22	12 / F	Lecture	4	Solutions/Titrations

Week 5

Date	Meeting/Day	Activity	Chapter	Material
Oct 25	13 / M	Lecture	4	Chemical Reactions
Oct 27	14 / W	Lecture	4	Solutions
Oct 29	15 / F	**Quiz**/Lecture	**4**/7	Quantum Mechanics

Week 6

Date	Meeting/Day	Time	Activity	Material
Nov 1	16 / M	Lecture	7	Quantum Mechanics
Nov 3	17 / W	Lecture	7	Hydrogen Atom
Nov 5	18 / F	Lecture	8	Periodic Table/Electrons

Week 7

Date	Meeting/Day	Activity	Chapter	Material
Nov 8	19 / M	Lecture	8	Periodic Table
Nov 10	20 / W	Lecture	8	Periodic Trends
Nov 12	21 / F	Review	4,7-8	

Week 8

Date	Meeting/Day	Activity	Chapter	Material
Nov 15	22 / M	**Midterm**	**4,7-8**	
Nov 17	23 / W	Lecture	9	Electron Densities/Bonding
Nov 19	24 / F	Lecture	9	Lewis Structures

Week 9

Date	Meeting/Day	Activity	Chapter	Material
Nov 22	25 / M	Lecture	9	Lewis/Covalent Bonds
Nov 24	26 / W	Lecture	10	Bonding/Geometries
Nov 26	27 / F	**Holiday**		

Week 10

Date	Meeting/Day	Activity	Chapter	Material
Nov 29	28 / M	Lecture	10	Hybridization
Dec 1	29 / W	Lecture	10	Bonding Models / MO
Dec 3	30 / F	**Review**	1-4,7-10	All

Final Exam

Date	Day	Time	Activity	Material
Dec 8	W	12:30-2:20 pm	**Final Exam**	**Chap 1-4, 7-10**

The tentative schedule of topics, number and length of examinations, point distribution, course requirements, and percentages required for letter grades may be changed at the instructor's discretion in order to better facilitate the learning process.