

Chemistry 104 -- General Chemistry (CRN 10508, 4 cr)
Portland State University, Fall, 2009

Instructor: Dr. Eric Sheagley

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Office Hours: Tentatively, Monday, after class until 12:00..

Text: Raymond, Kenneth W., General, Organic, and Biological Chemistry: an integrated approach. John Wiley & Sons, Inc., 2006 The PSU bookstore should have several options, including hardback and loose-leaf (3-hole punched.) [**NB**: CH 107, for which you should be enrolled concurrently with this course, requires a lab manual; check the bookstore.]

Course Description: A survey of chemistry for students in nursing, allied health fields such as dental hygiene, forestry, and the liberal arts. This course is not intended for science or engineering majors. Ch 104, 105, and 106 must be taken in sequence. CH 104 requires concurrent enrollment in the lab course, CH 107. Also please note that the laboratory for this class is SEPARATE from the lecture portion: different CRN, different instructor. You must register for the lab (i.e., don't assume that because you've registered for 104 that you are automatically enrolled in 107).

Prerequisite: Two years of high school algebra or Mth 95. *Math skills tend to be the limiting factor for how well you do in chemistry*; if your math skills are weak and you want/need to do well in this class, I *strongly* recommend that you postpone taking CH104 until you are sure you can handle the math comfortably.

Exams: There will be two one-hour midterms (100 pts each), two short quizzes (30 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.

Attendance: Attendance will not count in the final grade, but you are responsible for information (corrections, changes in dates, assignments) given during class time. Get that information either from BlackBoard or from a classmate. Do **not** expect to get it from me (i.e., do **not** e-mail me or call me or otherwise ask me what you missed.) I recommend that you make friends with your classmates, so you can swap such information quickly and efficiently.

Grading: There will be two midterm exams (100 points each, comprehensive), a final (150 points, comprehensive, *scantron 882E*), and 5 homework assignments (20 points each; approximately every other week).

Midterms	200 pts
Quizzes	30 pts
Homework	100 pts
Final (bring scantron, 882E)	150 pts
total	510 pts

please note: because of the very large #students this term, and the very small #TAs, we may have to change how homework is handled. Please be patient whilst we figure this out.

Grades will be assigned by the following scale:

- 94% and above is an A
- 90-93% is an A-
- 88-89% is a B+
- 84-87% is a B
- 80-83% is a B- and so forth.

Note: this scale may change based on class performance.

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.

Tentative Chemistry 104 schedule (Chapters 1-6)

Wk #	Chapter and Lecture Topics	Comments
1-2	Ch 1: Science and Measurements	The basics; what is and isn't science; units & metric prefixes, some math skills.
3	Ch 2: Atoms and Elements	I may add some more historical info that falls between Dalton's model and the modern (quantum mechanical) view. Counting vs weighing. Radioisotopes
4-5	Ch 3: Compounds Midterm #1 10/30 (Friday of Week 5)	Ions & ionic compounds; covalent bonds & molecules. Sure we describe bonding, but we also introduce <i>nomenclature</i> .
6-7	Ch 4: Intro to Organic Chem.	Molecular structure; carbon-based chemistry.
8	Ch 5: Gases, Liquids, Solids	All the math is in the Gas Laws; the other two phases are discussed <i>qualitatively</i> .
9-10	Ch 6: Reactions Midterm #2 12/2 (Wednesday of Week 10)	<i>Really important stuff!</i> The last day of class, 12/4, will be a review day.
11	Final Exam TUESDAY, 8 a.m.- 9:50 a.m.	Note that this is NOT our usual <u>day</u> of the week or <u>time</u> .

Holidays are November 11 (Veterans Day), 26-27 (Thanksgiving)

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.