

CHM 2045, General Chemistry 1

Spring 2012

Instructor: Dr. Kathryn R. Williams, CLB 220, 392-7369, krw@chem.ufl.edu
Office Hours: M, 6th; T, 5th; W, 8th; Th, 6th; F, 3rd

Class Logistics: M, W, F, 4th period; CLB C130; Discussions on Tuesdays (see class schedule for rooms).
Please turn cell phones **OFF** during lectures and discussions.

Description: CHM 2045 is the first half of the two-semester general chemistry sequence for science majors. Topics include: chemical formulas and reactions, stoichiometry, states of matter, thermochemistry, quantum theory and the periodic table, chemical bonding, solutions, and kinetics. To proceed to CHM 2046, students must earn at least a C (not C-) in CHM 2045.

Prerequisites: Passing score on the Chemistry Readiness Assessment (6 or higher on each portion, math and chemistry) OR Grade of C or higher in CHM 1025 OR Score of 3 or higher on the AP Chemistry Exam OR Score of 4 or higher on the IB Chemistry Exam **PLUS** MAC 1140 OR MAC 1147 OR MAC 2311. Students may take the MAC prereq concurrently with CHM 2045, **but the MAC requirement MUST be met prior to taking CHM 2046.**

Text: Silberberg, Martin S. *Principles of General Chemistry*, 2nd ed.; McGraw-Hill: New York, 2010.

Attendance: Attendance will not be recorded, but it is highly recommended that you attend every lecture and discussion. You are expected to be aware of any announcements made in class.

Quizzes: Four 40-point quizzes will be given during discussions (see schedule). The lowest quiz grade will be dropped. There will be **NO** makeup quizzes. You must take quizzes during your assigned discussion.

Exams: Three 250-point progress exams will be given on the evenings of T, Feb 7; Th, March 1; and M, April 9. The lowest exam score will be dropped. Exam rooms will be assigned by section number and posted in the Sakai announcements. Evening exam times are 8:20-10:20 PM. No student will be allowed to start after 9:00 PM. Bring a non-programmable calculator, several sharp #2 pencils, an eraser, and your Gator1 card; **NO** study sheets or cell phones.

Final Exam: The 300-point cumulative final exam is scheduled for Sat. April 28, 5:30-7:30 PM.

Make-up Policy: There will be **NO** makeup quizzes or progress exams, except for required attendance at university-sponsored events (see back). A missed quiz or exam will be the one dropped.

Calculators: **NO** programmable calculators are permitted on exams and quizzes. Bring a calculator with all the common mathematical operations, including log, ln, powers, and roots.

Grades: Your letter grade will be based on 1000 total points, distributed as follows:

WEBAssign Homework	80 pts
Quizzes (best 3 of 4 @ 40 pts each)	120 pts
Progress Exams (best 2 of 3 @ 250 pts each)	500 pts
Final Exam	300 pts

The **fixed, non-negotiable** grading scale is as follows:

900-1000, A	860-899, A-	830-859, B+	800-829, B	760-799, B-	730-759, C+
700-729, C	660-699, C-	630-659, D+	600-629, D	< 600, E (fail)	

Grade Posting: All quiz and exam scores will be posted on Sakai E-Learning. The URL is <http://lss.at.ufl.edu>. It is **your responsibility** to make sure that your scores are posted correctly. Any questions about exam or quiz scores (including Scantron verification) must be brought to Dr. Williams' attention within one week after the exam score posting or quiz return.

GCLC: The General Chemistry Learning Center, the go-to place for help in this course, is in Flint Hall 257. TA's will be available during most business hours Monday-Friday. Any CHM 2045 TA present in the GCLC is able to assist with topics in CHM 2045. You should take advantage of this free resource.

WebAssign (On-Line) Homework: You must purchase Webassign; it is **NOT** included with the text. WebAssign assignments for each textbook chapter will be due on the dates listed in WebAssign – times due for each due date are just before midnight. Do **NOT** wait until the last minute to access and attempt to complete WebAssign assignments, because **NO extensions** will be given for computer issues.

To access WebAssign: If you do not already have a WebAssign account set up, go to <https://www.webassign.net/login.html> and use the following:

username = your GatorLink username

institution = ufl

password = 2045 (or if you already have a WebAssign account, use your current password.)

You will have to buy the access from the web site (something like \$35 for the semester). You will have about 10 days “free” WebAssign usage once you access the site using the class-provided login information, but to continue beyond the grace period, you must purchase access either on-line or in the bookstore.

Correct answers to WebAssign assignments require very precise attention to significant-figure rules. If you do not fully understand the usage of significant figures, you should read pages 22-23 in your textbook (or another source for detailed significant-figure instruction). Also, the correct answers to WebAssign assignments have very narrow acceptance windows. You must be very careful in the numbers you use for calculations and how you carry them through the problem-solving procedure. Finally, you’ll notice that many of the WebAssign problems have information next to the problem number (things like “EOCP” which refers to Silberberg EndOfChapterProblem such-and-such), so that you can consult the Silberberg textbook problem and the posted online solutions to find out how the problem is solved if you have any difficulties. The WebAssign User Guide is at <http://www.webassign.net/guide/index.html> and the WebAssign Student Technical Support is at <http://www.webassign.net/info/support/report.html>.

To avoid problems relating to computer or other “glitches,” the total number of possible WebAssign points is 100, and you are encouraged to work and correctly answer all questions. However, at the end of the semester, a maximum of 80 points will be included in your final grade tally.

Other Links: Honor Code: <http://www.chem.ufl.edu/~itl/honor.html>
Disabilities: <http://www.chem.ufl.edu/~itl/disabilities.html>
Counseling: <http://www.chem.ufl.edu/~itl/counseling.html>
Grade Point Values: <http://www.isis.ufl.edu/minusgrades.html>

Student Athletes and School Events: Students required to attend university-sponsored events must see Dr. Williams personally **prior to the event** about accommodations for quizzes or exams.

Course Schedule

Week	Topic/Chapter	Special Dates
1/9-1/13	Basics/Components of Matter/Nomenclature, Chap 1,2	
1/16-1/20	Components of Matter/Stoichiometry, Chap 2,3	No class M, 1/16, MLK Day
1/23-1/27	Stoichiometry/Classes of Reactions, Chap 3,4	Quiz 1 during discussion
1/30-2/3	Thermochemistry, Chap 6	
2/6-2/10	Thermochemistry/Quantum Theory, Chap 6,7	Exam 1, T, 2/7; Chap 1,2,3,4,6
2/13-2/17	Quantum Theory/Atomic Structure, Chap 7,8	
2/20-2/24	Electron Configurations/Periodic Table, Chap 8	Quiz 2 during discussion
2/27-3/2	Bonding Principles, Chap 9	Exam 2, Th, 3/1; Chap 1-4;6-9; No class F, 3/2
3/5-3/9	Spring Break	
3/12-3/16	Molecular Shapes/Covalent Bonding, Chap 10,11	
3/19-3/23	Covalent Bonding/Gases, Chap 11,5	Quiz 3 during discussion
3/26-3/30	Gases/Kinetic Molecular Theory, Chap 5	
4/2-4/6	IMF’s/Solids & Liquids, Chap 12	
4/9-4/13	Solutions, Chap 13	Exam 3, M, 4/9; Chap 1-12
4/16-4/20	Solutions/Kinetics, Chap 13,16	
4/23-4/25	Kinetics, Chap 16	Quiz 4 during discussion
Sat. 4/28; 5:30-7:30 PM		Final Exam, Cumulative