

<b>CHM 2045</b>	<b>General Chemistry</b> <b>Gower Sections</b>	<b>Spring 2013</b>
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**INSTRUCTOR:** Jeff Gower ([jgower@ufl.edu](mailto:jgower@ufl.edu))

Lectures: MWF 6th Period (CLB 130) Discussion Sections: Thursdays

Office hours: MWF 4<sup>th</sup> Period, and MWR 8<sup>th</sup> Period (CLB 314)

**TEXT:** **Chemistry: The Molecular Nature of Matter and Change (6<sup>th</sup> Edition)**  
by Martin Silberberg (McGraw-Hill)

**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.

**COURSE SCHEDULE (lecture schedule is tentative)**

Dates	Topics (# of lectures)	Chapters
Jan. 7–9	Introduction and Review: Atoms, Molecules, and Ions (2)	Chap. 1–2
<b>Wednesday, Jan 16</b>	<b>Online Assessment Quiz #1</b>	<b>Chaps. 1–2</b>
Jan. 11–18	Mass Relations and Stoichiometry (3-4)	Chap. 3
<b>Wednesday, Jan 23</b>	<b>Online Assessment Quiz #2</b>	<b>Chap. 3</b>
Jan. 23–28	Aqueous Reactions (3-4)	Chap. 4
<b>Wednesday, Jan. 30 (8:20-10:20 pm)</b>	<b>Progress Exam 1</b>	<b>Chaps. 1–4</b>
Feb. 1–4	Enthalpy & Calorimetry (2)	Chap. 6
Feb. 6–8	Atomic Structure (2)	Chap. 7
<b>Wednesday, Feb. 13</b>	<b>Online Assessment Quiz #3</b>	<b>Chap. 6–7</b>
Feb. 11–18	Electron Configuration and Periodic Trends (4)	Chap. 8
Feb. 20–25	Chemical Bonding Models (3)	Chap. 9
<b>Wednesday, Feb. 27 (8:20-10:20 pm)</b>	<b>Progress Exam 2</b>	<b>Chaps. 1–4, 6–9</b>
Mar. 1 and 11	Molecular Geometry (2)	Chap. 10
Mar. 13–18	Covalent Bonding Theories (3)	Chap. 11
<b>Wednesday, Mar. 20</b>	<b>Online Assessment Quiz #4</b>	<b>Chaps. 10–11</b>
Mar. 20–25	Gases (3)	Chap. 5
Mar. 27 – Apr. 1	Intermolecular Forces and Liquids and Solids (3)	Chap. 12
<b>Wednesday, Apr. 3 (8:20-10:20 pm)</b>	<b>Progress Exam 3</b>	<b>Chaps. 1–12</b>
Apr. 5–12	Solutions (4)	Chap. 13
<b>Wednesday, Apr. 17</b>	<b>Online Assessment Quiz #5</b>	<b>Chap. 13</b>
Apr. 15–22	Chemical Kinetics (4)	Chap. 16
Apr. 24	Cumulative Review (1)	Cumulative
<b>Monday, Apr. 29 (3:00–5:00pm)</b>	<b>Final Exam</b>	<b>Cumulative</b>

**HOLIDAYS (no classes):** Jan. 21 MLKJr. Day; Mar 4–8 Spring Break

**SAKAI** (<http://lss.at.ufl.edu>): Here you will find the syllabus, the Discussion Section schedule, a link to the WebAssign homework site, your gradebook for the class, selected lecture material, videos, files, end-of-chapter problem solutions, class announcements, and other pertinent info for the course. It is your responsibility to check the Class Web Site often (as well as your gradebook) to make sure that you do not miss important announcements and other information and to ensure that your gradebook is accurate. If you change your GatorLink username during the semester, please inform me immediately – otherwise your WebAssign scores may not transfer accurately. If you have any problems with your GatorLink name or password, you should either go on-line <http://www.gatorlink.ufl.edu>, contact the Help Desk at 392-HELP, or go to 520 CSE for personal assistance. For other computer assistance, visit <http://helpdesk.ufl.edu/>.

**DISCUSSION CLASSES:** The Discussion Classes meet every week according to the schedule (see the Resources folder in Sakai). You may go to as many Discussion Classes that you would like to attend, so long as space is available - should space become an issue, the TAs will have to take steps to ensure that assigned students get priority seating.

**CONTACTING THE INSTRUCTOR / OFFICE HOURS:** Emails are for administrative purposes only, and not for distance-instruction (my experience has shown that it is almost impossible to adequately teach chemistry via email). All email queries about information covered in the syllabus or announced in lecture will be disregarded. All academic inquiries must be made during office hours or before/after lectures (if time permits). If this is not possible, visit the CLC (see below). Please consult the online chapter solutions (if applicable) before coming to office hours.

**CHEMISTRY LEARNING CENTER (CLC):** There is free help to be had from graduate student teaching assistants in the CLC Monday through Friday 2<sup>nd</sup> through 11<sup>th</sup> periods in Flint Hall 257. Your discussion TA will have office hours in the CLC, but you may go there anytime any TA is assigned there to get help on questions pertaining to chemistry. A schedule of the TA schedules will be posted in the corridor outside the CLC and also on Sakai.

And, there is the **TEACHING CENTER** located on the ground floor of Broward Hall, if you'd like to use that resource. Their web site is <http://www.teachingcenter.ufl.edu>.

**WEBASSIGN (ON-LINE) HOMEWORK:** When you log into <https://www.webassign.net/ufl/login.html> you should see a “Log-In” button for WebAssign – this will be your entry into WebAssign. No separate WebAssign password is necessary. You'll have a free grace period (14 days or so) to use WebAssign before you have to pay \$25.95 for the semester. This should be the only way to access WebAssign properly.

WebAssign assignments for each textbook chapter will be due on the dates listed in WebAssign – due times for each due date are just before midnight - it is up to students to be aware of WebAssign due dates. Do not wait until the last minute to attempt to complete WebAssign assignments, because computer issues can arise at any time, and you don't want to be left at the last minute not being able to complete your assignments on time due to some technical error.

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 25-28 in your Silberberg textbook (or another source for detailed significant-figure instruction). Also, the correct answers to WebAssign assignments sometimes have 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.

You'll have three (3) attempts for each problem question. The WebAssign User Guide is at [http://www.webassign.net/manual/WebAssign\\_Student\\_Guide.pdf](http://www.webassign.net/manual/WebAssign_Student_Guide.pdf) and the WebAssign Student Technical Support is at [http://www.webassign.net/user\\_support/student/](http://www.webassign.net/user_support/student/)

If you change your CHM2045 enrollment from one lecture instructor to another (e.g., from Gower to Mitchell or Mitchell to Polfer, etc.), then you need to be sure to tell your instructors so that your WebAssign enrollment is also changed.

Please do not email instructors about WebAssign problems - if you need help, come to office hours or the CLC for help - be sure to have the problem printed out in full and show what work you've done. Again, pay extra careful attention to significant figure rules because WebAssign is not tolerant of incorrect sig figs.

**EXAMS:** You must use a non-graphing non-programmable scientific calculator on exams (with log, ln, root, and exponent (scientific notation) functions). Be sure to also bring pencils, section number, and your UF ID card. No notes, papers, cell phones or other electronic devices can be in view during exams.

No makeup progress exams will be given for any reason. Since unavoidable emergent situations (illnesses, accidents, emergencies, etc.) do arise occasionally, we've incorporated a dropped-exam policy (the best 2 of 3 progress exams will be counted toward your grade - see under "GRADES" below). If you must be absent for an exam due to a documented and approved academic or UF athletic conflict, bring the documentation to your instructor beforehand (at least one week prior to the scheduled exam) and an early conflict exam will be scheduled. Planned or emergency trips home or elsewhere are not approved conflicts. For more information on CHM2045 exam policy, see [http://iteach.chem.ufl.edu/file.php/1/Exam\\_Absence\\_Policy\\_GChem\\_s13.pdf](http://iteach.chem.ufl.edu/file.php/1/Exam_Absence_Policy_GChem_s13.pdf)

Student bubbling errors on exam scantrons are not negotiated, and a penalty of nine (9) points will be applied to any exam scantron that has to be tracked down and identified due to incorrect student identity bubbling. This penalty is intended to prevent repeated bubbling errors by the same students.

Checking your Scantron: Out of the tens of thousands of exam scantrons that have been scored while I've been at UF, not one has been scored incorrectly. Any discrepancies have always been due to student bubbling error. However, scantrons may be checked during the two established instructor office hour sessions following the posting of the exam score in your Sakai gradebook, after which no further scantron checking will be accommodated.

**ONLINE ASSESSMENT QUIZZES:** There will be five (5) online assessment quizzes given via the Sakai web site for this course. To access the assessment quizzes, click on "Assessments" in Sakai. The quizzes are scheduled as indicated above in the course schedule. The quizzes will be opened for you to take them on the days listed, and the time period you'll be able to take the quiz is anytime during the 24-hour period that defines that particular day. No makeup quizzes will be given for any reason. Computer issues that may arise will not be negotiated. To accommodate unavoidable conflicts or computer issues that may arise, we offer a dropped-quiz policy (the best 4 of 5 quizzes counting toward your grade – see under "GRADES" below). It is suggested that you do the assessments early enough in the day to avoid last-minute time or computer issues. If you must be absent for a quiz due to a documented and approved academic or UF athletic conflict, bring the documentation to your instructor beforehand (at least one week prior to the scheduled quiz). Planned or emergency trips home or elsewhere are not approved conflicts.

**GRADES:** Grades for the term will be determined as follows:

Progress Exams (best 2 of 3 @ 250 pts)	500 pts
WebAssign (On-line) Assignments	80 pts
Online Assessment Quizzes (best 4 of 5 @ 30 pts)	120 pts
Final Exam	300 pts
TOTAL	1000 pts

The following grade cutoffs will be used (these are non-negotiable):

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    (a grade of C or higher is required to take CHM2046; a C- does not count)

For further information on UF's Grades and Grading Policies, go to <http://www.registrar.ufl.edu/staff/grades.html#grading>

**HONOR CODE:** The [UF Student Honor Code](#) (ctrl+click to open link) applies to all exams and assessments given in this course. Please understand that absolutely no leniency will be extended in any case of academic dishonesty.

**DISABILITIES:** Students requesting classroom and exam accommodations should contact the Dean of Students Disability Resources Center (DRC) at <http://www.dso.ufl.edu/drc/> and obtain the proper forms that need to be turned in to me during the first week of class or as soon as possible after obtaining the paperwork from the DRC. It is the student's responsibility to schedule and arrange accommodations with the DRC. For other disability or related students-affairs info, see <http://www.chem.ufl.edu/~itl/disabilities.html>  
Students may seek mental health counseling at any time. See <http://www.chem.ufl.edu/~itl/counseling.html>.

**COURSE INFO:** CHM 2045 and CHM 2045L constitute the first semester of the two term sequence of General Chemistry, CHM 2045-2045L-2046-2046L. This sequence is suitable for all science and engineering majors. To continue into CHM 2046, you must earn a grade of C or higher in CHM 2045 and have MAC 1140 or MAC 1147 or Calculus 1 or the equivalent of these or higher completed (Statistics does not count). If you drop your math class and do not have MAC 1147 or the equivalent or higher you will not be able to go on to CHM2046 even if you pass CHM2045 (you will be ejected from CHM2046 even if the system allows you to register).

**GENERAL EDUCATION CREDIT:** This course is available for general education credit. This course introduces students to fundamental concepts of chemistry including bonding, atomic and molecular structure, chemical reactions, states of matter, and reaction rates. The scientific method and the place of chemistry in the everyday world are emphasized.