

## CHM 2046 – General Chemistry II – Fall 2013

- Instructor:** Professor Adam S. Veige, CLB 412B  
[veige@chem.ufl.edu](mailto:veige@chem.ufl.edu) (email is recommended for contact)  
**Office Hours: M W F period 3**
- Sections:** 0745, 0747, 0748, 0749, 0750, 0751, 0752, 0754, 1900
- Lectures:** **M W F Periods 4** (10:40 – 11:30 AM) in CLB C130. Classes begin **August 21<sup>st</sup>, 2013**  
Concurrent enrollment in CHM 2046L, MAC 2311, or MAC 2312 is suggested.
- Discussions:** Tuesday classes corresponding to the section numbers above meet with a Teaching Assistant (TA) and will start **August 27<sup>th</sup>**.
- Teaching Assistants:** Soufiane Nadif ([snadif@ufl.edu](mailto:snadif@ufl.edu), CLB 417), Stella Gonsales ([stellagonsales@ufl.edu](mailto:stellagonsales@ufl.edu), CLB 417), Xi Yang ([xiyang@ufl.edu](mailto:xiyang@ufl.edu), CLB 419). TA office hours are held in the Chemistry Learning Center (CLC) in Keene-Flint Hall 257 and 258 (schedules posted there). You can also look on Sakai for TA office hours.
- Tutoring** The Chemistry Learning Center (CLC) is located in Keene-Flint Hall rooms 257 and 258. Chemistry graduate students offer free help, usually weekdays between periods 2-9. The UF Teaching Center has free walk-in help, or you can schedule an appointment.
- Text:** *Chemistry “The Molecular Nature of Matter and Change”*, by Martin S. Silberberg, 6<sup>th</sup> Ed, McGraw Hill
- Description:** CHM 2046 is the second semester of the CHM 2045 – 2046 General Chemistry I and II sequence. Topics include, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, electro-chemistry, and an introduction to transition metal coordination compounds.
- Attendance:** While attendance will not be taken, it is highly recommended that you attend every lecture and discussion period.
- Course Objectives:** The main objective for the course is for students to understand chemical equilibrium and the fundamental laws governing those dynamics. Students will need to demonstrate an ability to solve problems using mathematical and or logical reasoning. Student will need to grasp the relationship between theoretical principles and physical observations (i.e. solubility, pH, entropy). Upon completion of the course students will have a solid foundation in the principles of chemical dynamics that will enable them to progress to more specialized topics in upper year classes, as well as apply them to their own physical environment.
- Homework:** Problems found at the end of chapters are strongly suggested. While they will not be graded, their purpose is to reinforce concepts discussed in lecture. Also, any general chemistry textbook is useful for finding additional problems to attempt. There are numerous textbooks in the library. Exams from previous semesters, **but not the answer**

**key**, will be posted in Sakai for practice. Note: previous exam content may not be the same as this semester as the exam dates and course progression are different.

**Quizzes:** **Four** announced quizzes will be given during the **Tuesday** discussion periods found on the schedule. Each quiz will be worth 50 points. The lowest quiz score will be dropped. You must take quizzes with your respective TA only and during the discussion period in which you are registered.

**Exams:** **Three** mid-semester exams will be administered (8:20 pm – 10:10 pm) during the course of the semester on **W Sep 18, Th Oct 24, and Th Nov 21**. One of the three mid-semester exams will be dropped, but the final exam is mandatory and may not be dropped. The final exam is cumulative. The final exam is scheduled on **M Dec 9** and this date is non-negotiable. Students are required to present their gator1 card during exam.

**Make-up Policy:** There will be **NO** make-up exams or quizzes. A missed exam or quiz will be the one dropped.

**Calculators:** Only non-programmable calculators are permitted.

**Cell Phones:** Cell phones **must** be turned **OFF** during lectures, discussions, and exams.

**Grading:** The final letter grade will be based on a total of 800 points. Point ranges are fixed and will **NOT** be curved.

Exam 1, 2, and 3 (1 drop)	400
Quizzes 1-4 (1 drop)	150
<u>Final Exam</u>	<u>250</u>
Total	800

800-700 A, 699-660 A-, 659-629 B+, 628-598 B, 597-567 B-, 566-536 C+,  
535-505 C, 504-474 C-, 473-443 D+, 442-412 D, 411-382 D-, 381-0 E

**Sakai Postings:** **Class website:** <http://lss.at.ufl.edu>  
Suggested problems and homework solutions, exam and quiz scores, exam and quiz answers and solutions will be posted, your gradebook, class announcements, and other pertinent information for the course. Each student should check their Sakai account frequently since exam rooms will also be posted in Sakai. Do not email the instructor and TAs within Sakai. Use the email listed above on this syllabus. All registered students will automatically have access to Sakai using their Gatorlink ID.

**Discussion Section:** The Discussion Classes meet every Tuesday. It is fully expected that you attend these classes - during these classes you will go over the exams (you will pick up your exams during these classes) and clarify any weaknesses you had with the material. You will also take the quizzes during the discussion class meeting time. You will also receive any needed assistance to prepare for the following week's topics. You may go to as many Discussion Classes that you

would like to attend, so long as space is available – the schedule of Tuesday discussion TAs and locations is in the “Resources” folder in e-Learning.

**Course Topics:** Chapter 17 Equilibrium: The extent of Chemical reactions  
Chapter 18 Acid-Base Equilibria  
Chapter 19 Ionic Equilibria in Aqueous Systems  
Chapter 20 Thermodynamics: Entropy, Free Energy, Direction of Chemical Reactions  
Chapter 21 Electrochemistry: Chemical Change and Electrical Work  
Chapter 22 The Transition Elements and their Coordination Compounds  
Special Topics(if time permits)

**Key Dates:** Quiz: T Sep 10, T Oct 15, T Nov 12, T Dec 3  
Exam: W Sep 18, Th Oct 24, Th Nov 21 M Dec 9 (Final)  
Class Begin: Aug 21<sup>st</sup>, Last Class: Dec 4<sup>th</sup>  
No Class: M Sep 2, F Nov 8, M Nov 11, W-F Nov 25-29

**\*CUMULATIVE FINAL EXAM**

**MONDAY, DECEMBER 9**

**3:00-5:00 pm**

**Course Policies:** **EXAM POLICY:** Three cumulative progress exams and a cumulative final examination will be administered. Your lowest progress exam score (NOT the final exam) will be excluded from final grade calculation. Each exam will consist of ~20 multiple choice questions. Any material covered prior to the exam date is eligible to appear on the exam.

Scantron errors are non-negotiable. This includes form code errors, registry errors, and name and UF ID errors. Students may not use graphing or programmable calculators on exams. You may use scientific calculators with exponent capability. No other device may be used as a calculator (cell phones, iPods, etc.). No spare calculators will be available for use during exams, nor will spare batteries.

Conflict exams may be offered to students with another assembly exam at the same time in a course with a higher number than ours, or to students with well-documented, UF-approved reasons (<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>). Such exams are offered in advance of the scheduled exam. It is your responsibility to identify yourself as requiring such accommodation at least one full week prior to the exam. If you fail to do so, you may not be accommodated and the missed exam will be dropped. **There are no make-up exams in general chemistry at University of Florida.** Please refer to the official General Chemistry Exam Absence Policy available in e-Learning.

**UF Policies:** **UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES:** Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams.

Accommodations are not retroactive; therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**UNIVERSITY POLICY ON ACADEMIC MISCONDUCT:** Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

**NETIQUETTE: COMMUNICATION COURTESY:** All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

**Other Information:**

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>

**Disclaimer:**

The above course information is tentative and subject to change. The instructor reserves the right to make corrections, additions, and/or deletions as the semester progresses. Syllabus corrections will be announced as they occur.