

CHM 2046 – General Chemistry 2 – Spring 2012

Lectures: MWR Period 9 (4:05 – 4:55 PM) in CLB 130. Concurrent enrollment in CHM 2046L, 2054L, MAC 2311, MAC 2312, or MAC 2313 is suggested.

Instructor: Dr. Jeffrey Keaffaber, Office: FLI 251; Phone: 392-1087; Email: jjk@chem.ufl.edu
Email is the recommended form of contact. Please do not email the instructor using Sakai!

Office Hours: MTWR Period 7-8 (1:55-3:50 PM)

If these times don't work for you, please make an appointment. No office hours on Fridays.

Teaching Assistants: TA sessions are held on Tuesdays beginning January 17th. No TA sessions during the first week of classes during add/drop. O/Hs: To be announced.

Text: *Principles of General Chemistry*, Martin Silberberg, 2nd Ed, McGraw Hill, 2010.

Note Outlines: Optional outlines in "skeletal" form may be purchased at Target Copy, 1412 W. University Avenue.

Description: CHM 2046 is a second semester of general chemistry for engineering majors requiring more depth in chemical principles. Topics include chemical equilibria, acid-base and aqueous equilibria, chemical thermodynamics, electrochemical devices, descriptive inorganic materials, transition metal coordination, and introductory organic chemistry.

Prerequisites: CHM 2045 or CHM 2095.

Attendance: Attendance will not be taken, but it is highly recommended that you attend every lecture. Remember that your instructor writes the exams. Therefore, concepts emphasized in lecture should be given top priority. Staying home and "reading" the textbook, studying the content on Sakai, and cramming for exams will not work in CHM 2046! Missing just one class is a proven effective way to be left behind.

Homework: Problems will be assigned from the end of the chapters. Homework will be handed in to your TA at the beginning of class on the Tuesday due date. Late work will not be accepted. There will be 12 homework assignments, and you will be allowed to drop your two lowest scores. Each homework assignment will be graded on four (4) point scale: 4 = flawless; 3 = good but not perfect; 2 = average effort; 1 = poorly presented; 0 = incomplete or not submitted.

Mini-Exams: Twelve (12) mid-semester 20-30 minute exams will be offered on Wednesdays at 4:05 PM sharp starting on January 25th. Two of these exams will be dropped. Each exam will be graded with a whole number on a 10 point scale: 10 = A; 9 = A-; 8 = B+; 7 = B; 6 = B-; 5 = C+; 4 = C; 3 = D; 2 = E; 1 = E; 0 = E.

Make-up Policy: There will be **NO** make-up exams given. A missed exam will count as a drop.

Final Exam: A mandatory two-hour final exam will be given during exam block 28E at 5:30-7:30 PM on Saturday, April 28th. The final exam will be worth 60 points.

Calculators: Calculators are **NOT** permitted on exams.

Cell Phones: Cell phones **must** be turned **OFF** during lectures and exams!

Grading: Your letter grade will be based on a total of 200 points. Point ranges are fixed will NOT be "curved." Letter grades will be available on ISIS, late night, Monday, May 7th.

12 Mini-Exams (2 drops)	100
Final exam	60
<u>12 Homework (2 drops)</u>	<u>40</u>
TOTAL	200

Minimum Targets: 180 (90%) A-; 160 (80%) B+; 140 (70%) B; 120 (60%) B-; 100 (50%) C+; 80 (40%) C

Grade point values: 4.00 A; 3.67 A-; 3.33 B+; 3.00 B; 2.67 B-; 2.33 C+; 2.00 C; 1.67 C-; 1.33 D+; 1.00 D; 0.67 D-.
For more information: <http://isis.ufl.edu/minusgrades.html>

Sakai: All exam and homework scores will be under the "my grades" link in Sakai. Check Sakai frequently for content additions under the "resources" link and for class announcements. <http://lss.at.ufl.edu> Do not email the instructor in E-learning, please use jjk@chem.ufl.edu for all course-related email.

GCLC: The General Chemistry Learning Center, a tutoring location, can be found in Flint Hall (FLI) 257. TAs will be available during most business hours Monday-Friday. Any TA present in the GCLC is able to assist with topics from this course. If a TA is not assisting his/her students, he/she is supposed to help you. One should take serious advantage of this free resource.

Course Schedule:

<u>Topic</u>	<u>Chapter</u>	<u>Week</u>	<u>Dates</u>	<u>Key Dates</u>
Chemical Equilibrium	17	1	01/09-01/13	Add/Drop
Chemical Equilibrium	17	2	01/16-01/20	No Exam
Acids and Bases	18	3	01/23-01/27	Exam 1 01/25
Acids and Bases	18	4	01/30-02/03	Exam 2 02/01
Aqueous Equilibria	19	5	02/06-02/10	Exam 3 02/08
Aqueous Equilibria	19	6	02/13-02/17	Exam 4 02/15
Energy and Enthalpy	6	7	02/20-02/24	Exam 5 02/22
Entropy and Free Energy	20	8	02/27-03/02	Exam 6 02/29
Spring Break		9	03/05-03/09	No Class
Entropy and Free Energy	20	10	03/12-03/16	Exam 7 03/14
Electrochemistry	21	11	03/19-03/23	Exam 8 03/21
Descriptive Chemistry of the Elements	14	12	03/26-03/30	Exam 9 03/28
Descriptive Chemistry of the Elements	14	13	04/02-04/06	Exam 10 04/04
Coordination Chemistry/Transition Metals	22	14	04/09-04/13	Exam 11 04/11
Introduction to Organic Chemistry	23	15	04/16-04/20	Exam 12 04/18
IN-CLASS CUMULATIVE FINAL EXAM	6, 14, 17-23	16	04/23-04/27	Final Exam 04/28 5:30 PM – 7:30 PM

*The last day to withdraw from a course with the grade of "W" is Friday, April 13th!!!

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. Syllabus corrections will be announced as they occur.