

PERIOD	SECTIONS	ROOM	INSTRUCTOR	OFFICE	OFFICE HRS.
MWF 8 <sup>th</sup> also Tuesday Discussion	1914, 3966, 3979, 3987, 5241, 5405, 5771, 5772, 5778	CLB C130	Dr. Anna Brajter-Toth <i>atoth@chem.ufl.edu</i> <i>http://www.chem.ufl.edu/~atoth/2046F13</i>	Leigh Hall Room 312	M– 9-10 <sup>th</sup> W– 9 <sup>th</sup> F– 4 <sup>th</sup>

**PREREQUISITES:** CHM 2045 and 2045L. This is the second semester of the sequence: CHM 2045-2045L-2046-2046L.

**OBJECTIVES:** General Chemistry is a broad survey of basic chemistry. This semester we will explore the use of chemical equilibrium concepts and other principles (structure, bonding, and energetics) to understand a broad range of chemical properties.

**COREQUISITE:** CHM 2046L. The class will occasionally draw on specific examples of chemistry studied in lab. The relevant examples that will be used in class are "fair game" on homework, quizzes, and exams.

**DISCUSSION:** Discussions start the second week of class. The Tuesday discussion classes will include several activities: discussion of homework that is turned in, worksheets including some new material, quizzes and practice exams.

Attendance records will be maintained in discussion.

**TEXTBOOK:** Silberberg, 6<sup>th</sup> Edition, Chemistry, *The Molecular Nature of Matter & Change* (McGraw Hill), 2012.

**CLASS WEB SITE:** <http://www.chem.ufl.edu/~atoth/2046F13>

A good source of information about the course. Please bookmark the page. Please be sure to reload this every time you visit, as it will change frequently. Of particular interest are Class Worksheets for the week with brief notes.

### TENTATIVE SCHEDULE

<u>WEEK</u>	<u>DATES</u>	<u>TOPICS</u>	<u>READING</u>
1	Aug 21, 23, 26	Chemical Equilibrium	Chapter 17
2	Aug 28, 30, H	Chemical Equilibrium	Chapter 17
3	Sept 4, 6, 9 (Q1)	Kw & pH, Acids & Bases	Chapter 4, 18
4	Sept 11, 13, 16	Acids & Bases	Chapter 18
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WEDNESDAY SEPT 18, 8:20 – 10:10 PM		EXAM 1	Chapters 17, 18
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5	Sept 20, 23	AB Reactions, Buffers	Chapter 19
6	Sept 25, 27, 30 (Q2)	Titration, Solubility	Chapter 19
7	Oct 2, 4, 7	Complex Ion Equilibria, Thermodynamics	Chapter 19, 20
8	Oct 9, 11, 14 (Q3)	Redox Reactions, Electrochemistry	Chapter 21
9	Oct 16, 18, 21, 23	Electrochemistry	Chapter 21

THURSDAY OCT 24, 8:20 – 10:10 PM		EXAM 2	Chapters 19-21
10	Oct 28	Electrochemistry, Metals	Chapter 14, 21, 22
11	Oct 30, Nov 1, 4	Transition Elements	Chapter 23
12	Nov 6 (Q4), Hx2	Coordination Compounds	Chapter 23
13	Nov 13, 15, 18, 20	Nonmetals	Chapter 14
THURSDAY NOV 21, 8:20 – 10:10 PM		EXAM 3	Chapter 14, 21-23
14	Nov 25, H, Dec 2	Nonmetals	Chapter 14, 15
15	Dec 4	Finish Up	
MONDAY DEC 9 3:00 - 5:00 PM		FINAL EXAM	All Chapters Listed Above

**HOMEWORK:** A problem set will be available on the website weekly, usually on or before Friday (except during the week of the exam). There will be no regular homework due the week after each major exam. You will need to print it and complete it by hand. Completed homework is to be turned at the beginning of class the following Tuesday in discussion to your TA. Late homework is not accepted. The 11 homework sets will count in your grade. You will get a grade (see GRADING) for the returned completed homework, practice quizzes and discussion.

In addition to the homework problems, a number of text problems will be recommended in the posted homeworks. Solutions to the homework problems, and the textbook problems will be available at <http://www.chem.ufl.edu/~atoth/2046F13>.

Working problems is recommended as the primary study activity.

**QUIZZES:** Four practice quizzes (Q1, Q2, etc.) will be posted, as indicated in the SCHEDULE above. The completed quiz is to be turned in on the following Tuesday, at the beginning of class, to your TA in discussion. Late quizzes will not be accepted. This means that some weeks you will have homework and quiz to turn in at the same time during the Tuesday discussion. Those who complete the quizzes and all the homeworks, and have a perfect attendance record in discussion, will get the maximum possible score for the homework/quizzes.

**EXAMS:** Three evening midterm exams will be given on the dates indicated on the preceding schedule. Students are expected to plan their work and other activities so as to be available at these times. Students with evening labs or classes may arrange to take the exams on the same day earlier. Classes will be cancelled on Friday for the week of each exam.

The 3 exam scores, plus the final, and the Homework and Quiz grade obtained in discussion will count in your grade.

**EXAM AND OTHER ABSENCES:** The GEN CHEM exam absence policy can be found at [http://iteach.chem.ufl.edu/Exam\\_Absence\\_Policy\\_GChem\\_s13.pdf](http://iteach.chem.ufl.edu/Exam_Absence_Policy_GChem_s13.pdf).

Makeup midterm exams will not be available for any circumstances except scheduled UF sponsored activities. If you have a scheduled UF sponsored activity that conflicts with the exams

see Dr. Toth in advance to schedule a makeup. If one midterm is missed for any reason, a grade adjustment will be made based on the average of your other 2 midterms and the final. In case of multiple absences for reasons that may be excused, or unusual circumstances, see Dr. Toth during the last week of classes about adjusting your grade.

**ATTENDANCE:** Attendance records will be maintained in discussion. You are responsible for all announcements made and material distributed in class. Missing class is an effective means of falling behind. (And not getting letters of recommendation- if I do not see you in class, I do not know you, and your grades are not enough for me to write a recommendation letter or for referrals).

**GRADE DISPUTES:** Every effort is made to make grading accurate. If you find what you believe to be a grade error on a homework, quiz or exam, see your TA first, within ONE WEEK after the grade is posted. If you are still not satisfied or have any questions, see Dr. Toth. Also contact Dr. Toth about any errors you feel may have been made on the grading of the major exams.

**GRADING:**

Homework (turned in on Tuesday)	11 @ 5 points each	= 55 points
Quizzes	4 @ 5 points each	= 20 points
Exams	3 @ 200 points each	= 600 points
Final (cumulative)		= <u>200 points</u>
	<b>TOTAL</b>	<b>= 800 points</b>

To estimate your grade you can use the grading scale shown below.

Homework/Quizzes will be included as bonus points (to obtain those Discussion attendance/participation is required), which means that you can earn more than 800 points. To estimate your grade you can use the grading scale shown below. The curve can be slightly different, with adjustment for our perception of the relative difficulty of the exams. Please be conservative when extrapolating your total during the middle of the term.

704 = A 672= A- 640 = B+ 608 = B 576= B- 544= C+ 512 = C 480 = C- 448 = D+ 400 = D

**GRADE POSTING:** Your own scores will appear on SAKAI as soon as available after each exam. Other scores will appear on Sakai each week the Homework/Quiz is due.

**CHEMISTRY LEARNING CENTER (CLC):** The CLC, located in Flint Annex 257-258, is a study facility available to all chemistry students. Chemistry teaching assistants (TAs) will be available here to answer questions and provide help during most daytime and early hours. The times at which the CHM 2046 assistants for your class are available will be posted on the class web page at <http://www.chem.ufl.edu/~atoth/2046F13>. In CLC you may see your own or any other TA, no appointment necessary. Assistants ( TAs) teaching in other chemistry courses should also be able to assist you in CLC with most topics, even if they are not currently teaching CHM 2046. When you see TAs for your CHM 2046 class during their office hours you will be on the bonus point list. We strongly recommend that you use the resources available in the Department in CLC. You may work in CLC whenever the building is open, generally up to 10 or 11 pm weekdays. Please be quiet, and ask others to be so also, when you are in this room. Eating and socializing are to be conducted outside in one of our many courtyards.

**ACADEMIC HONESTY:** Students are expected to be aware of and abide by the University's academic honesty policies. See, for instance, <http://www.dso.ufl.edu/stg/>. You may discuss the homework sets with other students and our teaching assistants. Then complete these yourself and turn in your own work.

**Students with Disabilities** requesting classroom accommodation must first register with the Dean of Students Office. Then, discuss with Dr. Toth what assistance you will need, well in advance of when it will be needed, so that we will be prepared to provide help as appropriate.

**DR. TOTH** is available individually to all students. Her office hours and location are listed above. Yes, this is a huge course. Much of the help you get will probably be from TAs in the CLC (see above). We all got into this business, however, because we like to discuss chemistry. We also are concerned about your progress. We are available to discuss and advise you about any individual difficulties. Take advantage of the opportunities to meet and work with your instructors. We want you all to do well!