

PERIOD	ROOM	INSTRUCTOR	OFFICE	OFFICE HRS.
MWF 3 rd or MWF 7 th	CLB C130	Dr. Anna Brajter-Toth <i>atoth@chem.ufl.edu</i> https://www.chem.ufl.edu/~atoth/2046S12	Leigh Room 312	MWF- 4 MWF- 8

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 look at 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. Such relevant examples are "fair game" on homework, quizzes, and exams.

DISCUSSION: Start 2nd week of class. The discussion classes will include several activities: discussion of homework, worksheets including some new material, practice quizzes and exams. Silberberg, 2nd Edition, Principles of General Chemistry (McGraw Hill), 2010.

WEB SITE: A good source of information about the course. Please Bookmark the class home page. Please be sure to reload this every time you visit, as it will change frequently. Of particular interest is What's Next Page and the Worksheets for the week with brief answers.

TENTATIVE SCHEDULE

<u>WEEK</u>	<u>DATES</u>	<u>TOPICS</u>	<u>READING</u>
1	Jan 9, 11, 13	Chemical Equilibrium	Chapter 17
2	Jan (H), 18, 20(Q1)	Chemical Equilibrium	Chapter 17
3	Jan 23, 25, 27	K _w & pH, Acids & Bases	Chapter 18
4	Jan 30 Feb 1, 3(Q2)	Acids & Bases	Chapter 18
5	Feb 6, 8	AB Reactions, Buffers	Chapter 19

THURSDAY FEB 9, 8:20 – 10:10 PM		EXAM 1	Chapters 17-18

6	Feb 13, 15, 17	Buffers, Titration, Solubility	Chapter 19
7	Feb 20, 22, 24(Q3)	Complex Ion Equilibria, Thermodynamics	Chapter 20
8	Feb 27, 29, Mar 2	Redox Reactions	Chapter 21

		SPRING BREAK	HAVE FUN

9	Mar 12, 14	Electrochemistry	

THURSDAY MAR 15, 8:20 – 10:10 PM		EXAM 2	Chapters 19-21

10	Mar 19, 21, 23	Electrochemistry, Metals	Chapter 21
11	Mar 26, 28, 30	Transition Elements	Chapter 22
12	Apr 2, 4, 6 (Q4)	Coordination Compounds	Chapter 22

13	Apr 9, 11	Nonmetals	Chapter 14
THURSDAY APR 12, 8:20 – 10:10 PM		EXAM 3	Chapters 21-22
14	Apr 16, 18, 20	Organic & Biochemistry	Chapter 15
15	Apr 23, 25	Finish Up & Review	Chapter 15
SATURDAY APR 28, 5:30 -7:30 PM		FINAL EXAM	All Chapters Listed Above

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

In addition to the problems in the posted homeworks, a number of text problems will be recommended. Solutions to the posted homeworks will be posted and the textbook problem solutions will be available at <https://www.chem.ufl.edu/~atoth/2046S12>. Working problems is recommended as the primary study activity.

QUIZZES: A practice quiz will be available on some Fridays as indicated. The completed quiz is to be turned in on the following Tuesday in discussion. Those who complete these and all the posted homeworks, and have a perfect attendance record in discussion, will get the maximum possible score for the homework/quizzes/discussions.

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 or one hour late, 9:20-11:10 PM. Classes will be cancelled on Friday for the week of each exam.

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

EXAM AND OTHER ABSENCES: Makeup midterm exams will not be available. 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. A makeup final exam will be available for those with valid reasons for needing this. 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.

GRADE DISPUTES: Every effort is made to make grading accurate. If you find what you believe to be a grading error on a homework or quiz, see your TA first, within ONE WEEK of turning in the assignment. 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/Quizzes/Discussion

HW	11 @ 5	points each	=	55 points
Q	4 @ 15	points each	=	60 points
Exams	3 @ 200	points each	=	600 points
Final (cumulative)			=	<u>200 points</u>
	TOTAL		=	800 points

GRADE SCALE: A tentative grade scale is shown below. The points for Homework/Quizzes /Discussion

attendance will be included as bonus points, 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. All exam and other scores are posted after each exam. To let you know how you are doing, a tentative grade will also be posted.

CHEMISTRY LEARNING CENTER: The CLC, located in Flint Annex 257-258, is a study facility available to all chemistry students. You may work here whenever the building is open, generally up to 10 or 11 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. Chemistry teaching assistants will be available here to answer questions and provide help during most daytime and early hours. The times at which the CHM 2046 assistants are available will be posted on the web and outside the CLC. You may see your own or any other TA whenever convenient, no appointment necessary. Assistants teaching in other courses should also be able to assist you with most topics, even if they are not currently teaching CHM 2046.

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/stq/>. 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 that might affect your ability to satisfactorily complete this course. Please do take advantage of the opportunities to meet and work with your instructors. We want you all to do well!