

PERIOD	ROOM	INSTRUCTOR	OFFICE	OFFICE HRS.
MWF 5 rd T (Discussions)	CLB C130	Dr. Anna Brajter-Toth atoth@chem.ufl.edu https://toth.chem.ufl.edu/courses/	Sisler Room A228A	M – 7,8 R – 7,8

TEXT: Silberberg, 6th Edition, Chemistry, *The Molecular Nature of Matter & Change* (McGraw Hill), 2012.

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

OBJECTIVES: CHM 2046 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.

CLASS WEB SITE: <https://toth.chem.ufl.edu/courses/> 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 are Homeworks, Worksheets for the week notes and useful Tables and Exam rooms.

TENTATIVE SCHEDULE

<u>WEEK</u>	<u>DATES</u>	<u>TOPICS</u>	<u>READING</u>
1	Aug 24, 26, 28	Chemical Equilibrium	Chapter 17
2	Aug/Sept 31, 2, 4(Q1)	Chemical Equilibrium	Chapter 17
3	Sept (H), 9, 11	K _w & pH, Acids & Bases	Chapter 18
4	Sept 14, 16, 18(Q2)	Acids & Bases	Chapter 18
5	Sept 21	AB Reactions, Buffers	Chapter 19

WEDNESDAY	Sept 23	8:20 – 10:10 PM EXAM 1	Chapters 17-18, 19

5 <i>contd</i>	Sept 25	AB Reactions, Buffers	Chapter 19
6	Sept/Oct 28, 30, 2	Buffers, Titration, Solubility	Chapter 19
7	Oct 5, 7, 9(Q3)	Complex Ion Equilibria, Thermodynamics	Chapter 19, 20
8	Oct 12, 14, 16	Redox Reactions	Chapter 21
9	Oct 19	Electrochemistry	Chapter 21

WEDNESDAY	Oct 21	8:20 – 10:10 PM EXAM 2	Chapters 19-20, 21

9 contd	Oct 23	Electrochemistry	Chapter 21
10	Oct 26, 28, 30	Electrochemistry, Metals	Chapter 21
11	Nov (H) 2, 4 (Q4)	Transition Elements	Chapter 22
12	Nov (H) 9, 11	Coordination Compounds	Chapter 23
<hr/>			
THURSDAY	Nov 12	8:20 – 10:10 PM	EXAM 3
			Chapters 14 , 21- 23
<hr/>			
13	Nov 16, 18, 20	Nonmetals	Chapter 14
14	Nov (H) 23	Nonmetals	Chapter 15
15	Nov/Dec 30, 2, 4	Organic & Biochemistry	Chapter 15
16	Dec 7, 9	Finish Up & Review	
<hr/>			
TUESDAY	Dec 15	10:00 -12:00 AM	FINAL EXAM
			All Chapters Listed Above

Working problems is recommended as the primary study activity. In class we will work using class Worksheets for solving problems. The Worksheets are your best study tools. The Worksheets will be available on class website <https://toth.chem.ufl.edu/courses/>. It is recommended that you print the worksheets and use in class

HOMEWORK: A Homework problem set will be available weekly on the website usually on Thursday. The first Homework set will be available first week of class. 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. You will get a grade for the returned completed homework. The grades for all 11 homework will count in your grade.

In addition to the posted problem sets, a number of text problems will be recommended in the homeworks. Solutions to the homework problems and the textbook problem solutions will be available on the class website at <https://toth.chem.ufl.edu/courses/>.

Grades for the Homework will be posted each week. Your TA has to be alerted about Homework grade adjustments within ONE week after the grades are posted on e-learning. Late adjustments will not be made.

QUIZZES: Practice quizzes (4) will be posted as indicated usually on Thursday. You will need to print it and complete it by hand. The completed quiz is to be turned in on the following Tuesday in discussion, at the beginning of class, to your TA. Late quizzes are not accepted. You will get a grade for the returned completed quiz. Grades for the quizzes will be posted within a week. Your TA has to be alerted about Quiz grade adjustments within ONE week after the grades are posted on e-learning.

Those who complete and turn in on time all quizzes and all homeworks, and have a perfect attendance record in discussion, will get the maximum possible score for the homework/quizzes. Grade distributions are shown below. Late adjustments will not be made.

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 the Wednesdays of the week of Wednesday exams and on Friday for the week of the Thursday exam. Grades will be posted on ISIS e-learning as soon as available usually the following week. For any grade adjustments of the midterm exams you will need to see Dr. Toth within ONE WEEK after the grades are posted. Late adjustments will not be made.

The 3 exam scores, plus the final, and the homework and quiz grade will count in your grade. Grade distributions are shown below.

EXAM AND OTHER ABSENCES: The GEN CHEM exam absence policy can be found at http://iteach.chem.ufl.edu/file.php/1/Exam_Absence_Policy_GChem_s13.pdf. Late 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 as soon as possible. For any grade verifications, you will need to see Dr. Toth during the last week of classes before the final. 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 and posted on class website. Missing class is an effective means of falling behind.

GRADE DISPUTES: All grades will be recorded and will appear on e-learning. To make grading accurate exams will be graded electronically. This grading method is 99.99% accurate. Exam grades will be posted as soon as available usually the following week. If you find what you believe an error in the posted homework or quiz grades, see your TA first, within ONE WEEK of the posting of the grade. 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. This is explained above.

GRADING:

Homework/Quizzes/Discussion

	HW	11 @ 5	points each	=	55 points
	Q	4 @ 10	points each	=	40 points
Exams		3 @ 200	points each	=	600 points
Final (cumulative)				=	<u>200 points</u>
	TOTAL			=	800 points

GRADE SCALE: A grade scale is shown below. The points for Homework/Quizzes are 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: Homework and quiz grades will be recorded on e-learning as described above. Your own scores will appear on e-learning. You can verify these as soon as they are posted. To estimate your grade you can use the grading scale shown above.

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 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. Chemistry teaching assistants (TAs) will be available here to answer questions and provide help during most daytime and early hours. Assistants teaching in other courses should also be able to assist you with most topics, even if they are not currently teaching CHM 2046. The times when the CHM 2046 assistants are available will be posted on the web and outside the CLC.

Office Hours of the assistants in this class, including your own TA, will be posted on the class website. You may see your own TA in this class during his/her office hours, no appointment necessary. The times at which the CHM 2046 assistants are available will be outside the CLC. If you use outside help/tutoring be aware that you may be misinformed about the material and the expected success in mastering the material.

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 the teaching assistants. However, you need to complete these yourself and turn in your own work. If you encounter any issues bring them to our attention and we will make sure to address the concerns.

Students with Disabilities requesting classroom accommodation must register with the Dean of Students Office. Then, you need to 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 but Dr. Toth do gets to know you all if you are in class. Much of the help you get will probably be from TAs in the CLC which is available all the time (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!

Letters of recommendation: If Dr. TOTH knows you, she can write a letter. Make yourself known!