

**General Chemistry 2: CHEM-UA.126.001
Room1001N**

Fall 2015, Tuesday & Thursday 9:30-10:45AM

Dr. Burt Goldberg; My office is in room: 1001N Silver Email: bg43@nyu.edu or burt.goldberg@nyu.edu Phone: (212.998.7949 if I do not answer **do not leave a message**, just send an email) **Office hours will be on Tuesday & Thursday from 11:00 to 2:00 PM, and Wednesday 12 noon to 2PM room 1001N Silver.**

I am NOT in the office every day, only on Tuesday and Thursday for office hours. But you can make AN APPOINTMENT FOR OTHER TIMES, please email for an appointment. A good time to ask your questions is during lecture and recitation, which means that you need to read the chapter prior to each class (lecture or recitation) and come to recitation with your **homework and lecture** questions. Your success in this course will depend on how seriously you take your preparation. Your grade is dependent on your performance on homework, exams, quizzes, peer-tutoring attendance and recitation and lecture attendance. Extra credit will not be offered to raise your grades! It is your responsibility to be prepared and to come to class. Having not read the material to be covered during the lecture is a serious error in judgment with possible devastating consequences. **I strongly urge students to form collaborative study groups**, and to discuss your answers to the strategies for solving homework assigned questions with the members of their group. It is up to you to do ALL of the assignment. And, I always recommend doing extra problems. The night before recitations I will post the answers to the assignment problems.

Punctuality is necessary and expected! This is a large class so please be on time. At the beginning of **each lecture** there will be a 5-7 minute **Lecture quiz (this is 10% of YOUR FINAL GRADE)**, there is no make up if you are late. I expect that you will be present for ALL examinations. If you are ill, please notify me no less than 24 hours beforehand, *not* after the examination has taken place. ***I will expect an official doctor's note only (a report from Student Health is acceptable). Makeup examinations are not a birthright and will not be given without good reason.*** Grades are based on three examinations. **If you miss a midterm examination**, you first must present documentation of why you missed the exam and only then will I discuss the possibility of the makeup exam.

Course Goals.

The main goal is to complete your basic foundations in chemical reactions and the rules that govern chemical reactions. In this semester you will study the affect of chemical reactions in solutions, aqueous or gaseous; the colligative properties of solutions; the periodic behavior of elements reactions in main-groups; the rate and mechanisms of chemical reactions. You will understand the formation of Equilibrium in chemical reactions and what factors affect Equilibrium. To understand how acid-base rxns are a special case of Equilibrium. How does thermodynamics control the direction of a reaction? To understand the factors that affect oxidation-reduction reactions.

Lecture is very important, will lecture by power-point slides, and will do problems on the board. Missing a lecture is then a big deal. Please do try not to miss lecture. The same for recitation were the Teaching Assistants will go over assignment problems. I have

posted assignment on the syllabus, and will the day before recitation post the answers, please go over your answers to these problems with the posted answers. What you are having trouble with, is what to ask about in recitation. There is always a recitation quiz.

Grading

100-95=A, 94-90=A-, 89-85=B+, 84-80=B, 79-75=B-. 74 to 70 = C +, 69 to 65 = C, 64-60=C-, if your grades put you below this I will strongly urge you to drop the course.

The times for your exams are: **2-4:30 PM** always on a **Friday**. The dates are; **10-07, 11-04** and the **Final Exam 12-09**.

You grade will be made up from the following: **20%** for each midterm exam, **20%** for the assignment and quizzes in **Recitation**. ***We will not check for correctness of assignment but completeness every week, if not handed in when asked, you have a problem, a big problem, doing assignments are professional behavior, no matter how well you are doing not doing assignments are deeply frowned upon. And, it will impact for Final Grade.*** **10%** of your grade is for **lecture quizzes**, **20%** for **final exam**. There will be a lecture quiz during the first 10 minutes of lecture. You must be on time. **NO MAKEUPS ARE GIVEN FOR MISSED LECTURE or RECITATION QUIZZES.**

Midterms X 2 =40%
Final exam =20%
Lecture Quiz =10%
Recitation =15%
Lab final grade =15%

If you going to miss a recitation and want to go to another section that is only possible with MY permission. You must prior to missing a recitation email ME and if the reason for missing recitation warrants allowing you to making up the recitation **BY GOING TO ANOTHER** recitation I will give permission. Missing recitation class is very serious, oversleeping is not an excusable absence. Rct is 15% of your FINAL GRADE!

Text for this course is Chemistry, Molecular Nature.....7e Silberberg.

Lecture	Date	Topic	Read Chapter	Assignment
1	09-03	Review Shapes of Molecules	Chapter 9; sect 9,1 thru 9.5 Chapter 10	9.30, 31 & 33 10.1,2,3,4,6,8,18,19, 22,28,32,33,35,37,55, 56,65,69,73,75,80, & 88
2	-08	Review Shapes of Molecules		Recitation begins this week.
3	-10	Covalent Bonding	Chapter 11	11.1,5,9,15,17,25,28, 32,33,38,47,52,
4	-12	Covalent Bonding	Chapter 11	
5	-17	Properties of Mixtures	Chapter 13	
6	-19	TBA		
7	-24	Kinetics: rate & mechanism of chem. rxns	Chapter 16	
9	10-01	Kinetics: rate & mechanism of chem. rxns	Chapter 16	
10	10-06	Kinetics: rate & mechanism of chem. rxns	Chapter 16	
11	10-08	Equilibrium: extent of chem. rxns	Chapter 17	
12	10-15	Equilibrium: extent of chem. rxns	Chapter 17	
13	10-20	Acid-Base Equilbra	Chapter 18	
14	10-22	Acid-Base Equilibrium	Chapter 18	
15	10-27	Ionic Equalibrium in Aqueous Systems	Chapter 19	
16	10-29	Ionic Equilibria in Aqueous Systems	Chapter 19	
17	11-03	Ionic Equilibria in Aqueous Systems	Chapter 19	
18	11-05	Thermodynamics: Free Energy, Entropy &.....	Chapter 20	
19	11-10	Thermodynamics: Free Energy, Entropy &.....	Chapter 20	

20	11-12	Thermodynamics: Free Energy, Entropy &.....	Chapter 20	
21	11-17	Thermodynamics: Free Energy, Entropy &.....	Chapter 20	
22	11-19	Electrochemistry	Chapter 21	
23	11-24	Electrochemistry	Chapter 21	
	11-27	NO CLASS	Thanksgiving Holiday	
24	12-01	Electrochemistry	Chapter 21	
25	12-03	Transition Elements...	Chapter 23	
26	12-08	Transition Elements...	Chapter 23	
27	12-10			
28	12-15			

Recitation Schedule

		sect	Name Instructor	Email	Time	Room
CHEM -UA	126	101	Tam, Shuk	sct268@nyu .edu	M: 8 AM - 9:15 AM	7E12 room 123
CHEM -UA	126	102	Sabo, Dubravko	ds2700@ nyu.edu	M: 9:30 AM - 10:45 AM	7E12 room LL33
CHEM -UA	126	103	Song, Hongxing	Hs2632@ny u.edu	M: 11 AM - 12:15 PM	7E12 room LL27
CHEM -UA	126	104	Song, Hongxing		M: 12:30 PM - 1:45 PM	25W4 room C-17
CHEM -UA	126	105				