

General Chemistry I

CHEM 031 | Section G | CRN: 94783

Instructor: Amy Hoeltge, Ph.D.

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Office: Hills 011

Lecture: MWF 1:10-2:00 Ira Allen LH LH

Office Hours: MW F 10:00-12:00 or by appointment

Exams: W 6:40-9:40 Marsh LS 235

Course Description: This is the first semester of a two-semester course sequence. Topics include matter, stoichiometry, gas laws, thermochemistry, quantum theory, atomic structure, electronic configurations, bonding, and intermolecular forces.

Required Course Materials:

Textbook: Chemistry Structure and Properties ; 2nd Ed.; Tro, N.

Plus, Mastering Chemistry online access (ISBN: 978-0-13-429393-6)

Three ways to obtain your textbook and Mastering Chemistry:

- x Online for approximately \$300; text and mastering
- x UVM bookstore for approximately \$160; text, solutions manual, and mastering
- x Digital access for approximately \$120; etext and mastering

Lab Manual: You will find all experiments as individual PDFs on your lab section's BB website. You are responsible for printing out each one and bringing it with you to lab.

Lab Notebook: A carbon -

Exams:

Prior to each lab session, you must watch the video that accompanies the experiment you will be performing. These videos are very helpful and demonstrate the procedure and proper use of the chemicals/equipment. You will find the lab videos here:

<https://www.youtube.com/channel/UC8r6fR2K-8xAtsf-a8edMg>.

Grading:

Exams*:	3 exams @ 125pts. ea.	375pts.	37.5%
Online Quizzes:	12 quizzes (top 10 counted) @ 12.5pts. ea.	125pts.	12.5%
Final Exam**:	comprehensive	250pts.	25%
Labs:	10 experiments	250pts.	25%
	Safety quiz @ 1pt		
	Pre-lab @ 3pts ea.		
	Reports @ 15pts ea.		
	Quizzes @ 8pts ea.		

Total Course		1,000pts	100%
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*If one of your three mid-semester exams is lower (percentage wise) than your final exam, the percent you have earned on the final will count as that mid-semester exam score. This will only happen for one of your mid- semester exams, not all three.

**You must take the final exam to pass the course.

Accommodations:

[Student Learning Accommodations Statement Ac\(i\)-630.065 ex thaodat ia2 \(f5 T.\(t\)-6..2 \(f\)-an.3 \(ly\)30.06](#)

Center For Health & Wellbeing:

<http://www.uvm.edu/~chwb/>

Counseling & Psychiatry Services (CAPS) :

Lecture Schedule

Dates	Chapter	Practice Homework
8/27 – 8/31	E & 1	Ch E: 19-99 odds Ch 1: 35-117 odds
9/3	LABOR DAY NO CLASS	
9/4 – 9/7	1 & 2	Ch 2: 35-91 odds
9/10	LAST DAY TO ADD/DROP	
9/10 – 9/14	2	
9/19	EXAM 1 CHAPTERS E, 1, & 2	6:40 – 9:40 Marsh Life Sci 235
9/17 – 9/21	3	Ch 3: 41-135 odds
9/24 – 9/28	4	Ch 4: 29-137 odds
10/1 – 10/5	4 & 5	Ch 5: 25-101 odds
10/8	NO CLASS	
10/8 – 10/12	5	
10/17	EXAM 2 CHAPTERS 3, 4, & 5	6:40 – 9:40 Marsh Life Sci 235
10/15 – 10/19	6	Ch 6: 25-61 odds
10/22 – 10/26	11 & 7	Ch 11: 35-51 odds Ch 7: 15-85 odds
10/29	LAST DAY TO WITHDRAW	
10/29 – 11/2	7 & 8	Ch 8: 21-99 odds
11/5 – 11/8	8 & 9	Ch 9: 31-123 odds
11/14	EXAM 3 CHAPTERS 6,7,8,& 11	6:40 – 9:40 Marsh Life Sci 235
11/12 – 11/16	9	
11/19 – 11/30	THANKSGIVING BREAK	
11/26 – 11/30	10	Ch 10: 25-127 odds
12/3 – 12/7	10 & 11	Ch 11: 53-93 odds

Lab Schedule

Dates	Experiment	Details
8/27 – 8/31	NO LABS	Purchase lab materials & view/complete safety stuff on Blackboard
9/3 – 9/7	NO LABS	
9/10 – 9/14	Lab 1 Recitation 1	Check in & Density Determination Ch E, 1, & 2
9/17 – 9/21	Lab 2 No Recitation	Flame Emission Spectra of Metals
9/24 – 9/28	Lab 3 Recitation 2	Ionization Energy & Atomic Radius Ch 3 & 4
10/1 – 10/5	Lab 4 Recitation 3	Determination of Chemical Formula Ch 4 & 5
10/8 – 10/12	NO LABS	
10/15 – 10/19	Lab 5 No Recitation	Chemical Models 2 (VSEPR)
10/22 – 10/26	Lab 6 Recitation 4	Intermolecular Forces
10/29 – 11/2	Lab 7 No Recitation	Chemical Reactions
11/5 – 11/9	Lab 8 Recitation 5	Acid/Base Titration Ch 7 & 8
11/12 – 11/16	Lab 9 No Recitation	ΔH_f° of MgO
11/19 – 11/23	NO LABS	
11/26 – 11/30	Lab 10 Recitation 6	Gas Law Determination of MW Ch 9 & 10
12/3 – 12/7	Recitation	Check out & Review

