

CHEM 31C (90930): General Chemistry Fall 2014

I. Lecture

Lecturer: Erik Ruggles, Ph.D. **Office:** A237 Cook **Email:** Erik.Ruggles@uvm.edu

Office Hours: M W F: 12:45 – 2:45 pm T Th: 9:00 – 11:00 am T: 6:00 – 7:00 pm
or by appointment

Lecture Time: M W F: 11:45 am – 12:35 pm **Location:** Angell B106

Exam/Recitation Time: T: 7:00 – 10:00 pm (varies) **Location:** Varies, see below

Lecture: The lecture each week will be used primarily to cover new material. My class lecture notes for the entire semester are posted on Blackboard.

Textbook: "Chemistry, A Molecular Approach" 3rd Ed., by Nivaldo Tro can be purchased at the UVM bookstore (2nd UVM Custom Edition). The solutions manual comes with the text and has the complete solutions to all the assigned problems.

Homework Problems: Answers to problem sets and exercises are in the solutions manual. I strongly encourage you to do as many problems as possible. The homework combines mathematics with scientific concepts and are challenging, so the more you practice the better you will get. Blank old exams from my 2012 and 2013 General Chemistry classes as well as their answer keys are posted on Blackboard. These are a great way to evaluate what you understand and what you do not. **Remember that test questions will change but the format and concepts will remain the same.**

Recitations: There are two recitations for this course. 1) You will be assigned a mandatory recitation session. Students must attend the recitation section they are assigned to. These teaching assistant led mandatory recitations will discuss specific homework problem sets from week to week. **Quizzes will also be given in most, but not all, of these sessions.** Students must attend the recitation section they are assigned to. If more than two recitations are missed you will receive an **F** for the course. 2) I, personally, will hold recitations on Tuesday evenings from 7:00-8:00 pm in Angell B106, when there is not an exam. The Sunday before a mid-semester exam I will hold an exam review session from 7:00-9:00 pm in Angell B106. Also, the class before the exam a review session will be held instead of the standard lecture. **These recitation/review sessions are meant to address your questions and test your preparedness about lecture topics and/or homework problem solving, so come prepared.**

Exams: The exams are scheduled to be **Tuesday evenings from 7:00-9:45 pm in Angell B106 Marsh Life Sciences 235**. While taking the exams only non-programmable non-graphing calculators are permitted. No other electronic devices are allowed (i.e. no cell phones, mp3 players, ipods, etc.). It is the responsibility of the student to bring a non-programmable non-graphing calculator to the exams. **Students caught using any other electronic device other than a non-programmable non-graphing calculator will receive a zero for the exam.**

Exam Dates:

September 16	Chapters 1, 2, 3, 4 (sections 1-6), 9.6
October 21	Chapters 5, 6, 7, 8
November 18	Chapters 9, 10.1-10.8, 11
December 12	Final Exam (cumulative) Angell B106 10:30 am-1:15 pm

II. Laboratory

Lab Manuals: “Chemistry 31, Experiments”, which is sold in the first floor stockroom in Cook (A143) for \$15.00.

Lab Notebook: A notebook with carbon-less copies is required for recording lab data. All data is to be recorded in ink (not pencil). A carbon-less copy lab notebook can be bought at UVM’s bookstore.

Safety Eye Wear: Everyone in the lab must wear OSHA approved (EZ87stamped) safety glasses or goggles once any experimentation has been started. Students not observing this rule will receive a **ZERO** for the experiment,

III. Course Grade

Percent Ranges for Grades:

A+ 96	A 90	A- 88	B+ 85	B 80	B- 77	C+ 72
C 65	C- 63	D+ 60	D 56	D- 53	F 51	

How to Calculate Your Points:

1) Class = 500 points

3 Mid-Semester Exams = 300 points

4 Mid-Semester Quizzes = 100 points

+ 1 Final Exam = 100 points

5 grades = **500 class points**

500 points x 1.6 = **800 scaled class points**

There are five grades that are counted for your class points. If your final is your lowest grade it will count only as 100 points. If one of the hour exams is your lowest grade then your final will count as 200 points. The lowest hour exam grade will be replaced by the grade on the final. If you are absent from an exam official documentation of sickness or family crisis is required or you will receive a **ZERO** for the exam. Students with legitimate excuses will be permitted to take the exam early. Except in very unusual circumstances makeup exams will not be administered after the scheduled exam time.

Example 1:

	Exam 1	Exam 2	Exam 3	Quizzes	Final X2
Actual Scores	85	45	78	77	75 75
Scores Counted	85	75	78	77	75

Total Points = 390 class points x 1.6 = 624 scaled class points

Example 2:

	Exam 1	Exam 2	Exam 3	Quizzes	Final X2
Actual Scores	67	78	76	69	62 62
Scores Counted	67	78	76	69	62

Total Points = 352 class points x 1.6 = 563 scaled class points

2) Laboratory = **200 lab points**

Prelab (2 pts/per)	18 points
Lab Reports (10 pts/per)	100 points
Quizzes (8 pts/per)	

IV. Lecture Schedule and Chapter Homework

<u>Dates</u>	<u>Chapters</u>	<u>End-of-Chapter Homework Problems</u>
Aug. 25-Aug.29	1	Ch1: 9,12,16,21,26,28,30,41,46,53,55,59,67,69,83,87,93,95,98,106,110,117,122,125
Sept. 1	LABOR DAY HOLIDAY	
Sept. 2-Sept. 5	2	Ch2: 6,13 thru 24,6,10,13,15,21,31,39,41,47,50,53,57,61,69,72,77,81,85,98,106,111
	3	Ch3: 2,2,4,8,14,32,34,37,44,47,49,52,57,61,67,69,72,77,81,85,89,91,97,101,113,117,121,126
	9.6	Ch9: 19
Sept. 8	LAST DAY TO ADD/DROP COURSE	
Sept. 8-Sept. 12	3 and 4	Ch4: 2,5,10,11,13,26,27,31,33,37,43,46,50,53,55,57,60,63,65,71,75,98,101,107,111,114,117,120
Sept. 15	REVIEW	
Sept. 16	EXAM 1	Chapters 1, 2, 3, 4.1-4.6, and electronegativity 9.6
Sept. 17-Sept. 19	5	Ch5: 4, 9, 29, 33, 35, 37, 40, 41, 44, 46, 48, 51, 55, 59, 61, 63, 67, 71, 73, 76, 79, 81, 83, 87, 92, 93, 97, 100, 104, 105, 108, 117, 122
Sept. 22-Sept. 26	5 and 6	Ch6: 6,10,11,13,15,19,21,25,32,35,39,42,44,46,49,53,56,58,61,64,67,71,74,77,80,.83,85,87,91,97,102,106,110,113,
Sept. 29-Oct. 3	6	
Oct. 6-Oct. 10	7	Ch7: 2,5,7,9,12,16,20,26,32,34,39,42,45,52,60,63,68,71,73,76,78,82,86,92,
Oct. 13-Oct. 17	8	Ch8: 7,11,15,16,23,25,28,32,35,37,42,43,47,48,51,55,58,61,64,65,68,72,75,78,80,83,85,89,91,93,99,105,110
Oct. 20	REVIEW	
Oct. 21	EXAM 2	Chapters 5, 6, 7, 8

<u>Dates</u>	<u>Chapters</u>	<u>End-of-Chapter Homework Problems</u>
Oct. 22-Oct. 24	9.1-9.3,9.5,9.7-9.9	Ch9: 3,15,19,21,26,28,32,37,51,55,60,63,65,70,72,73,76,79,81,84,87,95,98,105,110,112
Oct. 27	LAST DAY TO WITHDRAW FROM COURSE	
Oct. 27-Oct. 31	10.1-10.3	Ch10: 1,5,9,14,16,31,34,36,39,42,46,50,53,57,63,86,92,95
Nov. 3-Nov. 7	10.4-10.7	
	9.4	Ch9: 9,11,33,40,46,48,89,114
	9.10	Ch9: 73,75,78,98
Nov. 10-Nov. 14	10.8	Ch10: 23,25,28,71,75,77
	11	Ch11: 5,9 thru 35,46,48,50,53,56,55,61,66,68,71,74,78,81,84,86,89,102,104,109,114,117,119,122,125,128,137
Nov. 17	REVIEW	
Nov. 18	EXAM 4	Chapters 10.1-10.8, 9.4, 9.10, 11
Nov. 19-Nov. 21	REVIEW	
Nov. 24-Nov. 28	THANKSGIVING HOLIDAY	
Dec. 1-Dec. 3	REVIEW	
Dec. 2	ACS Assessment	
Dec 12	Final Exam (cumulative) Angell B106 10:30 am-1:15 pm	

V. ACCESS Accommodations and Religious Holidays

Student Learning Accommodations Statement

In keeping with University policy, any student with a documented disability interested in