

CHEM 32 (60045): General Chemistry Summer 2019

I. Lecture

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Office Hours: Mon-Thurs, 12:00pm – 1:00pm

Lecture Time: Mon-Fri, 9:00am – 12:00pm

Location: Lafayette 403

Lecture: The lecture each week will be used to cover new material and concepts along with sample problem solving. My class lecture notes for the entire semester are posted on Blackboard.

Textbook: If you took Chem31 earlier this summer, then you already have all the materials necessary for Chem32. There are three options to purchase “Chemistry Structure and Properties” 2nd Ed., by Tro (Full text ISBN-13: 978-0-13-429393-6eW* nBT3Q01G 0.504 Tc[]) TJETQ3<0048>3<005600

II. Laboratory

Lecture Time: Mon – Wed, 1:00– 3:45 **Location:** Discovery Bldg. W205, W207, or W208

Lab Manuals: All experiments can be found online on your lab's BB website as individual pdfs. Please make sure you ***print out each experiment and bring to lab.***

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, warnings will not be given. Safety eyewear can be purchased at the UVM bookstore or in the Discovery Building stockroom. ***Contact Lenses are a potential health hazard and can be worn in the laboratory only if no other types of corrective lenses are available. If you have to wear contact lenses then you must wear goggles and please let your TA know.***

Lab Attire: This is a chemical laboratory—dress appropriately! It is best to wear full pants and a shirt with at least short sleeves. Shorts and short pants (capris, crops, etc.) are not allowed in the laboratory. Shirts that expose the shoulders, midriff, or back are also not allowed. Proper footwear is also necessary in the laboratory. Full shoes, preferably constructed of leather or other chemically res

III. Course Grade

Percent Ranges for Grades:

A+	97	A	92	A-	90	B+	87	B	82	B-	79	C+	74
C	67	C-	64	D+	61	D	57	D-	54	F	< 54		

How to Calculate Your Points:

- 1) Class = **750 total points** (75% of grade; exams and homework)
- 1a) Mid-Semester Exams = **525 points** (175 points/exam)
- 1b) Final Exam = **225 points**

There are three mid-

2) Laboratory = **250 lab points** (25% of grade)

Prelab (2 pts/per)	20 points
Lab Reports (15 pts/per)	150 points
Quizzes (8 pts/per)	<u>80 points</u>
	250 points

3) Course Grade Determination

Add up your points from class and lab and then use the chart at the beginning of this section to determine your course grade.

Example 1:

$$\begin{array}{r} 585.25 \text{ class points} \\ + \quad \underline{200 \text{ lab points}} \\ \hline 785.25 \text{ total points}/1000 \text{ points} = 78.25\% \text{ C+} \end{array}$$

Example 2:

$$\begin{array}{r} 545.0 \text{ class points} \\ + \quad \underline{200 \text{ lab points}} \\ \hline 745.00 \text{ total points}/1000 \text{ points} = 74.50\% \text{ C+} \end{array}$$

To summarize:

$$\text{Ex1} + \text{Ex2} + \text{Ex3} + \text{Final} + \text{Lab} = \text{Total Points}$$

$$(\text{Total Points})/1000] \times 100 = \text{Total Percent}$$

Academic Integrity: Offenses against the Code of Academic Integrity (i.e. cheating) are deemed serious and insult the integrity of the entire academic community. Any suspected violations of the code are taken very seriously and

IV. Lecture Schedule and Chapter Homework

<u>Dates</u>	<u>Chapters</u>	<u>End-of-Chapter Homework Problems</u>
June 17	13	Ch13: 25,27,29,31,33,35,37,43,45,47,49,51, 59,63,65,67,69,71,73,77,79,81,83,85,87,89,93, 97,99,105,109,115
June 18	13 and 14	Ch14: 27,29,31,37,41,45,47,53,55,59,65,71, 75,77,83,89,91,95,103,105,107
June 19	14	
June 20	15	Ch15: 21,23,27,29,31,33,35,37,39,41,45,47, 49,53,55,59,63,65,67,69,71,73,75,79,81,83,89
June 21	First Exam*	Chapters 13,14,15*
June 24	15 and 16	Ch16: 31,33,35,37,39,41,45,49,51,55,59,61, 65,67,69,71,7reW* nBT/F2 12 Tf12 Tf1 0 0 1 288.05 445.6rD

July 5	Exam 3*	Chapters 17,18,19*
July 8	19	
July 9	19	
July 10	20	Ch20: 31,33,35,37,41,45,51,57,61,71,73,81, 83,89
July 11	Review	
July 12	Cumulative Final Exam	

*Extent of exam material will depend on our progress in lecture.

V. Laboratory Schedule

<u>Date</u>	<u>Experiment</u>	<u>Description</u>
June 17	Check In	Purchase breakage card, lab manual and safety glasses On Blackboard, review and complete the Safety Presentation and Safety Quiz (Chap 13)
	Recitation 1	
June 18	Experiment 1 Recitation 2	Freezing Point Depression (Chap 13)
June 19	Experiment 2 Recitation 3*	Iodination of Acetone (Chap 14)
June 24	Experiment 3 Recitation 4	K_{eq} of FeSCN (Chap 15)
June 25	Experiment 4 Recitation 5	Neutralization Power of Antacids (Chap 16)
June 26	Experiment 5 Recitation 6	Acids, Bases, pH and Buffers (Chap 16-17)
July 1	Experiment 6 Recitation 7	K_{sp} of Copper Hydroxide (Chap 17)
July 2	Experiment 7 Recitation 8	Hot and Cold Packs (Chap 18)
July 3	Experiment 8 No Recitation	Thermodynamics of Borax (long lab)
July 8	Experiment 9 Recitation 9	Oxidizing Power of Bleach (Chap 19)
July 9	Experiment 10 Recitation 10 Check Out	Electrolysis and Electroplating (Chap 20)

