

# CHEM 31A (12610) : General Chemistry SPRING 2019

## I. Lecture

**Lecturer:** Alan Chant, Ph.D.

**Office:** Hills 106

**Email:** [achant@uvm.edu](mailto:achant@uvm.edu)

**Office Hours:**

11 AM – 12PM

(Mon/Wed/Fri)

*or by appointment*

**Phone:** 802-656-0283

**Lecture Time:**

9:40 – 10:30 AM

(Mon/Wed/Fri)

**Location:** Billings-IRA Hall

**Lecture:** The lecture each week will primarily involve covering material from the assigned textbook and will include going over numerical problems. Included in this syllabus is a tentative schedule outlining lecture dates/times, text material and suggested problems sets. After each lecture, I will post my lecture notes on Blackboard. You are expected to come prepared and on time and to stay until the lecture has finished.

**Textbook:** If you took Chem31 this past Fall 2018 then you already have all the materials necessary for the Spring Chem 31 semester. If not, there are three options to purchase “Chemistry Structure and Properties” 2<sup>nd</sup> Ed., by Tro (Full text ISBN-13: 978-0-13-429393-6) along with Mastering Chemistry online access. 1) It can be purchased at an online site (~\$300; hardcover text and mastering), or 2) at the UVM bookstore (~\$160; binder text, solutions manual, and mastering), or 3) digital access (~\$120; etext and mastering). The digital solutions manual will be provided for free but also comes with the UVM package and has the complete solutions to all the assigned problems. The most bang for your buck is the UVM bookstore package.

**Problem Sets:** We will be using the online program “Mastering Chemistry” for a) *homework assignments (ungraded)*, b) *‘self-assessment’ quizzes (ungraded)* and c) *‘homework quizzes’ (graded)*. Every student on the course needs to have access to the homework site. To register for ‘Mastering Chemistry’ you **must** go through your Chem 31 Blackboard site to register - by clicking on the ‘Mastering Chemistry’ link in the navigation bar (to the left side of the homepage) – you don’t need a ‘course access code’ if you go via Blackboard. If you purchased a Mastering Chemistry access code last semester, you will

not need to register again. Simply access Mastering Chemistry via Blackboard and your account will automatically be updated in the new course site.

Note: There will be 12 total quizzes, however, only the top 10 scores will count toward your final quiz grade.

You are encouraged to attempt all the problems outlined in the 'Course Schedule' (**these will be ungraded**) and the problems provided by 'Mastering Chemistry'.

**Communications:** I will be using Blackboard to e-mail and post important announcements. I will also be using this platform to post additional course resources and grades.

**Teaching Assistants' Office Hours:** TAs will be conducting office hours in the new Discovery building at various times throughout the week. The schedule will be posted in Discovery or will be available from your TA. You can approach any of the TAs for help, not just your lab TA. You may utilize this time to get help with both lab- and lecture-related questions.

**Supplemental instructors (S.I.):** In addition to T.A support, there will be additional help from S.Is . - schedule to be determined. You may utilize this time to get help with lecture-related questions.

**Exams:** Mid-term exams are scheduled for Thursday nights from 6:00 - 9:00 PM in Billings-IRA Hall. There are no make-up dates. A zero grade as a result of the missed exam will be used as the dropped grade when appropriate when determining final grades. Only non-programmable calculators are permitted during exams. It is the responsibility of each student to bring their own non-programmable calculator to the exam. Calculators may not be shared. No other electronic devices, including laptops, cell phones, MP3 players, iPods, etc., are allowed. Students caught using any electronic device other than a non-programmable calculator will receive a zero for the exam.

**Exam Dates:**

<b>February 7</b>	Exam 1 (6:00-9:00pm; Billings-IRA Hall)
<b>March 7</b>	Exam 2 (6:00-9:00pm; Billings-IRA Hall)
<b>April 11</b>	Exam 3 (6:00-9:00pm; Billings-IRA Hall)
<b>May 9</b>	Final Exam (7:30 am-10:15 am; Billings-IRA Hall)

**(Final is cumulative : standardized test format)**

**II. Laboratory:** A separate syllabus for the lab portion of the course is available on your laboratory Blackboard site. **Labs will begin the week of the 28<sup>th</sup> January.** All matters concerning the Lab should be directed to Christine Cardillo: [Christine.Cardillo@uvm.edu](mailto:Christine.Cardillo@uvm.edu)

### III. Course Grade

#### Percent Ranges for Grades:

I cannot say in advance which point ranges correspond to which letter grades, but I will give approximate correlations throughout the semester following each of the exams. Please note that you are not competing with each other for grades in this course: if everyone scores in the “A-range,” I will give everyone “A” s for the course (really!). I encourage you all to work together as you study, to help each other learn the material, but do also recognize that all graded work must be solely your own, so be prepared to work independently to demonstrate your understanding of the material.

#### How to Calculate Your Points:

- 1) Class = **750 total points** (75% of grade; exams and homework)
- 1a) Mid-Semester Exams = **375 points** (125 points/exam)
- 1b) Quizzes = **125 points** (12.5 points/assignment)
- 1c) Final Exam = **250 points**

There are three mid-semester exams (each 125 points) and a final exam (250 points). If your final is your lowest grade it will count only as one unit. If one of the mid-semester exams is your lowest grade then your final will count as two units. The lowest mid-semester exam grade will be replaced by the percentage 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	Final
Actual Scores:	106.25 (85%)	56.25 (45%)	97.5 (78%)	187.5 (75%)
Counted Scores:	106.25 (85%)	93.75 (75%)	97.5 (78%)	187.5 (75%)
Homework Score:	105.0 (84%)	Class Points = 485.0 exam + 105.0 homework		
Total = 590.0 points				

Example 2:

	Exam 1	Exam 2	Exam 3	Final
Actual:	87.5 (70%)	97.5 (78%)	95.0 (76%)	170.0 (68%)
Counted:	87.5 (70%)	97.5 (78%)	95.0 (76%)	170.0 (68%)
Homework Score:	87.5 (70%)	Class Points = 450.00 exam + 87.5 homework		
	Total = 537.5 points			

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

Safety Quiz	1 point
Prelab (3 pts/per)	27 points
Lab Reports (15 pts/per)	100 points
Quizzes (8 pts/per)	<u>72 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:

$$\begin{array}{r} 590.0 \text{ class points} \\ + \quad \underline{200 \text{ lab points}} \\ \hline 790.0 \text{ total points}/1000 \text{ points} = 79.00\% \text{ B-} \end{array}$$

Example 2:

$$\begin{array}{r} 537.5 \text{ class points} \\ + \quad \underline{200 \text{ lab points}} \\ \hline 737.5 \text{ total points}/1000 \text{ points} = 73.75\% \text{ C+} \end{array}$$

## IV. Lecture Schedule and Chapter Homework

<u>Dates</u>	<u>Chapters</u>	<u>End-of-Chapter Homework Problems</u>
Jan. 14 – Jan. 18	E	ChE: 19,21,23,25,27,29,33,37,39,41,45,47,49,51,53,55,59,61,65,71,73,75,79,81,87,89,91,95,99,
Jan. 21	<b>Martin Luther King day</b>	
Jan 21. - Jan. 25	1	Ch1: 35,39,43,45,49,53,55,57,59,61,63,65,67,71,75,77,79,83,85,87,89,91,93,97,103,105,107,109,117,
<b>Jan. 28</b>	<b>LAST DAY TO ADD/DROP COURSE</b>	
Jan. 28 - Feb. 1	1 and 2	Ch2: 35,37,39,41,43,51,53,55,57,59,61,63,65,67,69,71,73,79,85,89,91
Feb. 4 - Feb. 6	2	
<b>Feb. 7</b>	<b>EXAM 1</b>	<b>Chapters E, 1, and 2,</b>
Feb 8. - Feb. 15	3	Ch3: 41,43,45,47,49,51,53,55,57,59,61,63,65,67,69,71,73,75,77,79,81,83,87,89,91,93,95,97,101,103,109,115,127,135
<b>Feb. 18</b>	<b>President's Day</b>	
Feb. 18 – Feb. 22	4	Ch4: 29,31,33,35,37,39,43,45,47,49,51,53,55,57,61,63,65,67,69,71,75,77,79,83,87,93,95,97,101,103,105,109,111,117,119,121,123,125,127,137
Feb. 25 - Mar. 1	4 and 5	Ch5: 23,25,27,29,31,35,37,41,43,45,47,49,51,53,55,57,59,61,63,65,69,71,73,75,79,81,83,85,91,95,97,99,101
Mar. 4 – Mar. 6	5	
<b>Mar. 7</b>	<b>EXAM 2</b>	<b>Chapters 3, 4,and 5</b>
<b>Mar. 11 – Mar. 15</b>	<b>SPRING BREAK</b>	
Mar. 18 - Mar. 22	6	Ch6: 25,29,31,33,35,39,41,43,45,49,51,53,55,57,59,61

Mar. 25 - Mar. 29	11 and 7	Ch11: 35,37,39,41,43,45,47,49,51  Ch7: 15,17,19,21,23,25,27,29,31,33,35,37,39,41,43,45,47,49,53,55,57,61,63,65,67,69,71,75,81,85
<b>Mar. 29</b>	<b>LAST DAY TO WITHDRAW FROM COURSE</b>	
Apr. 1 - Apr. 5	7 and 8	Ch8: 21,23,25,27,29,31,33,35,37,39,41,43,45,47,49,51,53,55,57,59,61,63,65,67,69,71,73,75,77,79,81,87,91,93,99
Apr. 8 - Apr. 10	8 and 9	Ch9: 31,33,35,37,39,41,43,45,47,49,51,53,57,59,61,63,65,67,69,71,73,75,77,79,81,83,85,87,89,91,93,95,99,101,107,111,113,117,119,123
<b>Apr. 11</b>	<b>EXAM 3</b>	<b>Chapters 6, 7, 8,</b>
Apr. 12 - Apr. 19	9	
Apr. 22 - Apr. 26	10	Ch10: 25,29,31,33,35,37,39,41,43,45,47,49,51,53,55,57,59,61,63,67,69,71,73,77,79,81,83,85,87,89,91,93,95,99,101,105,107,113,123,125,127
Apr. 29 – May. 3	10, 11 and review	Ch11: 53,57,59,61,63,65,67,69,71,73,77,81,85,87,93
<b>May. 9</b>	<b>Final Exam</b>	<b>Cumulative</b> – standardized test format  (Billings-IRA Hall; 7:30-10:15 am)

## V. ACCESS Accommodations and Religious Holidays

### Student Learning Accommodations Statement

*In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the Office of Disability Services on campus. ACCESS works with students to create reasonable and appropriate accommodations via an accommodation letter to their professors as early as possible each semester.*

ACCESS Office: <http://www.uvm.edu/~access/>

Policy on disability certification and student support:

<http://www.uvm.edu/~uvmppg/ppg/student/disability.pdf>

Religious Holiday Policy Statement

*Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time.*

Academic Integrity

As UVM students, you are expected to conduct yourself in accordance with the Codes of Academic Integrity and Student Rights and Responsibilities. Offenses against these codes are deemed serious and insult the integrity of the entire academic community. Any suspected violations of these codes are taken very seriously and will be forwarded to the Center for Student Ethics and Standards for further intervention.