General Chemistry I SPRING 2020

CHEM 031 | Section A | CRN: 12425

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Office: Innovation E337 Lecture: MWF 1:10-2:00pm Innovation E105

Office Hours: MWF 12-1 pm *or by appointment* Exams: R 6:40-9:40 Innovation E105

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

1) Text & Quiz Access

<u>Chemistry Structure and Properties</u>; 2nd Ed.; Tro, N.

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

Some ways to obtain these materials

Source	Approximate Price	What You Get	
UVM Bookstore	\$160	text, solutions manual, and mastering access code	
Pearson	\$300	text and mastering access code	
Pearson	\$120	e text and mastering access code	
Pearson	\$70	mastering access code only	

2) 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.

3) Lab Notebook

A carbon-less copy notebook is required. You can find these in the UVM bookstore.

4) Safety eyewear

Everyone must wear OSHA approved safety glasses or goggles while in the lab. Safety eyewear can be purchased at the UVM bookstore or in Discovery's Stockroom.

5) Calculator

A <u>non-programmable</u>, <u>non-graphing calculator</u> to be used for exams in this course. You can find one at the UVM bookstore, or nearly anywhere, for about \$10.

Exams

Dates for each exam are listed on the lecture schedule. These three exams will be given on Thursday evenings from 6:40-9:40. Only non-programmable, non-graphing calculators are permitted for these exams. You will not be allowed to use cell phones, laptops, tablets, or any programmable devices on exams. Students caught with any other electronic devices will receive a grade of zero for the exam.

Attendance at all exams and labs is required. A grade of **zero** will be assigned for any missed an exam or lab. In the case of an excused absence from the Dean's office, **the final exam will be used, percentage wise, to recover the missing points.** The final may only be used to replace ONE missing exam. So realize that this is your emergency one time only pass. More than one missed exam will result in a zero, without exception.

Review Sessions

Review sessions will be held the Sunday before each of the three exams. These sessions represent an opportunity for students to ask questions about homework and class topics in preparation for the exams. If you keep up with the course work on a daily basis you will be best prepared to benefit from these sessions. Attendance is optional but highly recommended for students having difficulty with the course. If you would like to be privy to our reviews, please attend or get notes from a classmate. If you choose to attend, please be courteous and mindful of those who are there for help. Videos, texting, social media, or otherwise distracting activities are not welcome.

Homework & Studying

A long list of suggested practice problems can be found at the end of this syllabus, in the lecture schedule. These exercises will not be collected or graded. However, failure to master these problems will certainly not lead to a wildly successful experience in this course. You can check your answers by referring to solutions manual. Studying for Chemistry requires a daily commitment of **at least 60 min** of dedicated problem solving, reading, and note transcription.

Online Quizzes

There will be ten graded quizzes (best 10 out of 12) during the semester. These will occur once we finish a chapter and will be found online, in Mastering Chemistry.

To activate your Mastering Chemistry access, you will need to log into our course page on Blackboard and click the Mastering Chemistry link on the left side of the screen. It will prompt you for your code. Enter it and from then on, you will find everything you need on that site. Do not attempt to access Mastering from the Pearson website. It will ask you for a course ID. THERE IS NO COURSE ID. You must access Mastering Chemistry via our Blackboard page. I have synced the two courses.

Students have five days to complete each quiz. The quizzes take only about 20 min to complete so no extended time will be given. Once the deadline passes, the quiz closes and you get the grade you get for the work you've completed. If you do not take the quiz or forget to submit your work, you will not be able to redo it. Don't ask.

Quizzes will be accessible for practice until the end of the semester once the due date has passed. You will not be able to re-take a quiz for credit. Please do not ask me for special consideration. You have five days to take a 20 min quiz. Please make sure your Mastering Chemistry code is purchased and you are set up for the first quiz. I will announce the opening of each quiz in class. I will only open a quiz once we have completed a chapter.

Lab

Students must attend the lab section for which they have enrolled. Attendance is mandatory and anyone missing more than two experiments will receive an **F** for the course. Only the academic dean of your college may assign an incomplete. An unexcused absence will result in a **zero** for the laboratory experiment. Official documentation of sickness or a family emergency is required for an excused absence. In order to attend a lab section other than the one for which you have enrolled, you must furnish this documentation and obtain permission from me **a week in advance**.

Please arrive on time with your experiment PDF printed out, wearing close-toed shoes, safety eyewear, and your lab notebook. There is no eating or drinking allowed in the laboratory. Prior to the beginning of the first lab, please visit the lab website on BB, view the safety presentation, and complete the safety quiz.

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 Scheme

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%
Total Course		1,000pts	100%

^{*}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. This will also recover points missed if you have an emergency (excused or not) and can't take an exam. There are no makeups for exams and all exams must be taken on the day they are scheduled, even at the EPC.

Expectations

Attendance at lecture is expected but not required. That said, if you choose to join us for lecture, please refrain from cruising social media, watching videos, texting, conversing with your neighbor, or otherwise distracting activities. I will appreciate your maturity and so will your classmates.

^{**}You must take the final exam to pass the course.

Accommodations

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." Contact ACCESS: A170 Living/Learning Center - 802-656-7753 - access@uvm.edu.

Policy on disability certification and student support:

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

Academic Integrity: This policy addresses plagiarism, fabrication, cheating, and collusion. http://www.uvm.edu/policies/student/acaintegrity.pdf

Code of Student Rights & Responsibilities:

http://www.uvm.edu/policies/student/studentcode.pdf

Center For Health & Wellbeing:

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

Counseling & Psychiatry Services (CAPS):

http://www.uvm.edu/~chwb/psych/

If you are concerned about a UVM community member or a specific event, we encourage you to contact the Dean of Students Office at (802) 656-3380.

If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at: http://www.uvm.edu/~saffairs/

Lecture Schedule

Date(s)	Material and/or Event	Practice Homework Problems
1/13	Introduction & Chapter E	Ch. E # 19-35 & 39-91 odds
1/15 - 1/17	Chapter 1	Ch. 1 # 37-55, 65-71, 77, 79,
1,13 1,17	Chapter 1	83-97, & 105-109 odds
1/20	no class – MLK Jr Day	
1/22-1/29	Chapter 2	Ch. 2 # 35-45, 51-61, 65-73 odds
1/31 – 2/5	Chapter 3	Ch. 3 # 41-93 odds, & 97, 103
2/7 - 2/14	Chapter 4	Ch. 4 # 29-33, 37-59, 63-89, 93-125 odds
2/13	Chapters E-3	exam 1 6:00-9:00pm E 105
2/17	no class – President's Day	
2/19 - 2/24	Chapter 5	Ch. 5 # 23-75 odds
2/26	Chapter 11.1-11.5	Ch. 11 # 35-55 odds
2/28 – 3/6	Chapter 6	Ch. 6 # 25-57 odds
3/7 – 3/15	no class – Spring Break	
3/19	Chapters 4-6 & 11.1-11.5	exam 2 6:00-9:00pm E 105
3/20 – 3/25	Chapter 7	Ch. 7 # 19-45, 49-71 odds
3/27 - 4/3	Chapter 8	Ch. 8 # 21-81 odds
4/6 - 4/13	Chapter 9	Ch. 9 # 31-37, 41-63, 67-95 odds
4/15 - 4/20	Chapter 10	Ch. 10 # 25-47, 51-77, 81-91 odds
4/23	Chapters 7-10	exam 3 6:00-9:00pm E 105
4/24 - 4/27	Chapter 11 finish	Ch. 11 # 63-69 odds
TBD	Chapters E - 11	final exam TBD TBD