

# CHEM 31B (90382): General Chemistry Fall 2022

## I. Lecture

**Lecturer:** Erik Ruggles, Ph.D.

**Office:** Innovation 333 or Virtual Ethereal

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

**Office Hours:** T, Th: 2:30-4:00pm for in-office hours by appointment or any time for virtual office hours by appointment using [Teams](#). The key is to think ahead to set up appointments for these important

**Office Hours:** Our class time is pretty much the same as office hours. However, if you have questions outside of class, questions of a more personal nature or feel the need to meet in private then feel free to set up an individual meeting with me via email or [Teams](#) that fits both of our schedules.

**Extra Practice:** For added examples, blank old exams from my 2017-2019 classes, SI Sessions, as

## II. Laboratory

**Lab Manuals:** All experiments can be found online on yo  
Please make sure you ***print out each experiment and bring to lab.***

as individual pdfs.

**Lab Notebook:** A notebook with carbon-

### **III. Course Grade**

2) Laboratory = **250 lab points**



<u>Dates</u>	<u>Chapters</u>	<u>Homework Problems (Learning Objectives)</u>
Oct 3 - 7	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

<u>Dates</u>	<u>Chapters</u>	<u>Homework Problems (Learning Objectives)</u>
<b>Nov 14</b>	<b>EXAM 3**</b>	<b>Chapters 6, 11, 7, 8, and 9**</b>
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Nov 14 - 18	9	
<b>Nov 21 - 25</b>	<b>THANKSGIVING HOLIDAY</b>	
Nov 28 - Dec 2	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 <u>(Module10: Simple Gas Laws and Ideal Gas Law,</u>  Gas-Reaction Stoichiometry and Real Gases)
Dec 6 - 9	10 and 11 Review	Ch11: 53,57,59,61,63,65,67,69,71,73,77,81,85,87,93 <u>(Module11b: Temperature Dependence, Vapor-</u> Pressure Heating Curve for Water and Phase Diagrams)
<b>Dec 13</b>	<b>Final Exam</b>	<b>Cumulative (7:30-10:15am; Innovation E102)</b>

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



## V. Laboratory Schedule

<u>Date</u>	<u>Experiment</u>	<u>Description</u>
Aug 29-Sept 9	No Lab	Purchase lab notebook and safety glasses. On Blackboard, review lab \ syllabus and schedule.
Sept 12-16	<b>Check In</b>	On Blackboard, review and complete the Safety Presentation and Safety Quiz
Sept 19-23	Experiment 1 Lecture Correlation	Density Determination Module E and Module1
Sept 26-30	Experiment 2 Lecture Correlation	Flame Emission Spec of Metals Module2
Oct 3-7	Experiment 3 Lecture Correlation	Ionization Energy/Atomic Radius Module3
Oct 10-14	Experiment 4 Lecture Correlation	Determination of a Chemical Formula Module4
Oct 17-21		

## VI. ACCESS 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](mailto:access@uvm.edu).

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

Policy on disability certification and student support:  
<http://www.uvm.edu/~uvmppg/ppg/student/disability.pdf>

## VII. Religious Holidays

### Religious Holiday Policy Statement

*Religious Holidays: 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.*

<https://www.uvm.edu/registrar/religious-holidays>

## VIII. Illness Accommodations

The Center for Health and Wellbeing does not provide students with notes verifying medical illness. This approach makes the best use of their limited medical resources by not having students who are required to provide verification of a recent illness utilize appointment times which can be used for students who require evaluation and therapy so they can report your illness to all of your professors.

When students experience a serious illness requiring hospitalization or when an extended absence from class is foreseen, a Center staff member will s  
t faculty members can be made aware and the student supported in working successfully through the absence.

## IX. COVID-19 Accommodations

Due to COVID-19 we advise that a student feeling any symptoms should get checked out before attending an in-person class. Keep in mind that if a student attends an in-person class and tests positive for COVID-19 that they are putting other students at risk and their possibly quarantine as well. When in doubt, go get tested. The [Green and Gold Promise](#) clearly articulates the expectations that UVM has for students, faculty, and staff to remain compliant with all COVID-19 recommendations from the federal CDC, the State of Vermont, and the City of Burlington. This include following all rules regarding facial coverings and social distancing when attending class. If you

do not follow these guidelines, I will ask you to leave the class. [The Code of Student Conduct](#) outlines policies related to violations of the Green and Gold Promise. Sanctions for violations include fines, educational sanctions, parent notification, probation, and suspension.

## X. Health & Safety

The University of Vermont's number one priority is to support a healthy and safe community:

**Center for Health and Wellbeing:** <https://www.uvm.edu/health>

**Counseling & Psychiatry Services (CAPS):** Phone: (802) 656-3340

**C.A.R.E.:** If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <https://www.uvm.edu/studentaffairs>

**Alcohol and Cannabis Statement:** As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to learn and retain information not only in the moment you may be using, but up to 48 hours or more afterwards. In addition, alcohol and cannabis can:

- Cause issues with attention, memory and concentration
- Negatively impact the quality of how information is processed and ultimately stored
- Affect sleep patterns, wh0 G[(Cau)-5(se)-3( issu)6(e)-3(s with)-3( )8(a)-3(tt)-3(e)6(n)-3(tio)-3q0.000009

