

CHEM 32B (10092) General Chemistry Spring 2022

I. Lecture

Lecturer: Erik Ruggles, Ph.D.

Office: Innovation 333 or Virtual Ethereal

Email: Erik.Ruggles@uvm.edu

Office Hours: T,Th: 11am-1pm, 3-4pm. W: 11am-3pm. These in-office visits are by appointment or meet outside of these time using virtual office hours by appointment using [Teams](#). The key is to set up these important meetings, so we make the best use of our time.

II. Laboratory

Lab Manuals: All experiments can be found online on your course page. Please make sure you *print out each experiment and bring to lab.* All lab manuals are available as PDFs.

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 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. **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 resistant material, should be worn in when in the laboratory. Open toed shoes, open backed shoes, and shoes that expose the top or other portions of the foot are not allowed. If you arrive at lab in inappropriate attire, you will not be allowed to perform the experiment that day.

Prior to Start of Lab: Purchase your lab notebook and safety glasses. In your Lab's Blackboard review and complete the Lab Safety and Academic Integrity Modules. Prior to lab print out the experiment. **If you have not purchased or completed these items, you will not be able to begin the lab portion of the course.**

Attendance: Students must attend the lab section they are assigned to.

III. Course Grade

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<u>Dates</u>	<u>Chapters</u>	<u>Homework Problems (Learning Objectives)</u>
Mar 14 - 18	17	Ch17: 25,27,29,31,33,35,39,41,43,45,49,51, 53,57,59,61,63,65,67,69,71,75,81,83,85,87,93, 95,97,103,105,111,113,115,121,125 (Module17: Buffers, Titrations, and Solubility Equilibria)
Mar 28 - Apr 1	17	
Apr 4	LAST DAY TO WITHDRAW FROM COURSE	
Apr 4 - 8	17 and 18	Ch18:31,35,37,39,41,45,47,51,53,55,59,61, 67,71,73,75,85,87,93,101 (Module18: Entropy, Gibbs Free Energy, Free Energy and Equilibrium, Standard State and Non- Standard State)
Apr 11 - 15	18 and 19	Ch19: 33,35,37,39,41,43,45,47,49,53,57,59, 61,63,65,69,71,73,77,83,85,89,97,99,103,105, 115,119 (Module19: Redox, Cell Potential, Redox and Equilibrium, Batteries, Electrolysis and Corrosion)
Apr 18	EXAM 3**	Chapters 16,17,18 and 19**
Apr 18 - 22	19	
Apr 25 - 29	19	
May 2 - 6	19 and 20	Ch20: 31,33,35,37,S.9311111111111111

V. Laboratory Schedule

Jan 18-21	No Lab	Purchase lab notebook and safety glasses. On Blackboard, review lab syllabus and schedule.
Jan 24-28	Lab Check In	On Blackboard, review and complete the Safety Presentation and Safety Quiz
Jan 31-Feb 4	Experiment 1 Lecture Correlation	Freezing Point Depression Module13
Feb 7-11	Experiment 2 Lecture Correlation	Iodination of Acetone Module14
Feb 14-18	Experiment 3 Lecture Correlation	K_{eq} of FeSCN Module15
Feb 21	President's Day Holiday: No Labs Mon Feb 21	
Feb 22-24, 28	Experiment 4 Lecture Correlation	Neutralization Power of Antacids Module16
Mar 1-4	Town Meeting Day Holiday: No Labs Tue Mar 1 - Fri Mar 4	
Mar 7-11	Spring Break Holiday	
Mar 14-18	Experiment 5	Acids, Bases, pH anQq0.000912 0 612 792 ris,

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.

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

Policy on disability certification and student support:
<http://www>.

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

