CHEM 32 (60037): General Chemistry Summer 2020*

I. Lecture

Lecturer: Erik Ruggles, Ph.D.   **Office:** The Internet Ethereal

Email: Erik.Ruggles@uvm.edu   **Office Hours:** Mon-Thurs, 8:00am-11:00am (Virtual Chat on Teams)

Virtual Class Time: Mon-Thurs (8am-11am)   **Location:** Your Work Station

Textbook: Qˇ[ˇ¢^Áæ^}ÁÔ@{ÁÐFÁæÄXTÁ^&^}ďˆÊ¤@}Á¦¦[àæà|ˆÁ@æ¸^Áæ|Á¢@Á¸æ^¦ã桕Á¸^&^••æˆÁ for Chem32. If not, there are three options to purchase **"Chemistry Structure and Properties" 2ⁿᵈ Ed., by Tro** (*Pearson Publishing; Full text ISBN-13: 978-0-13-429393-6*) **along with Mastering Chemistry online access**ĚÁFÐÁ@Áˇ||Á¢¢à[[\Áæ}åÁ¸æ¢¦ã¸*Á&æ}Áà^Áa[ˇ*@Á[}ÁÚ^æ•[}¢Á[}|ã^Á site (~$300; text and mastering), <u>or</u> 2) at the UVM bookstore (~$160; UVM custom textbook, solutions manual, and mastering), <u>or</u> 3) just 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 (option 2), but the most economical and necessary is digital access (option 3).

Lecture: The video lectures for discussions Monday-Thursday will be used to cover new material and concepts along with sample problem solving. They will be assigned the day before virtual class meetings and you are expected to watch the lecture prior to virtual class time. My video lecture notes will also be posted in pdf format in **4. Course Materials** on BlackBoard (BB).

Assignments: Assignments are broken down into Modules and can be found in **2. Assignments** on BB. Each module contains Lecture Videos, Textbook Sections Covered and Homework Problem Sets. They will be assigned the day before virtual class meetings and you are expected to do your best to complete the module prior to virtual class time. I strongly encourage you to do as many problems as possible, the more you practice the better you will get.

Virtual Class Time: Class will be held virtually from 8am-11am Monday-Thursday and is meant for questions and answers. The module assigned should be finished prior as I want to use this time to clarify lecture concepts and homework problems. I will be omnipresent on **5. Discussion Boards** on BB and email for question and answer. Class Q and A will also be posted in pdf format in **4. Course Materials** on BB.

Extra Practice: For added examples, blank old exams from my 2019 and 2018 classes, SI Sessions, as well as their answer keys are posted in **4. Course Materials** on BB. Remember that even though questions will change from year to year, the concepts will remain the same. ***Do not study with just the old exams!*** The Meat and Potatoes, or Seitan and Broccoli, is in the Homework Problems. A|•[Á¢@¦^Áæ¸^Á¢@{ˆ^¸[¦\Á¦[à|^{Á¸ãæ^•Á[•¢åÁ[¦¦Á¢dææ¾æ¸@[{ˆ^·Á@ˇ]]ĚÁ

Exams: The exams are scheduled to be on open on **3. MasteringChemistry** *Friday from 9:00am-9:00pm*. There are three hours to complete the exam. There are no scheduled make up dates. Only non-programmable non-graphing calculators are permitted. No other electronic devices are allowed.

Exam Dates: Exam 1 June 19 (Friday)   Exam 3 July 2 (Thursday)

                                Exam 2 June 26 (Friday)   Final Exam July 10 (Friday)

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*All times are Eastern Standard

II. Laboratory

Lecture Time: Mon . Wed   **Location:** Your Workstation

Lab BlackBoard: You will have access to the lab portion of this course in **6. Lab Materials** on BlackBoard as well. V@ Áˌæà Áˌ|æⱭ¦{ Áˈ Á}¸}æ ÁˇSæà|[¸Ѐå[}çÁˌ[¦¦^ Á[ˇ¶|Áà^Áˌ[ã㠌å Áː sign up (this is covered in your lab fees). Here is where you will find experimentals, helpful documents and videos, logistics, etc. Here is also where you will hand in materials, such as Pre-Lab Quiz Questions, Lab Reports and Post-Lab questions.

Lab Manuals: All experiments can be found online using the Labflow Online Platform. Please make sure you thoroughly go through the actual experimental before attacking the labs**.**

Lab Notebook: We used to require a notebook with carbon-less copies for recording lab data. All

III. Course Grade

Percent Ranges for Grades:

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

There are 10 lab experiments, each worth 25 points total which will be split into Pre-Lab questions (10 points), Lab Report and Post-Lab questions (15 points). Roughly we see an 80% average (~200 points) in labs.

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:

585.25 class points

+   200 lab points

785.25 total points/1000 points = 78.25% C+

Example 2:

545.0 class points

+   200 lab points

745.00 total points/1000 points = 74.50% C+

To summarize:

Ex1 + Ex2 + Ex3 + Final + Lab + Extra Credit = Total Points

(Total Points)/1000] x 100 = 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 will be forwarded to the Center for Student Ethics and Standards for further investigation.

V. Laboratory Schedule

Date	Experiment	Description
June 16	**Check In** Experiment 1 Lecture Correlation	 Molar Mass and Freezing Point Module 13
June 17	Experiment 2 Lecture Correlation	Rate Expression Determination Module14
June 22	Experiment 3 Lecture Correlation	Determination of K_{eq} Module15
June 23	Experiment 4 Lecture Correlation	Š^ÁÔ@ėc^|à¦ɋ ÁÚ¦ą̧ &ą̧¦^ Module15
June 29	Experiment 5 Lecture Correlation	Buffer Solutions Module17
June 30	Experiment 6 Lecture Correlation	Molar Mass of Diprotic Acid Module17
July 1	Experiment 7 Lecture Correlation	Determination of K_{sp} Module17
July		

VI. ACCESS Accommodations

Student Learning Accommodations Statement