be assigned after each class period and you are expected to watch the lecture(s) and attempt the homework prior to the next virtual class time. <u>The Video Lectures</u> for discussions on Mondays, Wednesdays and Fridays will be used to cover new material and concepts along with sample problem solving <u>The Homework Problem Sets</u> will strengthen your connection between concept and the mathematics that describes the concept. I strongly encourage you to do as many problems as possible, the more you practice the better you will get. Use the <u>Homework Problem</u> <u>Video Examples</u> for extra help My video lecture notes as well as inclass discussions will be posted in pdf formation BB (\_\_\_\_\_\_\_\_\_ ind). In class discussions will be recorded and then posted invideo formation Teams.

Class will be held virtually from 1:10pm 200pm Monday, Wednesday and Friday. Class is v es lass is v iF ass is sc 2 e he delpd... Ma

I cannot say in advance which point ranges conespond to which letter grades, but I will give approximate conclutions 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 mastery of the material.

1)Class =(75% of gade; exams and homework)1a)Mid Semester Exams =(125 points/exam)1b)Homework =(125 points/assignment)1c)Final Exam=

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

<b>2)</b> Laboratory=	<b>(25% of gade)</b>	
<b>Safety Qu</b>	iz.	1 point
Pielab (3	pts/per)	27 points
Lab Repo	nts (15 pts/per)	100 points
Quizzes (	8pts/per)	<u>72 points</u>
		250 points

#### 3) Course Grade Determination

Add up your points firm class and lab and then use the chart at the beginning of this section to determine your course grade.

Example 1:

### 5900 class points

## + 200 lab points

7900 total points/1000 points = 7900%

**Example 2** 

537.5 class points

+ 200 kab 7 ps ginning ints

# General Chemistry 32Fall Frik Ruggles, PhD

<u>Dates</u>	<u>Chapters</u>	<u>HomeworkProblems (Learning Objectives)</u>
Aug 31 - Sept 4	Syllabus	(Class Dynamics)
	13	Ch13 25,27,2931,33,35,37,43,45,47,49,51, 5963,65,67,69,71,73,77,79,81,83,85,87,89,93, 97,99,105,109,115 ( <u>Module13</u> Solution Concentration, Temperature Effects, Colligative Properties, Melting and Boiling Points, Osmotic Pressure)
Sept 7- 11	13 and 14	Ch14: <i>27,2</i> 9,31,37,41,45,47,53,55,59,65,71, 75,77,83,89,91,95,108,105,107 ( <u>Module14</u> : Chemical Kinetics, Rate Laws, Integrated Rate Laws, Mechanism, Temperature Effects)
Sept 14- 18	14	
Sept 21 - 25	15	<b>Ch15 21,23,27,2931,33,35,37,3941,45,47, 49,53,55,5963,65,67,69,71,73,75,7981,83,89</b> ( <u>Mbdule15</u> : <b>Chemical Equilibrium K., K., and Le</b> <b>Châtelier</b> )
Sept28-Oct2	15 and 16	Ch16 31,33,35,37,39,41,45,49,51,55,59,61, 65,67,69,71,75,79,81,83,85,87,89,91,95,97,99, 101,103,107,109,111,113,115,117,121,123, 127,129,133,141 (Module 16) Acid Base Reactions and Equilinia, Conjugate Acid/Conjugate Base Equilinia, Polymotics
Ott5-9	16	
Oct 12-16	16	

Extent of examinaterial will depend on our progress in lecture.

# General Chemistry 32Fall Frik Ruggles, PhD

<b>Dates</b>	<u>Chapters</u>	<u>HomeworkProblems (Learning Objectives)</u>
Oct 19- 23	17	Ch17: 25,27,2931,33,35,3941,43,45,49,51, 53,57,5961,63,65,67,69,71,75,81,83,85,87,93, 95,97,103,105,111,113,115,121,125 (Module17: Buffers, Titrations, and Solubility Equilibria)
Oct 2630	17	
Nov 2-6	17 and 18	Ch1831,35,37,39,41,45,47,51,53,55,59,61, 67,71,73,75,85,87,98,101 ( <u>Mbdule18</u> Entropy, Gibbs Free Energy, Free Energy and Equilibrium, Standard State and Non- Stanard State)
Nov 9-13	<b>18and 19</b>	Ch19 3335,37,39,41,43,45,47,49,53,57,59 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 Conosion)
Nov 16-20	19	
Nov 23-24	19	
Nov 30- Dec 4	19and 20 Review	Ch20 31,33,35,37,41,45,51,57,61,71,73,81, 83,89 (Module20 Radioactivity, Kinetics of Radioactivity, Fusion, Fission, and Binding Energy)

Extent of examinaterial will depend on our progress in lecture.

#### Date

Aug 31 · Sept 4

LabA and Lab B

Sept 7-11 Lab A and Lab B

Sept 14 - 18

In Person Lab A

Online Lab B

Sept 21 - 25

**Online Lab**A

In Person Lab B

CheckIn

AssignmentDue

CheckIn

Experiment 1

Experiment 2

AssignmentDue

Experiment 2 Assignment Due

Experiment 1 Assignment Due

Sept28-Oct2

In Person Lab A

Experiment3 AssignmentDue

Online Lab B

Experiment 4

vandcomplete

Sefal s PhD

ewand complete sentation and Quiz

Freezing Point ion and Safety Quiz

nation of Acetone tation and Safety Quiz

ession

Kinetics of odination of Acetone Expl: Lab Report Exp2: Preference of Quiz

Freezing! Exp1: Pr Exp2: L:

Detem Exp2 Exp3

Le C

<u>Date</u>	<u>Experiment</u>	<u>Description</u>
<b>Oct</b> 5-9		
<b>Online Lab A</b>	Experiment 4	L



General Chemistry 32Fall Frik Ruggles, PhD

<u>Date</u>	<b>Experiment</b>	<b>Description</b>
Nov 2-6		
In Person Lab A	Experiment 8 Assignment Due	Themodynamics Hot/Cold Packs Exp7: Lab Report Exp8: Prelab and Quiz
Online Lab B	Experiment 7 Assignment Due	<b>Detemination of Solubility Product Exp8 Lab Report Exp7: Prelab and Quiz</b>
Nov9-13		
Online Lab A	Experiment9 AssignmentDue	Themodynamics of Boax Exp8 Lab Report Exp9 por S

<u>Date</u>	<u>Experiment</u>	Description*
Aug 31 - Sept 4		Purchase lab manual and safety glasses On Blackboard, review and complete the Introduction to Lab
SepgintitDue	<b>Exp::</b> PabRepot	On Blackboard, review and complete the Lab Safety Presentation and Quiz
Sept 14- 18	CheckIn	
Online Lab	Experiment 1Experiment Assignment Due	4 Molar Mass and Freezing Point Safety Presentation and Safety Quiz
Sept 21 - 25	CheckIn	
Online Lab	Experiment 2 Assignment Due	<b>Kinetics of Iodination of Acetone Exp1: Lab Report Exp2: Pielab and Quiz</b>
Sept 28- Oct 2		
Online Lab t	Experiment 3 Assignment Due <b>Eq:% Philli</b>	Determination of Keq Exp2: Lab Report blinf23]] <b>EQ:in</b> b and Q.iz ÎÈ
<b>Ott5-9</b>		
Online Lab	Experiment 4	Le Châtlier's Princi

Genual Chemistry 32Fall Frik Ruggles, PhD

Oct 19- 23

Online Lab	Experiment 6	Acid base Equilibria and Buffers
	AssignmentDue	Expő LabReport
		<b>Expô Pielaband Quiz</b>

Oct 26- 30 Q.iz

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@uxmedu

ACCESS Office: http://www.medu/~access/

Policy and sability certification and student support http://www.ummedu/~umpg/ppg/student/disability.pdf

**Religious Holiday Policy Statement** 

Religious Holidays: Students have the right to practice the religion of their choice. If you need to miss