CHEM 23/25: OUTLINE OF GENERAL CHEMISTRY

Fall 2016

LECTURE A: CHEM 23 (90058) & CHEM 25 (90888), M,W,F 8:30AM-9:20AM, Marsh Life Sci 235

LECTURE B: CHEM 23 (91130) & CHEM 25 (90889), T,Th 8:30AM-9:45AM, Votey 105

GENERAL INFORMATION: (see also the CHEM23 BlackBoard page)

Instructor: Steve Flemer **Email**: sflemer@uvm.edu

Office: A-335 Cook **Office Hours**: M W F 9:30 AM - 10:30 AM
T Th 10:00 AM – 11:00 AM

Lecture: The lecture will primarily be used to cover new material. Included in this syllabus is a tentative schedule covering the text material and the corresponding problems to be worked from each chapter.

Exams: Three 2-hour exams are given on Thursday nights from 6:00-8:00 PM.

	Lecture A (M,W,F; 8:30-9:20 AM)	**Lecture B** (T,Th; 8:30-9:45 AM)
Exam 1	Thurs, Sept. 22; 103 Rowell	Thurs, Sept. 22; 101 Fleming
Exam 2	Thurs, Oct. 20; 103 Rowell	Thurs, Oct. 20; 101 Fleming
Exam 3	Thurs, Nov. 17; 103 Rowell	Thurs, Nov. 17; 101 Fleming
Final Exam	Thursday, Dec. 15; 7:30-10:15AM; 235 Marsh	Tuesday, Dec. 13; 1:30-4:15PM; 105 Votey

Absences from exams: Students with legitimate excuses (ie: a UVM-related conflict) may be permitted to take an exam sometime during the day that it is given to the rest of the class that evening. This must be cleared with the instructor first, however. **Makeup exams will only be administered after the scheduled exam time if a medical or family** emergency precludes taking the exam at the scheduled time.

Review Sessions: I will be holding Exam Review Sessions the Wednesdays prior to impending exams from 5:00-6:30PM in 235 Marsh Life Sci. Weekly SI sessions will also be starting

COURSE GRADE FOR CHEM 23 STUDENTS:

1. Points needed to obtain a specific grade

920 = A	870 = B+	790 = B-	680 = C	620 = D+	570 = D-
900 = A-	820 = B	760 = C+	650 = C-	590 = D	less than 570 = F

2. How to calculate your points:

a) **Class = 800pts** 3 Exams/1 quiz grade = 4 grades
1 Final = 2 grades
6 grades - 1 grade = 5 grades x 1.6 = class pts

I will drop your lowest score. If the final exam is your lowest grade it will only count once. If your quiz average is your lowest grade, this score will be your drop. The 1.6 factor is because each test was only worth 100 pts, and therefore the maximum number of points obtainable from the tests are 500. In order to raise this to 800 pts you must multiply the 500 x 1.6 = 800.

Example:

	Ex-1	Ex-2	Ex-3	Quiz Av.	Final x 2
Actual Scores	85	45	78	77	75 75
Scores Counted	85	75	78	77	75

Total pts = 390 x 1.6 = 624 pts from class

b) **Laboratory = 200 pts**

Notebook / Prelab	30 pts
Lab reports	80 pts
Quizzes	65 pts
Technique	25 pts
	200 pts

3. Determination of grade: Add up your points from the class and lab and then use the chart at the beginning to determine your course grade.

Example: 624 class pts + 160 lab pts = 784 total pts = C+

COURSE GRADE FOR CHEM 25 STUDENTS:

Since there is no laboratory component to your grade, you will be graded on your exam/quiz scores exclusively. Your 5 highest scores will be multiplied by 2 (rather than 1.6).

LABORATORY SCHEDULE

Date	Experiment Description
12 – 15 SEPT	**CHECK-IN** & Densities of Common Substances
19 - 22 SEPT	Determination of Heat Capacity Using Calorimetry
26 - 29 SEPT	Qualitative Analysis
3 - 6 OCT	Synthesis of Ionic Compound Alum from Aluminum Metal
10 - 13 OCT	**NO LABS** (Fall Recess on Monday)
17 - 20 OCT	Determination of a Compound's Empirical Formula
24 - 27 OCT	Reaction Stoichiometry & Equation Balancing
31 OCT – 3 NOV	Determination of Limiting Reactant
7 - 10 NOV	Determination of Acid Content in Pickle Juice using Titration
14 - 17 NOV	Determination of Limestone Content in Soil using the Ideal Gas Law
21 – 24 NOV	**NO LABS** (Thanksgiving Break)
28 NOV – 1 DEC	Acid-Base Equilibria and Buffers & **CHECKOUT**