Chemistry 1C Sec 61 & 62 Spring 20

Course times: Lecture: 6-7 PM Lab 61: 7-8 PM (Evening) Lab 62: 5-6 PM (Afternoon)

Instructor: John Cihonski, e-mail: cihonskijohn@fhda.edu

Office Hours: 30 minutes before Sec 62 and 30 min after Sec 61 Lab times (above)

General:

Course Goal: Under the current restrictive conditions provide a Chem 1C course that delivers sufficient content so that those in the sciences can succeed academically – under safe physical conditions.

Chemistry 1C will focus on the following topics:

Chapter 13 Mixtures and Solutions
Chapter 19 Ionic Equilibria
Chapter 21 Electrochemistry
Chapter 23 Transition Metals and Coordination Compounds

Recommended approach to this on-line course:

- *Textbook* Silberberg, 8e. Read the recommended sections and work the in text example problems including the example follow up problems labeled A & B. For adequate mastery of the material insure that you can work these problems without looking at hints or the solutions. (See homework – below)

- *Lectures* After reading the recommended text material watch the on-line lectures (a PDF of the slides will be provided for use with the lectures). The material is similar to the text reading. Access to the Zoom videos is easy. See the example below:

Lecture	Chapter 13 Solution Related
T1 P1	Topic: Lecture material to be covered
	Sign in code for Zoom lecture

T1 P1 means Topic 1 and Part 1

You should also be able to solve the on slide questions (labeled as "Q" in red), they are similar to the text and homework and will be the main basis for the exams. As follow up to the on-line lectures we will be doing open discussion sessions to answer questions related to the lectures and homework. Timing and frequency will be determined.

- *Homework* is from the text (Silberberg 8e). The homework shouldn't be difficult assuming you have read the text and studied the in-text examples. Your homework hard copy will be turned in at select times for grading. Since the answers are provided in the

back of the text I will mainly be looking for two things: (1) at a minimum that you attempted every problem and (2) that your work is coherent (I can follow it).

- *Laboratory related problems* – As a replacement for the "live" laboratory portion of the course we will do open ended problems related to practical lab and applied chemistry situations that can benefit from an experimental approach – just without the glassware. The class will be assigned the same problem and you are free to discuss the problem with each other. However, everyone will be responsible for their own independent write up. We will discuss the details at the time the first problem is assigned.

- *Exams* – There will be 2 one hour exams. A mid-term covering the first two chapters and the final that will only cover the last two chapters. Exams will be discussed more at the appropriate time and we will agree on the specific exam date.

Grading:

Exams (Mid-term + Final) (2 x 100 pts)		200
Lab problems (4 x 25 pts)		100
Home Work (4 x 25 pts)		100
	Total Points:	400

Extra Credit:	Homework (additional)	Optional
	Lab Problems (additional)	Optional

Grading: A (100-93%), B (92-80), C (79-65), D (64-55)

Quarter Calendar: Chem 1C Spring 20

Some *estimated* project start dates are indicated. Specific due dates for the items will be determined later. Due meaning sent in by mail or email – method to be determined.

Week of:	Tuesday	Thursday
April 12	Course Intro - Syllabus Start C13 + HW	5-6 Sec 62 lab discussion 6-7 General lecture discussion 7-8 Sec 61 lab discussion
April 19	Introduce Lab 1	
April 26	Start C19 + HW	Introduce Lab 2
May 03		Wrap up before Exam 1
May 10	Exam 1 + **Mail/email**	Start C21 + HW
May 17	Introduce Lab 3	
May 24		Start C23 + HW
June 07	Introduce Lab 4	
June 14		Wrap up before Exam 2
June 21	Exam 2 + **Mail/email**	

Student Learning Outcome(s):

*Apply the principles of equilibrium and thermodynamics to electrochemical systems.

*Apply the principles of transition metail chemistry to predict outcomes of chemical reactions and physical properties.

*Evaluate isotopic decay pathways.

*Demonstrate a knowledge of intermolecular forces.