General Chemistry II -
1101CHEM 1020 Section 1
Summer Quarter, 2021

Instructor: Ogar Ichire (Leo) Ph.D.

E-mail: ogar.ichire@du.edu | **Phone:** 303.871.2985 | **Office:** F.W Olin 205A

Lecture: MTWRF 9:00 a.m. – 10:50 a.m. (Online on Zoom)

Office Hours: Open door or by appointment. Please email for appointments.

Required Text: ***Chemistry: The Molecular Nature of Matter and Change*** *- 9th Edition by* Martin Silberberg (Author), Patricia Amateis.

Course Objective:
This course is the second half of our first-year General Chemistry sequence for chemistry and non-chemistry majors at DU. Our main objective is to build on and complement concepts learned in General Chemistry I. We will continue exploring fundamental concepts in chemistry including equilibrium systems, thermodynamics, and kinetics. We will also cover some applications of the chemistry concepts in these chapters. The Silberberg textbook willbe our compass for the course, and we will follow the general progression of topics in the book. The selected chapters we will cover for General Chemistry II arein the schedule portion on the last page of the syllabus.

In order to get the most out of this course, I will advise you:

- Review the Silberberg textbook before and after each class. Preferable, read the whole chapter before class.
- Conduct searches after each class to find applications of the concepts covered in class.
- Solve as many problems as possible instead of memorizing. This means that consistent work is required and will pay off much better than cramming for an exam or throwing together an assignment at the last minute. Chemists are problem solvers - you can start by solving book problems for now and on time.

Lectures: The lectures will generally follow the chapters in the textbook. All lectures will be presented on MS OneNote writing software and PowerPoint slides via ZOOM. Please review the slides before class because the class will be fast paced. ***Attending every class and taking meaningful notes is incredibly important for this class.*** Keeping up with the reading will help you understand the lectures better and take more meaningful notes. Also, we will work through problems during lectures to help you

understand each concept and build the necessary problem-solving skills required to excel in the class.

Problems: You should work on many problems from the textbook as possible. The exams will focus on simple, applied, and composite problems. Most composite type problems require a good understanding of various concepts and your ability to connect two or more concepts together to arrive at a solution. The only way to prepare for these problems is to practice, practice, and practice. All problem types can be found in your textbook, and additional problems will be presented in class. **A good strategy may be to solve all the odd-numbered problems initially, and then the even ones as part of your exam review**. You are advised to keep a separate, dedicated notebook with all your solved problems for this course – it will make studying a lot easier and your study notes will come in handy for quick revision before exams.
Also, solving problems together in small groups can be very helpful and I encourage you to do so, especially after first working on the problems yourself. Your classmates may have an alternate way of looking at a problem, and this can add to your toolbox of problem-solving skills. In addition, helping to teach the subject to your mates is one way to understand the concepts yourself.

Calculator: Any simple or graphing calculator would be good enough for the calculations covered in this course. Your calculator should be capable of scientific notation, log, and exponential functions. If a graphing calculator is used, you must clear the memory before receiving attempting the exam. On a typical TI-XX graphing calculator, the sequence is to press 2nd then '+' (MEM), then Reset, All RAM, Reset. A message will be displayed as "RAM Cleared". This must be displayed before receiving the exam. I may inspect calculators andtheir memory during the exams.

Exams: There will be two midterm exams and a final exam; each exam is worth a 100 points – for a total of 300 points for the course. If your final exam score is higher than either midterm exam score, the lowest midterm will be dropped, and the final score will replace the low midterm.

Final Grade: Your final grade will be determined out of the 300 available points earned **There will be no makeup exams.** If you miss an exam for any reason, that exam will be dropped, and the final will count for 200 points**. The final exam is not optional – NO EXCEPTION**

Grade	Range	Grade	Range
A	**100 – 94 %**	**C-**	**<74 – 70%**
A-	**<94 – 90%**	**D+**	**<70 – 67%**
B+	**<90 – 87%**	**D**	**<67 – 64%**
B	**<87 – 84%**	**D-**	**<64 – 61%**
B-	**<84 – 80%**	**F**	**<60 – 0%**
C+	**<80 – 77%**		
C	**<77 – 74%**		

Note: Final grades and percentage ranges are subject to change by the instructor

Lecture and Testing Accommodations:
I will make every effort to accommodate students diagnosed with a learning disability. I will do this in complete confidence. I do, however, request that any student requiring these accommodations inform me the first week of class. For further information, please see the University Disability Services' website at http://www.du.edu/disability/dsp/index.html.

Academic Integrity:
While I advocate collaborative learning and teamwork, I also firmly believe that each student should maintain the highest ethical standards. As such, I support and will strictly enforce the Honor Code of the University of Denver. www.du.edu/honorcode.

Honor Code Statement.
All members of the University of Denver are expected to uphold the values of *Integrity*, *Respect*, and *Responsibility*. These values embody the standards of conduct for students, staff, faculty, and administrators as members of the University community. These values are defined as:

Integrity: acting in an honest and ethical manner;
Respect: honoring differences in people, ideas, and opinions;
Responsibility: accepting ownership for one's own conduct.

Pioneer Pledge.
As a University of Denver Pioneer, I pledge…

- to act with INTEGRITY and pursue academic excellence;
- to RESPECT differences in people, ideas, and opinions and;
- to accept my RESPONSIBILITY as a local and global citizen;

Because I take pride in the University of Denver I will uphold the *Honor Code* and encourage others to follow my example.

Topics to be covered: Tentative Course Schedule – Subject to Change

Weeks	Date'20	Topic	Reading	Due
	M- 07/12	Chapter 20: Thermodynamics	Ch 20	
		Chapter 17: Equilibrium Sys	Ch17	
Wk1	F - 07/16	**Exam 1**		
	M - 07/19	Chapter 18: Acid-Base Equilibria	Ch18	
		Chapter 19: Ionic Equilibria in Aqueous Systems	Ch19	
Wk2	F - 07/23	**Exam 2 (Cumulative)**		
	M - 07/26	Chapter 16: Chemical Kinetics	Ch16	
Wk3				
	F – 07/30	**Final Exam (Cumulative)**		

C**anvas and Class Notes:**
Lecture information will be presented on OneNote via Zoom. The slides will be posted on Canvas in addition to other useful learning materials including suggested problems and assignments.