

Chemistry 1001 (Chemistry and Society) Spring 2023



Meeting days: MWF	Instructor title and name: Dr. Kelly Hunter, Visiting Assistant Professor of Chemistry
Meeting times: 1:30 – 2:25pm	Phone: 619-849-3407
Meeting location: Liberty Station 203	Email: khunter@pointloma.edu
Final exam: 1:30 – 4pm on Friday, May 5 th	Office hours: Monday 3 – 4pm, Tuesday 1 – 2pm, Thursday 11:30am – 12:30pm or by appointment in Rohr Science 316

1. **Student Outcomes:** The following outcomes are expected and will be assessed on exams and quizzes:
 - a) Demonstrate knowledge of fundamental principles of atomic structure, bonding, acids and bases, oxidation and reduction, and basic nomenclature.
 - b) Demonstrate knowledge of fundamentals of nuclear chemistry.
 - c) Demonstrate knowledge of key terminology in organic chemistry and biochemistry.
 - d) Demonstrate knowledge of key concepts in air and water quality as well as energy production and consumption.
 - e) Perform research on a topic and make a presentation intended to teach others about the key concepts.

FE learning outcome 1e will be assessed in this course using student performance on problems that are quantitative in nature on the comprehensive final exam.

2. **Text:** Hill, J.W.; McCreary, T.W.; Kolb, D.K. **Chemistry for Changing Times**, 15th edition, Prentice Hall, 2020. This text is **required**.

Mastering Chemistry Access: This is a web-based homework site. You are **required** to purchase access. If you bought a new book from the bookstore, you already received access to Mastering Chemistry in your bundle. When you purchase access through Pearson, you will also get access to the e-book.

Calculator: A graphing or non-graphing calculator that can handle scientific notation is required and will be used for quizzes and exams.

3. **Internet Resources and Communication:** You will be required to access this course on Canvas. I will place chapter notes for the class on this sight that you will have to print out prior to class. The notes will contain blanks which you will be required to fill in during lecture. The notes may contain some information that is not in the text. You will also be required to access the Mastering Chemistry web site (can be accessed through the MyLab and Mastering tab on our course Canvas page) in order to do your assigned homework.
4. **Office Hours:** I will be available in my office during the times I've indicated above for office hours. You are welcome to come by to ask questions about the course content, homework, or to talk about life at PLNU or outside of PLNU. I am also available outside of these times by appointment. Please email me if you would like to meet outside of the listed times.

5. **Mastering Chemistry Homework:** You will be assigned a set of homework for every chapter to be completed online through the Mastering Chemistry website. The assignment for each chapter will be due by 11:59pm two days after the completion of a chapter in lecture (i.e. if we finish a chapter on Wednesday in class, the homework will be due Friday at 11:59pm). You will have 5 attempts to answer every question. A late penalty of 5% per day past the due date will be enforced. These assignments are invaluable in preparing you for the in-class exams. Working problems is a very practical way for learning the material, and you should try your best to solve the problems before requesting a solution. There is also an Introduction to Mastering Chemistry assignment (worth no points for the class) that helps serve as an introduction to Mastering Chemistry. The online homework will count for 12% of your overall course grade. The course ID (although you shouldn't need it to register) is hunter62362.
6. **Group Work:** We will also have regular in-class group work and three in-class activities. Group work will count for 10% of your overall course grade.
7. **Reflections:** Throughout the semester, you will be asked to complete reflections on Canvas. The reflections will focus on the course, course content, and your personal and spiritual life. These reflections will be worth 6% of your overall course grade.
8. **Help Sessions:** I will do my best to schedule some class time prior to each exam for me to answer any questions that you might have.
9. **Quizzes:** There will be three quizzes worth 20 points each given over the course of the semester. These quizzes can take on different forms, which may include but are not limited to the following: take home, in-class, in-class open book, or in-class group work. These quizzes will count for 6% of your overall course grade.
10. **Group Project:** There will be a group project at the end of the semester. You will work on this project with your group in class and will then present to the rest of your classmates in the final week of classes. More information about the group project will be given out towards the end of the semester. The group project will count for 15% of your overall course grade.
11. **Exams:**
 - a) **In-class Exams:** Exams will cover material in the text and the lecture material as well as any other assigned material. There will be 3 major exams worth 100 points each. These will count for 36% of your overall course grade (each exam is worth 12% of your overall grade). There will be no exam scores dropped. **If you are caught cheating, I reserve the right to assign you a zero on that quiz or exam, and you could be subject to further action as stated in university policy. Makeup examinations will be given only for excused absences provided the appropriate documentation is provided.** You should make sure to contact me before your scheduled exam time. If you find that there are errors in the grading of your exam, you should come by my office as soon as possible.
 - b) **Final Exam:** A mandatory, 150 point final exam will be given at the time dictated by the University final exam schedule. The final will consist of one portion of material covered in class since exam 3 and one portion that will be comprehensive over the rest of the course. The final will count for 15% of your overall course grade.
 - c) **Exam Schedule:** A tentative, but reasonably accurate, schedule for the in-class exams and final exam is given below. Changes in exam dates will be announced at least two days in advance in class and on Canvas. The date for the final exam is firm as set by University policy.

Exam 1	Wednesday, February 8 th
Exam 2	Friday, March 3 rd
Exam 3	Monday, April 3 rd
Final	Friday, May 5 th from 1:30 – 4pm
12. **Course Grade:** Your overall course grade will be based on your performance in numerous categories. The weighting of each course activity is shown below:

Online Homework	12%
Group Work	10%
Reflections	6%
Quizzes	6%
In-class Exams	36% (12% each)
Group Project	15%
Final Exam	15%

Letter grades will be assigned at the end of the course based on your percentage of total possible points, according to the following APPROXIMATE scale:

A	90 – 100%
B	80 – 90%
C	70 – 80%
D	60 – 70%
NC/F	< 60%

(+) and (–) grades will be assigned within each bracket. (There is no A+ grade.)

13. **Course Schedule:** Listed below is a course schedule with approximate lecture coverage and examination points indicated. Any changes to the course schedule will be announced in class and posted on Canvas.

Week	Day	Chapter	Content
1	Tuesday 1/10		Introduction
	Wednesday 1/11	1	Chemistry
	Friday 1/13	1	Chemistry
2	Monday 1/16		NO CLASS – Martin Luther King Jr. Day
	Wednesday 1/18	1	Chemistry
	Friday 1/20	2	Atoms
3	Monday 1/23	2	Atoms
	Wednesday 1/25	3	Atomic Structure
	Friday 1/27	3	Atomic Structure
4	Monday 1/30	4	Chemical Bonds
	Wednesday 2/1	4	Chemical Bonds
	Friday 2/3	4	Chemical Bonds
5	Monday 2/6		Review/Activity 1
	Wednesday 2/8		EXAM 1 (Ch. 1-4)
	Friday 2/10	5	Chemical Accounting
6	Monday 2/13	5	Chemical Accounting
		6	Gases, Liquids, Solids
	Wednesday 2/15	6	Gases, Liquids, Solids
	Friday 2/17	6	Gases, Liquids, Solids
7	Monday 2/20	7	Acids and Bases
	Wednesday 2/22	7	Acids and Bases
	Friday 2/24	8	Oxidation and Reduction
8	Monday 2/27	8	Oxidation and Reduction
	Wednesday 3/1		Review/Activity 2
	Friday 3/3		EXAM 2 (Ch. 5-8)
SPRING BREAK WEEK 3/6 – 3/11			

9	Monday 3/13	9	Organic
	Wednesday 3/15	9	Organic
	Friday 3/17	9	Organic
10	Monday 3/20	11	Nuclear Chemistry
	Wednesday 3/22	11	Nuclear Chemistry
	Friday 3/24	16	Biochemistry
11	Monday 3/27	16	Biochemistry
	Wednesday 3/29	16	Biochemistry
	Friday 3/31	Review/Activity 3	
12	Monday 4/3	EXAM 3 (Ch. 9, 11, 16)	
	Wednesday 4/5	15	Energy
	Friday 4/7	NO CLASS – Easter Recess	
13	Monday 4/10	NO CLASS – Easter Recess	
	Wednesday 4/12	15	Energy
	Friday 4/14	15	Energy
14	Monday 4/17	Work on Presentations	
	Wednesday 4/19	Work on Presentations	
	Friday 4/21	Work on Presentations/Review for Final	
15	Monday 4/24	Group Presentations	
	Wednesday 4/26	Group Presentations	
	Friday 4/28	Group Presentations	
FINAL EXAM: Friday, May 5 th 1:30-4pm			

14. **Attendance:** Attendance will be taken in class and will be used for advising purposes. If your absence is not excused, then you will get a zero for any group work done on that day. Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. If the student is absent for more than 10 percent of class sessions, the faculty member will issue a written warning of de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation.
15. **Academic Accommodations:** PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.
- PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course and/or if they do not wish to utilize some or all of the elements of their AP in that course.
- Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC.
16. **University Mission:** Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.
17. **FE Mission:** PLNU provides a foundational course of study in the liberal arts informed by the life, death, and resurrection of Jesus Christ. In keeping with the Wesleyan tradition, the curriculum equips students with a broad range of knowledge and skills within and across disciplines to enrich major study, lifelong learning, and vocational service as Christ-like participants in the world's diverse societies and cultures.

18. **Copyright:** Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.
19. **Academic Honesty:** Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See [Academic Policies](#) for definitions of kinds of academic dishonesty and for further policy information.
20. **Sexual Misconduct and Discrimination:** Point Loma Nazarene University faculty are committed to helping create a safe learning environment for all students. If you (or someone you know) have experienced any form of sexual discrimination or misconduct, including sexual assault, dating or domestic violence, or stalking, know that help and support are available through the Title IX Office at pointloma.edu/Title-IX. Please be aware that under Title IX of the Education Amendments of 1972, it is required to disclose information about such misconduct to the Title IX Office.
- If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact Counseling Services at counselingservices@pointloma.edu or find a list of campus pastors at pointloma.edu/Title-IX.
21. **State Authorization:** State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on [State Authorization](#) to view which states allow online (distance education) outside of California.
22. **Spiritual Care:** Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith. If students have questions, a desire to meet with the chaplain or have prayer requests you can contact the [Office of Spiritual Development](#).