

# Chemistry Department CHE 1001 - Chemistry and Society

4 Units

Fall 2025

#### **Instructor Information**

Instructor: Dr. Emily Schmidt, PhD Email: eschmidt@pointloma.edu

Course Website: Access through Canvas

# **Course Information**

Lecture: MWF | 1:10 PM - 2:15 PM - Liberty Station 207

Office Hours: MWF | 12:30 PM - 1:10 PM - Liberty Station 207

Final Exam: TBA

**Texts:** Hill, J.W.; McCreary, T.W.; Kolb, D.K. Chemistry for Changing Times, 15th edition, Prentice Hall, 2020. This text is required (older editions are acceptable).

**Mastering Chemistry Allocation:** This is a web based homework site. You are required to purchase access. If you bought a new book from the book store 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.

**Course Description:** Designed to introduce non-science students to the major ideas of modern chemistry and their relevance in contemporary society. Chemical principles are examined and applied to areas such as nutrition, medicine, agriculture, pollution, and energy issues.

Meets a Foundational Explorations requirement; does not count toward any Chemistry Department majors. Letter grade.

# **Required Materials**

**Internet Resources and Communication:** You will be required to access this course on Canvas. You will also be required to access the Mastering Chemistry website (www.masteringchemistry.com) in order to do your assigned homework.

**Scientific calculator:** No cell phones may be used as substitution, graphing calculators are not permitted for tests or quizzes.

# **Course Objectives**

**Student Outcomes:** The following outcomes are expected and will be assessed on exams and quizzes:

- 1. Demonstrate knowledge of fundamental principles of atomic structure, bonding, acids and bases, oxidation and reduction, and basic nomenclature
- 2. Demonstrate knowledge of fundamentals of nuclear chemistry
- 3. Demonstrate knowledge of key terminology in organic chemistry and biochemistry.
- 4. Demonstrate knowledge of key concepts in air and water quality as well as energy production and consumption.
- 5. Perform research on a topic and make a presentation intended to teach others about the key concepts.
- 6. Students will be able to solve problems that are quantitative in nature

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

## **Grading Policies**

**Course Grade:** Your overall course grade will be based on your performance in the lecture. The weighting of each course activity is shown below.

Homework	10%
Class Participation	5%
Christian Practice	5%
Quizzes	10%
Exams	35%
Final	20%
Group Project	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:

А	90 – 100%
В	80 – 90%
С	70 – 80%
D	60 – 70%
NC/F	< 60%

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

# <u>Assignments</u>

**Mastering Chemistry Homework:** You will be assigned a set of homework for every chapter to be completed online at the Mastering Chemistry website. Due dates for each assignment generally fall a week or 2 after lecture completion. A late penalty of 1 % per hour past the due date will be enforced. You will have the chance to retake

each assignment 3 times, and will have 5 attempts per question, with optional hints. The online homework will count for 10% of your overall course grade. Register at <a href="https://www.masteringchemistry.com">www.masteringchemistry.com</a> with the course ID schmidt87705.

**Group Work:** We will also have a group project. Group work will count for 10% of your overall course grade.

**Participation:** We will also have periodical in-class work. Turning in these assignments will merit full points. These will not be graded, but used by me to assess class knowledge as a whole as we progress through the semester, so please try all problems even if you think you are wrong. This work will count for 5% of your overall course grade.

Christian Practice: You will be assigned to a group at the beginning of the semester and you will be asked to pray for members of the group throughout the semester. You will meet as a group at least three times during the semester outside of class time with the first meeting occurring in the first two weeks of class. You will be required to fill out a log that includes the times you met as a group, the times you have prayed for group members, as well as times that you have encouraged a classmate or helped them in some way. You will hand in this log at the end of the semester and will be required to have at least 10 entries total with entries from at least two of the three categories (prayer, encouragement, and help) in addition to the three group meetings. This log will count for 90 points. In addition, you will be required to write a brief reflection on the overall assignment. This will also be worth 10 points. This Christian practice, love of neighbor, assignment will be worth 5% of your overall course grade.

**Quizzes:** There will be three quizzes 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, or in-class open notes. These quizzes will count for 10% of your overall course grade.

**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 35% of your overall course 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 are unable to call me then have your roommate, parents, etc. make the contact for you. If you find that there are errors in the grading of your exam, you should come by my office as soon as possible.

**Final Exam:** A mandatory, 150 point final exam will be given at the time dictated by the University schedule. The final will be comprehensive over the entirety of the course. The final will count for 15% of your overall course grade.

## **Final Examination Policy:**

Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted on the Traditional Undergraduate Records: Final Exam Schedules site. If you find yourself scheduled for three (3) or more final examinations on the same day, you are authorized to contact each professor to arrange a different time for one of those exams. However, unless you have three (3) or more exams on the same day, no requests for alternative final examinations will be granted.

# **PLNU Academic Accommodations Policy**

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities in accordance with the Americans with Disabilities Act (ADA). 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 work with the student to create an Accommodation Plan (AP) that outlines allowed accommodations. The EAC makes accommodations available to professors at the student's request.

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. Accommodations are not retroactive so clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

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. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any special accommodations.

# **PLNU Attendance and Participation Policy**

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 withdrawal date or, after that date, receive an "F" grade.

### **Lomabooks Instructions for Students:**

This course is part of our course material delivery program, LomaBooks. The bookstore will provide each student with a convenient package containing all required physical materials; all digitally delivered materials will be integrated into

#### Canvas.

You should have received an email from the bookstore confirming the list of materials that will be provided for each of your courses and asking you to select how you would like to receive any printed components (in-store pick up or home delivery). If you have not done so already, please confirm your fulfillment preference so the bookstore can prepare your materials. <a href="https://www.pointloma.edu/lomabooks">https://www.pointloma.edu/lomabooks</a>

## **Language and Belonging**

Point Loma Nazarene University faculty are committed to helping create a safe and hospitable learning environment for all students. As Christian scholars we are keenly aware of the power of language and believe in treating others with dignity. As such, it is important that our language be equitable, inclusive, and prejudice free. Inclusive/Bias-free language is the standard outlined by all major academic style quides, including MLA, APA, and Chicago, and it is the expected norm in university-level work. Good writing and speaking do not use unsubstantiated or irrelevant generalizations about personal qualities such as age, disability, economic class, ethnicity, marital status, parentage, political or religious beliefs, race, gender, sex, or sexual orientation. Inclusive language also avoids using stereotypes or terminology that demeans persons or groups based on age, disability, class, ethnicity, gender, race, language, or national origin. Respectful use of language is particularly important when referring to those outside of the religious and lifestyle commitments of those in the PLNU community. By working toward precision and clarity of language, we mark ourselves as serious and respectful scholars, and we model the Christ-like quality of hospitality.

If you (or someone you know) have experienced other forms of discrimination, you can find more information on reporting and resources at <a href="https://www.pointloma.edu/nondiscrimination">www.pointloma.edu/nondiscrimination</a>

# **Sexual Misconduct and Discrimination**

In support of a safe learning environment, 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 accommodations and resources 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, faculty and staff are 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 <a href="mailto:counselingservices@pointloma.edu">counselingservices@pointloma.edu</a> or find a list of campus pastors at <a href="mailto:pointloma.edu/Title-IX">pointloma.edu/Title-IX</a>

If you (or someone you know) have experienced other forms of discrimination or bias, you can find more information on reporting and resources at www.pointloma.edu/bias

# **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.

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.

#### **Mission Statements**

**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.

**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

**GE 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.

**PLNU Recording Notification:** In order to enhance the learning experience, please be advised that this course may be recorded by the professor for educational purposes, and access to these recordings will be limited to enrolled students and authorized personnel.

Note that all recordings are subject to copyright protection. Any unauthorized distribution or publication of these recordings without written approval from the University (refer to the Dean) is strictly prohibited.

# **Artificial Intelligence (AI) Policy**

You are allowed to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro 1.5, GrammarlyGo, Perplexity, etc) to generate ideas, but you are not allowed to use AI tools to generate content (text, video, audio, images) that will end up in any work submitted to be graded for this course. If you have any doubts about using AI, please gain permission from the instructor.

## **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.