

GENERAL CHEMISTRY I (CHE1052) FALL 2020 SYLLABUS

Chemistry:
The Science of



PLNU 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.

Welcome to Chemistry 1052

This is a 4 unit chemistry course taught by the Department of Chemistry at PLNU. Chemistry is a fundamental building block of life since every physiological process ultimately involves chemical reactions. Throughout this semester, I strongly encourage you to review class work regularly, practice problems daily and ask as many questions as necessary in order to succeed. This semester will be particularly exciting since our course will begin online, giving all of us a great opportunity to learn some new remote classroom applications. Ultimately, chemistry is my favorite subject to talk about and I look forward to helping you discover this exciting field.

INSTRUCTOR:

Ariane Jansma, Ph.D.

Associate Professor

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Meet Prof J: <https://www.youtube.com/watch?v=1n8VZH8-YIw&t=5s>

OFFICE HOURS (Additional Zoom details on Canvas)

Tuesday, Thursday, and Friday 8:00 am – 9:30 am:

<https://pointloma.zoom.us/j/92647808526>

Coffee with Prof J (Additional Zoom details on Canvas)

Monday and Wednesday 8:00 – 8:30 am:

<https://pointloma.zoom.us/j/96940100203>

LECTURE SCHEDULE (Additional details on Canvas)

Lecture, Section 1: 8:30 am – 9:45 am

Monday and Wednesday: <https://pointloma.zoom.us/j/96880723675>

Friday: Pre-recorded lecture posted to Canvas by 8:00 am

DISCUSSION BOARDS (Optional)

Ask Your Professor: If you have any specific homework questions or other questions related to our course, this is the place to post! I will make every effort to respond within 24 hours.

Ask Each Other: This Discussion Board is a place for you to chat about chemistry with your fellow students, ask questions to one another or simply discuss life this semester.

Strategies for success in CHE152

1. It is crucial that you primarily understand as well as memorize course material. You will be expected to synthesize your knowledge on homework, quizzes, and exams. Focus on recognizing patterns and learn to apply the problem solving strategies that are introduced in the book and lecture.
2. Working problems is the key to success. Work the practice problems in the book as you read the material and start homework sets early so that you can take advantage of office hours.
3. Be prepared for each class session. The time you invest in reading the assigned sections, taking notes, and answering pre-lecture practice problems will be repaid in full when it comes time to study for exams.
4. Get help if you do not understand something. I am here for you!

Advice from recent General Chemistry students

- “Stay on top from the beginning. Work on test taking strategy. Study. Exams are everything.”
- “Read the sections assigned for each lecture beforehand. Even if you don't understand what you are reading, it will make so much sense when the instructor explains it. Doing this keeps you on top of this class and makes quizzes and tests much easier to study for.”
- “I advise them to start mastering chemistry assignments as soon as they are assigned. They should take advantage of office hours, too.”
- “Go to office hours if you don't understand something! Read the textbook - it actually helps so much to go over those examples and do them yourself. When studying for the exams, redo examples from class handouts.”
- “Dedicate a certain amount of time each day to reviewing in class material and go to office hours if you are confused about anything at all.”
- “Study hard and prioritize your time. Also, make a good relationship with the professor.”
- “Apply yourself and work hard. You as an individual determine your success in general chemistry.”
- “Take the class seriously from the very beginning.”

COURSE DESCRIPTION

Study of the basic principles of modern chemistry. Emphasis on atomic and molecular structure, chemical bonding, gas laws, states of matter, and solutions. Prerequisite(s): Satisfactory high school background or CHE 1003 or PSC 1014. Corequisite(s): CHE 1052L.

LEARNING OUTCOMES

An understanding of chemistry is a necessary part of an education in the basic and applied sciences, engineering, and medical professions. It also provides insight and increased comprehension regarding current events and proposed policies.

Specifically, upon completion of this course, students will be able to:

- Demonstrate a foundational knowledge of the general principles of chemistry including atomic and molecular structure, chemical bonding, states of matter, and behavior solutions.
- Solve problems related to unit conversions, stoichiometry, energy calculations, and gas laws.
- Perform basic chemical laboratory techniques related to the topics listed above.

General Education Learning Outcome 1e Quantitative Reasoning: Students will be able to solve problems that are quantitative in nature. This learning outcome will be assessed directly using problems on the final exam that are quantitative in nature.

EVALUATION

The described activities will contribute to your total course grade according to the following:

Hour Examinations (4)	50%
Homework (online & other)	15%
Quizzes and Activities	15%
Final Examination	20%

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

A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
NC/F	< 60%

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

LEARNING MATERIALS*

1. *Textbook*: Tro, Chemistry: A Molecular Approach Plus MasteringChemistry with eText, Pearson, 4th Edition, ISBN-13: 9780134103976 (hardcover text), 9780134162454 (looseleaf text), or 9780134162485 (etext)
2. *Online Homework*: MasteringChemistry www.masteringchemistry.com (bundled with text or purchased separately) Course ID: **CHE1052FALL2020**
3. *Course Website*: Canvas canvas.pointloma.edu **CHE1052-1 FA20 – General Chemistry I**
4. *Scientific Calculator*: Non-graphing, non-programmable calculator required for exams and quizzes.
5. *Optional Materials*: Tro, Study Guide for Chemistry: A Molecular Approach, Pearson, 4th Edition 2017, ISBN-13: 9780134066271. Tro, Selected Solutions Manual for Chemistry: A Molecular Approach, Pearson, 4th Edition 2017, ISBN-13: 9780134066288.

* These materials are used for both semesters of General Chemistry.

SYNCHRONOUS ATTENDANCE

Monday and Wednesday lectures will be conducted synchronously via zoom at the appropriate time for each section. You are required to attend one of these two synchronous sessions each week. These lectures will be recorded and posted to Canvas for viewing at any time. Attendance will be taken by registering with your PLNU email address before you enter the zoom room. It is recommended that you attend both synchronous sessions each week, but only one will be graded.

ASYNCHRONOUS ATTENDANCE/PARTICIPATION DEFINITION

Friday's material will be presented asynchronously and posted to Canvas each Friday by 8:00 am. A day of attendance in asynchronous content is determined as contributing a substantive note, assignment, discussion, or submission by the posted due date, when applicable. Failure to meet these standards will result in an absence for that day.

PLNU ATTENDANCE POLICY

If the student is absent for more than 10 percent of class sessions (virtual or face-to-face), 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. In some courses, a portion of the credit hour content will be delivered **asynchronously** and attendance will be determined by submitting the assignments by the posted due dates. See [Academic Policies](#) in the Undergraduate Academic Catalog. If absences exceed these limits but are due to university excused health issues, an exception will be granted.

COURSE WEBSITE

[Canvas](#) (CHE1052-2 FA20 – General Chemistry I) will be used constantly as a repository for all course material such as lecture notes, problem sets, etc. Additionally, all quizzes and exams will be conducted through Canvas. Homework assignments will be a combination of Canvas and Mastering Chemistry. Grades will be posted to Canvas throughout the semester. It is your responsibility to check Canvas regularly and to confirm that your correct email address is in the system.

HOMEWORK

Homework will be assigned regularly through [MasteringChemistry](#) (Course ID: CHE1052FALL2020). Successful completion of the homework is essential in mastering the course material. Late assignments will not be accepted.

EXAMS AND QUIZZES

Four exams and a comprehensive final will be given during the semester via Canvas using the Honorlock system. Make-up exams will be arranged only if the instructor is contacted prior to the scheduled exam time and then only if you present an institutionally valid excuse. Quizzes will be given via Canvas at the start of each week, covering material from the previous week. The lowest quiz score will be discarded when final grades are computed. *Only non-graphing and non-programmable calculators may be used for exams and quizzes.*

PLNU FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination **on its scheduled day and time**. The final examination schedule is posted on the [Undergraduate Records](#) site. No requests for early examinations or alternative days will be approved.

FOUNDATIONAL EXPLORATIONS 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 culture.

PLNU COPYRIGHT POLICY

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.

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.

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

PLNU ACADEMIC HONESTY POLICY

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.

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](#)

USE OF TECHNOLOGY

In order to be successful in the online environment, you'll need to meet the minimum technology and system requirements; please refer to the [Technology and System Requirements](#) information. Additionally, students are required to have headphone speakers compatible with their computer available to use. If a student is in need of technological resources please contact student-tech-request@pointloma.edu. Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work.

COURSE SCHEDULE

Given the hybrid and online modalities being used in the 2020-2021 academic year, the content of the course schedule and assignments will be posted in Canvas as its own document.

PLNU ACADEMIC ACCOMMODATIONS POLICY

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses. If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.