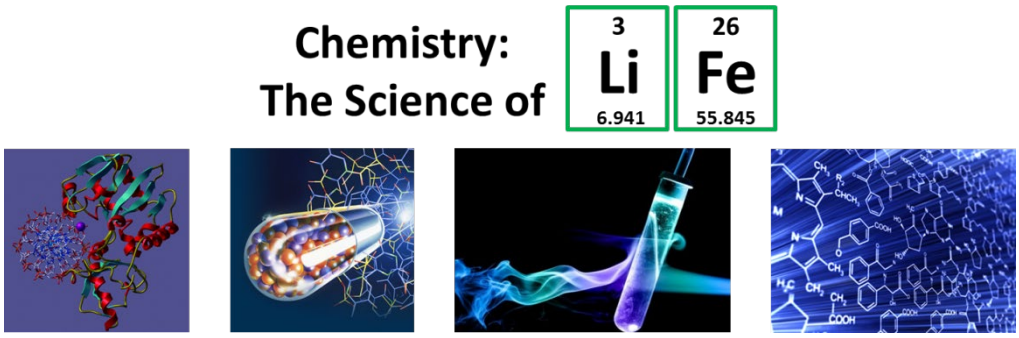
Chemistry 1003

Fundamentals of General, Organic and Biological Chemistry



Welcome to CHE 1003, Spring 2022:

Chemistry 1003 is 4 unit introductory chemistry class taught by the Department of Chemistry at PLNU. Chemistry is a fundamental building block of life since every physiological process ultimately involves chemical reactions. The field of chemistry is also critical in the development of drugs designed to help when biochemical systems are not functioning properly. As such, I will seek to demonstrate the biological relevance of chemistry as often as possible throughout this course. While chemistry may be new to some of you, I strongly encourage you to review class work regularly, practice problems daily and ask as many questions as necessary in order to succeed. Ultimately, chemistry is my favorite subject to talk about and I am very happy you are here. I look forward to helping you discover this exciting field.

INSTRUCTOR

Ariane Jansma, Ph.D.
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LECTURE SCHEDULE

Section 1: 12:15 pm – 1:20 pm
Monday, Wednesday and Friday
Latter Hall 101 (Beginning Week 2)
Click to Join the Zoom Lecture (Week 1)

OFFICE HOURS

Monday, Wednesday and Friday: 11:00 am - 12:00 pm
Tuesday and Thursday: 8:00 am - 9:00 am
Tuesday and Thursday: 10:00 am - 11:00 am
Office Hours will be hybrid with in-person locations listed in Canvas by Week 2
Click for Zoom Link to attend office hours virtually

Course Catalog Description

Examination of those aspects of inorganic and organic chemistry that are pertinent to biology and chemistry. Examines the structures and metabolic reactions of biomolecules. Provides a background for nursing, family and consumer sciences and physical education majors. (Meets a general education requirement; does not count toward any Chemistry Department majors; must also take CHE 1003L (1 unit) with this option.)

TEXT BOOK and SUPPLIES

- Fundamentals of General, Organic and Biological Chemistry, by McMurry, Castellion, Ballantine, Hoeger and Peterson, Pearson, 8th Edition, 2012 (with Mastering Chemistry).
  NEW EDITION: 9780134033099
  Required

- Calculator: Scientific
  Required

COURSE GOALS and LEARNING OBJECTIVES

At the end of the course, you will be able to:

- Identify the different properties of solids, solutions and gases
- Describe the properties of atoms, ions, molecules and molecular compounds
- Write and balance chemical reactions and explain the energies associated with them
- Identify the main functional groups (alkenes, amines, ketone, alcohol)
- Utilize basic biochemistry concepts to assemble proteins from functional groups
- Describe biochemical processes using the functions of these protein systems

EVALUATION

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

- Lecture Examinations (4)…….. 50%
- Quizzes…….. 15%
- Participation…….. 10%
- Online Homework…….. 10%
- Final Examination…… 15%

GRADES

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 93 – 100%	**A-** 90 – 92.9%
B+ 87 – 89.9 %	**B** 83 – 86.9 %	**B-** 80 – 82.9 %
C+ 77 – 79.9 %	**C** 73 – 76.9 %	**C-** 70 – 72.9 %
D+ 67 – 69.9 %	**D** 63 – 66.9 %	**D+** 60 – 62.9 %
F < 59.9 %		

ADMINISTRATION

1. Attendance: You are responsible for all the material covered during class. 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.

2. Exams and Quizzes: Four exams and a comprehensive final will be given during the semester. 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.*

3. The use of portable electronic devices (phones, laptops, iPods, etc.) not related to the course is not permitted in the classroom.

4. Participation: Class participation is crucial for all students success and the grade will be based on Canvas assignments.

5. Online Homework: Homework will be assigned regularly through MasteringChemistry (**Course ID: jansma65892**). Successful completion of the homework is essential in mastering the course material. Late assignments will not be accepted.

6. Course Website: Canvas (CHE1003-1 FA22 – Introduction to General, Organic and Biochemistry) is used as a repository for course material such as lecture notes, slides, and miscellaneous items. Announcements will be sent out via Canvas. It is your responsibility to check Canvas regularly and to confirm that your correct email address is in the system.

7. Course Schedule: The course schedule is available on canvas.

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.

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

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.

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.

PLNU ACADEMIC ACCOMMODATIONS POLICY

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.