



CHEM 1303 General Chemistry I (B-Global)
Spring 2024
Jan 16, 2024 - May 8, 2024

Instructor: Dr. Andrea Oseolorun
Section # and CRN: Z01 24522
Office Location: Room 230 J EE O’banion Building (New Science)
Office Phone: 936-261-3119
Email Address: admoseolorun@pvamu.edu
Office Hours: TR 11:00 am – 1:00 pm in-person with (Virtual) Link request by email.
Mode of Instruction: Internet-Asynchronous

Course Location: Online

Class Days & Times:

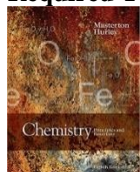
Catalog Description: *CHEM 1303 General Inorganic Chemistry: 3 semester hours.*

For students majoring or minoring in chemistry. Theory of matter and concepts of measurement, atoms, molecules, and ions. Stoichiometry and chemical calculations, reactions in aqueous solutions, the kinetics of gases, thermo-chemistry, atomic structure, electron configurations, and chemical bonds.

Prerequisites: [\(MATH 1314 or MATH 1113\)](#) or [\(MATH 1511 or MATH 1115\)](#).

Co-requisites: N/A

Required Text(s):



CHEMISTRY: Principles and Reactions by William L. Masterton and Cecile N. Hurley (Cengage Learning) 8th edition. ISBN- 9781305863088 (digital e-text)
<https://www.bkstr.com/Home/10001-10734-1?demoKey=d>
University Bookstore: Phone:(936) 261-1990

Recommended Text(s): **Chemistry for Changing Times** 14th edition by Terry W. McCreary, Doris K. Kolb, C Alton Hassell, Paula Marshall, and John W. Hill (ISBN-13: 9780321972026)

Calculations in Chemistry: An Introduction (Second Edition) eBook or print
Author(s): Donald J. Dahm; Eric A. Nelson. Publisher: W. W. Norton & Company
Print ISBN: 9780393614367, 0393614360 or e-text ISBN: 9780393616323, 0393616320

Student Learning Outcomes:

	Upon successful completion of this course, students will be able to:	Program Learning Outcome # Alignment	Core Curriculum Outcome Alignment

1	Demonstrate analytical problem-solving skills in stoichiometry.	ABCD	
2	Explain the underlying theoretical principles that related to chemical behavior at the atomic, molecular, and macroscopic levels and in all three states of matter.	ABCD	
3	Predict and explain the energy changes associated with interactions of atoms, molecules, and ions.	ABCD	
4	Utilize dimensional analysis in unit conversions and solve stoichiometric problems in chemical reactions.	ABCD	
5	Explain the chemical behavior of the elements based on location on the periodic table	ABCD	
6	Define and Describe the Significance of Green and Sustainable Chemistry.	ABCDEF	

Major Course Requirements

Method of Determining Final Course Grade

Course Grade Requirement and % of Final Grade	Value	Total
5 Unit Modules		
1. Exams (60%)	4 -50 points each	200
2. Discussions (5%)	4 - Vary based on the individual assignment	35
3. Quizzes (15%)	4 – 10 points each	55
4. Module exit tickets (1%)	6 – 1 point each	6
5. Basic Math assessment quiz	1 – 0.01 points	1.19
6. Written Recitation/Homework (14%)	4 - points vary	85
7. Case studies (5%)	2 – points vary	30
Total:		412.19

Grading Criteria and Conversion:

A = 100-90%

B = 89-80%

C = 79-70%

D = 69-60%

F = 59% and below

Detailed Description of Major Assignments:

Assignment Title or Grade Requirement	Description
Getting Started with Module 1	📚 Discussion 1 "Get-to-Know you" + 📝 HW1 + 🍌 Quiz 1a - Basic Math Practice Quiz + 👁️ Jove videos and learning check quizzes + 🍌 Quiz 1b - Scientific notation concept mastery quiz + 🍌 Homework 2 - The International System of Units (SI): Base units + 📝 Module 1 Exit Ticket
Module 2	🍌 Quiz 2 Definitions from chapters 1 and 2 + 🍌 Exam 1 online + 📝 Module 2 Exit Ticket
Module 3 – all assignments to this point will be used for the midterm grade	🍌 Homework 3 – Stoichiometry + 👁️ Jove videos and learning check quizzes + 🚗 ⚡ 🌍 Discussion 2 – Title: The Carbon Calculator + 🍌 Quiz 3 + 🍌 Exam 2 on Stoichiometry, Moles, Molarity and Concentration from Chapters 3, 4 and 10 + 📝 Module 3 Exit Ticket
Module 4	🍌 Homework 4 + 🍌 Quiz 3 + 📝 Module 4 Exit Ticket

Module 5	Case study 1: Climate + Homework 5 + Jove videos and learning check quizzes + Quiz 4 + Exam 3 + Module 5 Exit Ticket
Module 6	Jove videos and learning check quizzes + Discussion 3: on the United Nations Sustainability Goals, Green Chemistry Principles, and Energy + Case Study 2 on Life Cycle Assessments + Module 6 Exit Ticket
Module 7	Discussion 4 - "The United Nations and Climate Change Mitigation, the Oceans are the Key + Final exam review quiz + Final Exam
All Exams	Exam 1, Midterm (Exam 2), Exam 3, Final Exam (Exam 4)

Semester Calendar

**Week 1-Week 3:
Topics**

Module 1 on Canvas

Introduction, Syllabus Review, Basic Math Review, Matter, Measurements and Energy, and The Atom.

Chapter (s):

1 and 2

Assignment (s):

Discussion 1 "Get-to-Know you" + HW1 + Quiz 1a - Basic Math Practice Quiz + Jove videos and learning check quizzes + Quiz 1b - Scientific notation concept mastery quiz + Homework 2 - The International System of Units (SI): Base units + Module 1 Exit Ticket

Weeks 4:

Module 2 on Canvas

Topic:

Matter and Measurements, Introduction to the Atom and the periodic table

Chapter (s):

2

Assignment (s):

Practice quiz for exam 1 Preparation, Quiz 2 Definitions from chapters 1 and 2 + Exam 1 online, Module 2 Exit Ticket

Week 5- Week 6:

Module 2 on Canvas continued

Topic

Introduction to Atomic Structure and Bonding

Chapter (s):

3

Assignment (s):

Jove videos and learning check quizzes + Exam 2 on Stoichiometry, Moles, Molarity and Concentration from Chapters 3, 4 and 10

Week 7 – week 8:

Module 3 on Canvas

Topics

Mass Relationships Reactions in Aqueous Solution and Chapter 10 (Solutions) 4 and Chapter 10 selected topics*

Chapter (s):

4 and Chapter 10 selected topics*

Assignment (s):

Homework 3 + Exam 2 (Midterm exam) + Module 3 Exit Ticket

Week 9 – Week 11:

Module 4 on Canvas

Topic

Electronic Structure and the Periodic Table) and 7 Covalent Bonding (Lewis structures and Molecular shapes specifically

Chapter (s):

6 and 7

Assignment (s):

Watch all videos and take learning check quizzes, complete quiz 3 and prepare for Exam 3, Module ticket 4

Week 12:

Module 5 on Canvas

Topic

Gases

Chapter (s):

5

Assignment (s): 📺 Watch all videos, 🎮 Case Study 1: Climate Adaption Game, + 📝 quiz 4 and ✍️ Take exam 3, Module ticket 5

Week 13 – Week 14: Module 6 on Canvas

Topic Thermochemistry

Chapter (s): 8

Assignment (s): 📝 Homework 4, 📺 Watch all videos, complete 🎮 Chapter 8 learning check quiz, ✍️ Case Study 2 on Life Cycle Assessments, and ✍️ Module ticket 6

Week 15 – Week 16: Module 7 on Canvas

Topic Review and Makeup

Chapter (s): **Review 1 – 10 except 9***

Assignments 📅 **Final exam review, Discussion 4: The United Nations and Climate Change Mitigation, the Oceans are the Key, and ✍️ take the Final (Exam 4)**

Student Support and Success

John B. Coleman Library

The John B. Coleman Library's mission is to enhance the scholarly pursuit of knowledge, to foster intellectual curiosity, and to promote lifelong learning and research through our innovative services, resources, and culture. programs, which support Prairie View A&M University's global mission of teaching, service, and research. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty. Website: <https://www.pvamu.edu/library/>; Phone: 936-261-1500

The Learning Curve (Center for Academic Support)

The Learning Curve offers Tutoring via peer tutoring. The services include workshops (i.e., Save My Semester, Recalculate Your Route), seminars (i.e., Tools You Can Use: TI-84), group review sessions (i.e., College Algebra Topic Reviews, GRE Preparation), group study opportunities (i.e., TSIA, HESI, Study Break, Exam Cram), and test-taking strategies (How to Take Notes, Study Buddy, 5-Day Study Guide). The Learning Curve is a nationally certified tutoring program through the National Tutoring Association. The peer tutors are trained and certified by the coordinator each semester. Location: J.B. Coleman Library Rm. 207F. Phone: 936-261-1561

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS)

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS) is designed to help Prairie View students in their second year and beyond navigate toward graduation by providing the following services: Academic Advisement, Targeted Tutorials for Personalized Learning, Campus Wide Referrals, and Academic & Social Workshops. Location: J.B. Coleman Library Rm. 306. Phone: 936-261-1040

Writing Center

The Writing Center provides student consultants on all aspects of the writing process and a variety of writing assignments. Writing Center consultations assist students in such areas as prewriting, brainstorming, audience awareness, organization, research, and citation. Students taking online courses or courses in the Northwest Houston Center or College of Nursing may consult remotely or by email. Location: Hilliard Hall Rm. 121. Phone: 936-261-3724.

Student Counseling Services

The Student Counseling Services unit offers a range of services and programs to assist students in maximizing their potential for success: short-term individual, couples, and group counseling, as well as crisis intervention, outreach, consultation, and referral services. The staff is licensed by the State of Texas and provides assistance.

to students who are dealing with academic skills concerns, situational crises, adjustment problems, and emotional difficulties. Information shared with the staff is treated confidentially and in accordance with Texas State Law. Location: Owens-Franklin Health Center Rm. 226. Phone: 936-261-3564

Testing

The Department of Testing administers College Board CLEP examinations, the HESI A2 for pre-nursing majors, LSAT for law school applicants and MPRE for second-year law students, the Experiential Learning Portfolio option, the Texas Success Initiative (TSI) Assessment, which determines college readiness in the state, and exam proctoring, among other services such as SAT and ACT for high school students. Location: Delco Rm. 141. Phone: 936-261-4286

Office of Diagnostic Testing and Disability Services

As a federally mandated educational support unit, the Office of Disability Services serves as the repository for confidential disability files for faculty, staff, and students. For persons with a disability, the Office develops individualized ADA letters of an accommodation request. Other services include learning style inventories, awareness workshops, accessibility pathways, webinars, computer laboratory with adapted hard and software, adapted furniture, proctoring of non-standardized test administrations, ASL interpreters, ALDs, digital recorders, Livescribe, Kurtzweil, and a comprehensive referral network across campus and the broader community. Location: Evans Hall Rm. 317. Phone: 936-261-3585

Veteran Affairs

Veterans Services works with student veterans, and current military and military dependents to support them Transition to the college environment and continued persistence to graduation. The Office coordinates and certifies benefits for both the G.I. Bill and the Texas Hazlewood Act. Location: Evans Hall Rm. 323. Phone: 936-261-3563

Office for Student Engagement

The Office for Student Engagement delivers comprehensive programs and services designed to meet the co-curricular needs of students. The Office implements inclusive and accessible programs and services that enhance student development through exposure to and participation in diverse and relevant social, cultural, intellectual, recreational, community service, leadership development, and campus governance. Location: Memorial Student Center Rm. 221. Phone: 936-261-1340

Career Services

Career Services supports students through professional development, career readiness, and placement and employment assistance. The Office provides one-on-one career coaching, interview preparation, resume and letter writing, and career exploration workshops and seminars. Services are provided for students at the Northwest Houston Center and College of Nursing in the Medical Center twice a month or on a requested basis. Distance Learning students are encouraged to visit the Career Services website for information regarding the services provided. Location: Evans Hall Rm. 217. Phone: 936-261-3570

University Rules and Procedures

Disability Statement (Also See Student Handbook):

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please contact Disability Services, in Evans Hall, Room 317, or call 936-261-3585/3.

Academic Misconduct (See Student Handbook):

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of Academic Dishonesty:

1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.
4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submit them as one's work also constitutes plagiarism.

Nonacademic Misconduct (See Student Handbook)

The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual Misconduct (See Student Handbook):

Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Title IX Statement

Prairie View A&M University (PVAMU) is committed to supporting students and complying with Texas A&M University System non-discrimination policy. It seeks to establish an environment that is free of bias, discrimination, and harassment. If you experience an incident of sex- or gender-based discrimination, including sexual harassment, sexual assault, or attempted sexual assault, we encourage you to report it. While you may talk to a faculty member about an incident of misconduct, the faculty member must report the basic facts of your experience to Ms. Alexia Taylor, PVAMU's Title IX Coordinator. If you would like to speak with someone who may be able to afford you privacy or confidentiality, some individuals can meet with you. The Title IX Coordinator is designated to handle inquiries regarding non-discrimination policies and can assist you with understanding your options and connect you with on- and off-campus resources. The Title IX Coordinator can be reached by phone at 936-261-2123 or in Suite 013 in the A.I. Thomas Administration Building.

Class Attendance Policy (See Catalog for Full Attendance Policy)

Prairie View A&M University requires regular class attendance. Attending all classes supports the full academic development of each learner whether classes are taught with the instructor physically present or via distance learning technologies such as interactive video and/or the Internet.

Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in the assignment of a grade of "F". Absences are accumulated beginning with the first day of class during regular semesters and summer terms. Each faculty member will include the University's attendance policy in each course syllabus.

Student Academic Appeals Process

Authority and responsibility for assigning grades to students rest with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other the problematic academic event that prompted the complaint.

TECHNICAL CONSIDERATIONS

Minimum Recommended Hardware and Software:

- Intel PC or Laptop with Windows 7; Mac with OS X; Smartphone or iPad/Tablet with Wi-Fi
- High-speed Internet access
- 8 GB Memory
- Hard drive with 320 GB storage space
- 15” monitor, 800x600, color or 16 bit
- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- most current version of Google Chrome, Safari, Internet Explorer, or Firefox

Note: Be sure to enable Java & pop-ups in the Web browser preferences

Participants should have basic proficiency in the following computer skills:

- Sending and receiving email
- A working knowledge of the Internet
- Proficiency in Microsoft Word (or a program convertible to Word)
- Proficiency in the Acrobat PDF Reader
- Basic knowledge of Windows or Mac OS.

Netiquette (online etiquette):

Students are expected to participate in all discussions and virtual classroom chats as directed. Students are to be respectful and courteous to others on discussion boards. Foul or abusive language will not be tolerated.

Technical Support:

Students should go to <https://mypassword.pvamu.edu/> if they have password issues. The page will provide instructions for resetting passwords and contact information if login issues persist. For other technical questions regarding eCourses, call the Office of Distance Learning at 936-261-3283

Communication Expectations and Standards:

Emails or discussion postings will receive a response from the instructor, usually in less than 48 hours. Urgent emails should be marked as such. Check regularly for responses.

Discussion Requirement:

Online courses often require minimal to no face-to-face meetings. However, conversations about the readings, Lectures, materials, and other aspects of the course can take place in a seminar fashion. This will be accomplished by the use of the discussion board. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it/they should be copied and pasted to the discussion board.