

General Chemistry for STEM I Syllabus

CHEM1305 (CRN 20546)

Spring 2025

Course and Instructor Information:

Instructor of Record: Dr. H. Patricio Del Castillo

Instructor's contact: hpdelcastil@utep.edu

Office hours and location: Upon request through the peer leaders

Technical support contact: helpdesk@utep.edu

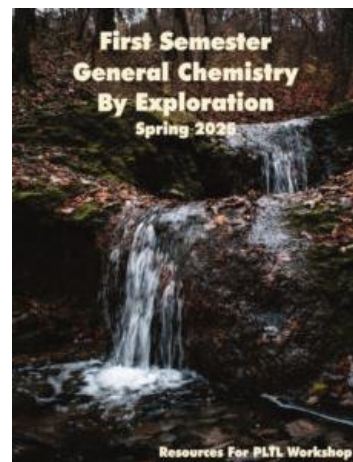


Course description

UTEP CHEM1305 is the first part of a series of integral courses on General Chemistry for STEM. This course encompasses the fundamentals of topics to understand the structure of matter and the atoms and their interaction with the universe.

Text and Materials:

- Scientific calculator
- **Class Guides** (a **blank hard copy** of the instructor's guides)
- Manual "**First Semester General Chemistry by Exploration**"
Obtain it at <https://pltlbooks.org/>.
- Any General Chemistry Book (your instructor recommends any edition from Raymond Chang)



Course Requirements:

During this course, you will perform activities in-person and online through Blackboard. It will be very important that you comply with the activities in the corresponding due dates. The final grade of your course will be calculated by the following criteria:

Average of Homework Activities – 15%

Average of Exams (1 Mock Midterm, 2 Midterms, 1 Final) – 60%

Average of Workshop Quizzes – 15%

Average of Attendances to Workshop – 10%

Homework activities: They are designed to test your knowledge on the topics that we have seen in class. They will be displayed in the form Blackboard quizzes that must be completed before the specified due date. You will have **two attempts per homework** and only the highest grade will count.

Mock Midterm Exam: During the semester there will be **one single** mock midterm exam that will be part of your “Average of Exams” grade. The test will be displayed in the form of a Blackboard quiz that must be completed using the Software **Respondus Lockdown Browser** available at the UTEP Webpage. What this test will grade is your comprehension on how to complete midterm exams in the correct online format, following the **camera angle indications**. The content that you must study for this exam will belong to the “**Tutorial to take exams using the Lockdown Browser**” available in “**Module 1 – Check-in**”.

Midterm Exams: The midterm exams will test your knowledge on certain parts of the course, and they will be completed **in-person** on specific dates, unless otherwise specified. If at any point of the semester we need to switch to an online midterm exam, we will follow the **mock midterm exam** indications mentioned above. **FAILING TO COMPLY WITH THIS WILL RESULT IN THE STUDENT SCORING A 0 AS HIS OR HER GRADE, WITHOUT A CHANCE TO RETAKE HIS OR HER EXAM.** Make sure that you check your feedback from the “mock midterm exam” that your instructor will give you during the semester so that you are certain that you know how to complete these activities.

Final Exam: A comprehensive final exam will test your overall knowledge of the course. This examination will be part of the “Average of Exams” grade, along with the midterm exams.

Workshop Quizzes: During your Workshop sessions, your Peer Leader will assign quizzes to test your knowledge over the course. Every peer leader might work differently, but all of them will reference the **manual** of the course, so it is important to have it on you always.

Average of Attendances to Workshop: Your attendance to the workshop is mandatory. Your peer leader will pass list at the beginning of every session. Having your manual is also fundamental for this grade criterion. **Failing to show up to the session without a manual will take 30 points off from the grade of “Attendance to workshop” of that day.**

It is the student’s responsibility to monitor his or her grade as the semester progresses. The grades will be in display and updated for the student!

Grading system:

Your activities will be graded on a basis of 0-100. By the end of the course, your accumulated grade will be translated to the corresponding letter grade using the following criteria:

A = 90 - 100

D = 60 – 69

B = 80 - 89

F = 0 - 59

C = 70 – 79

Instructors Policies:

Attendance: The instructor **will not** take attendance for the lecture. It is your responsibility to attend the classes, to do self-studying if you miss a class, and to schedule your own office hours if you need personalized assistance. For the workshop, your peer leader will take attendance and expect you to show up with your course manual.

Late policy: The success for this class relies mostly on the completion of your online and in-person activities on time. There are only two instances in which the instructor will grant an extension of any activity that needs to be completed in-person:

- 1) An instance regarding an infectious disease or a situation that physically incapacitates you from attending your class. Medical and/or other type of valid evidence must be provided for this. **The evidence must be official, and it must contain the date to be considered. Consider using the health center's services located behind the Union Building at UTEP (link to the center: <https://www.utep.edu/chs/shc/>). This service is part of your tuition fee.**
- 2) An instance regarding an athletic or academic event. It will be 100% your responsibility to notify your instructor about this instance with enough time. Official letters and emails from your coach or academic representative is enough valid proof.

There are only two instances in which the instructor will allow you to work outside of your scheduled times for any online activity:

- 1) An instance regarding a situation that physically incapacitates you from working from home, and/or at UTEP's computer laboratories (refer to the location of these facilities in the syllabus). Medical and/or other type of valid evidence must be provided for this. **The evidence must be official, and it must contain the date to be considered.**
- 2) A malfunction related to Blackboard that was detected and addressed with the helpdesk before due dates during regular office hours. Students who experience malfunctions from Blackboard close or during the due date of an activity **will not** be considered for an extension. If you decide to submit a homework activity 10 minutes before the due date, then this is the risk.

Other than this, there will be **NO EXCEPTIONS** for any late submissions or absence to class.

Technical support at UTEP:

UTEP offers many technical support services that will assist you in completing your activities during the semester:

- 1) UTEP offers working spaces that are open to the students. Get familiar with the times and location of the workplaces by accessing the following link:
https://www.utep.edu/technologysupport/ServiceCatalog/COMP_ComputerPrintingLabs.html.
- 2) UTEP offers the possibility to lend technological gadgets in the event of any loss during the semester. Email the helpdesk for more information.
- 3) Any technical difficulty related to your webmail or Blackboard's functions is solved through the helpdesk.

Contact the helpdesk for more information: helpdesk@utep.edu. **Make sure to always contact them during office hours to maximize your chances to get a reply!**

Course calendar

Week	Tuesday	Thursday
1 – Jan 20 th – 24 th	Module 1 - Class check-in	Module 3 – Atoms
2 – Jan 27 th – 31 st	Module 3 – Atoms	Module 4 – Periodic Relationships Friday 31 st - Online Mock Midterm Exam
3 – Feb 3 rd – 7 th	Module 4 – Periodic Relationships	Module 5 – Chemical Bonds I
4 – Feb 10 th – 14 th	Module 5 – Chemical Bonds I	Module 6 – Chemical Bonds II
5 – Feb 17 th – 21 st	Module 6 – Chemical Bonds II	Module 7 – Chemical Reactions part I
6 – Feb 24 th – 28 th	<i>Review for 1st Midterm Exam*</i>	<i>Review for 1st Midterm Exam*</i>
7 – Mar 3 rd – 7 th	1 st Midterm Exam – During class time	Module 7 – Chemical Reactions part II
8 – Mar 10 th – 14 th	SPRING BREAK – NO CLASSES	
9 – Mar 17 th – 21 st	NO LECTURE ACTIVITIES – ATTEND YOUR LABORATORY AND WORKSHOP ONLY	
10 – Mar 24 th – 28 th	Module 8 – Aqueous Reactions	Module 8 – Aqueous Reactions
11 – Mar 31 st – Apr 4 th	Module 9 – Gases	Module 9 – Gases
12 – Apr 7 th – 11 th	Module 10 – Thermochemistry	Module 10 – Thermochemistry
13 – Apr 14 th – 18 th	Module 11 – Quantum Chemistry	Module 11 – Quantum Chemistry
14 – Apr 21 st – 25 th	<i>Review for 2nd Midterm Exam*</i>	<i>Review for 2nd Midterm Exam*</i>
15 – Apr 28 th – May 2 nd	2 nd Midterm Exam – During class time	<i>Review for Final Exam*</i>
16 – May 5 th – 9 th	<i>Review for Final Exam*</i>	<i>Review for Final Exam*</i>
17 – May 12 th – 16 th	Final Exam (Thursday, May 15 th from 1:00 PM – 3:00 PM MT)	

***Review sessions may be established as online activities. Your instructor will let you know every time**

***Sessions will be given in an online fashion. Please check your announcement section in Blackboard for more instructions.**

***" Module 2 – Chemistry and Measurement" will be covered during the workshop section of the lecture. This module will be part of the first midterm exam.**

Assignment Calendars

	Topic	Due date of homework activity in Blackboard
<u>Homework 1</u>	Module 1 – Check-in to the course	Fri, Jan 24 th before 10:00 PM MT
<u>Homework 2</u>	Module 3 – Atoms	Fri, Jan 31 st before 10:00 PM MT
<u>Homework 3</u>	Module 4 – Periodic Relationships	Fri, Feb 7 th before 10:00 PM MT
<u>Homework 4</u>	Module 5 – Chemical Bonds I	Fri, Feb 14 th before 10:00 PM MT
<u>Homework 5</u>	Module 6 – Chemical Bonds II	Fri, Feb 21 st before 10:00 PM MT
<u>Homework 6</u>	Module 7 – Chemical Reactions part I	Fri, Feb 28 th before 10:00 PM MT
<u>Homework 7</u>	Module 7 – Chemical Reactions part II	Fri, Mar 21 st before 10:00 PM MT
<u>Homework 7</u>	Module 8 – Aqueous Reactions	Thu, Mar 27 th before 10:00 PM MT
<u>Homework 8</u>	Module 2 – Chemistry and Measurement	Thu, Mar 27 th before 10:00 PM MT This HW will not be done through Blackboard. Your instructor will give you more instructions as the date gets closer.
<u>Homework 9</u>	Module 9 – Gases	Fri, Apr 4 th before 10:00 PM MT
<u>Homework 10</u>	Module 10 – Thermochemistry	Fri, Apr 11 th before 10:00 PM MT
<u>Homework 11</u>	Module 11 – Quantum Chemistry	Thu, Apr 17 th before 10:00 PM MT
<u>Homework 12</u>	Extra credit – All modules	Fri, May 9 th before 10:00 PM MT

***Both calendars are subject to change depending on the performance of the group**

***Acknowledge “MT” as “Mountain Time”, which is the official time of El Paso, Texas!**

Exams Dates:

Mock Midterm Exam – Friday, Jan 31st, in Bb before 10:00 PM MT [Module 1]

Midterm exam 1 – Thursday, Mar 4th, during class time [Modules 2 – 7]

Midterm exam 2 – Tuesday, Apr 29th, during class time [Modules 7 – 11]

Cumulative Final exam – Thursday, May 15th, from 1:00 PM – 3:00 PM MT [All Modules]

Office hours Schedules:

Throughout the semester, office hours will be available to all students at **room ACES C-003** (the basement of the “Classroom” building). They will be provided by the peer leaders in the following schedules. You can attend the office hours session that best fits your schedule. On Mondays and Fridays during “**Preview**” times, office hours will not be available.

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30 a. m.	Erick 9:30 - 10:30 AM	Asher 9:30 - 10:30 AM	Fabi 9:30 - 10:30 AM	Frida 9:30 - 10:30 AM	Danisa/Frida 9:30 - 10:30 AM
10:00 a. m.					
10:30 a. m.	Kurt/Oswaldo 10:30 - 11:30 AM	Osvaldo/Sofia 10:30 - 11:30 AM	Carlos 10:30 - 11:30 AM	Camila/Amy 10:30 - 11:30 AM	Anthony 10:30 - 11:30 AM
11:00 a. m.					
11:30 a. m.	Preview	Oscar 11:30 - 12:30 PM	Matthew/Alyssa 11:30 - 12:30 PM	Daire/Eduardo 11:30 - 12:30 PM	Preview
12:00 p. m.					
12:30 p. m.	Gio 12:30 - 1:30 PM	Christian/Oscar 12:30 - 1:30 PM	Matthew 12:30 - 1:30 PM	Emily B/Ivan 12:30 - 1:30 PM	Mary 12:30 - 1:30 PM
1:00 p. m.					
1:30 p. m.	Mary 1:30 - 2:30 PM	Ana/Aaron 1:30 - 2:30 PM	Angelina 1:30 - 2:30 PM	Christian/Ana 1:30 - 2:30 PM	Daire/Ivan 1:30 - 2:30 PM
2:00 p. m.					
2:30 p. m.	Paulina 2:30 - 3:30 PM	Anjo 2:30 - 3:30 PM	Ale 2:30 - 3:30 PM	Anjo 2:30 - 3:30 PM	Isabella 2:30 - 3:30 PM
3:00 p. m.					
3:30 p. m.	Emily Z 3:30 - 4:30 PM	Angel 3:30 - 4:30 PM	Isabella 3:30 - 4:30 PM	Danisa 3:30 - 4:30 PM	Eli 3:30 - 4:30 PM
4:00 p. m.					

Module-Book Chapter (Raymond Chang, Chemistry) Relationship:

Homework Activity	Location in the Manual
Module 1 – Check-in to the course	Not in the book, look for it inside the folder “Module 1” in Blackboard
Module 2 – Chemistry and Measurement	Chapter 1 – Chemistry: The Study of Change
Module 3 – Atoms	Chapter 2 – Atoms, Molecules, and Ions (Chapter 7 Electron Configuration is included in this module)
Module 4 – Periodic Relationships	Chapter 8 – Periodic Relationships among Elements
Module 5 – Chemical Bonds I	Chapter 9 – Chemical Bonding I: Basic Concepts
Module 6 – Chemical Bonds II	Chapter 10 – Chemical Bonding II: Molecular Geometry and Hybridization of Atomic Orbitals
Module 7 – Chemical Reactions	Chapter 3 – Mass Relationships in Chemical Reactions
Module 8 – Aqueous Reactions	Chapter 4 – Reactions in Aqueous Solutions
Module 9 - Gases	Chapter 5 – Gases
Module 10 – Thermochemistry	Chapter 6 – Thermochemistry
Module 11 – Quantum Theory	Chapter 7 – Quantum Theory and the Electronic Structure of Atoms

UTEP Academic Calendar – Spring 2025:

Jan 20th	Dr. Martin Luther King, Jr. Holiday – University Closed
Jan 21st	Spring classes begin
Jan 21-24th	Late Registration (Fees are incurred)
Feb 5th	Spring Census Day Note: This is the last day to register for classes. Payments are due by 5:00 pm.
Feb 17th	20th Class Day Note: Students who were given a payment deadline extension will be dropped at 5:00 pm if payment arrangements have not been made.
Feb 21st	Graduation application deadline for degree conferral
Mar 10-14th	Spring Break
Mar 19th	Freshman midterm grades are due
Mar 28th	Cesar Chavez Holiday - No classes
Apr 4th	Spring Drop/Withdrawal Deadline Note: Student-initiated drops are permitted after this date, but the student is not guaranteed a grade of W. The faculty member of record will issue a grade of either W or F.
Apr 18th	Spring Study Day; Deadline to submit candidates' names for commencement.
May 8th	Spring last day of classes
May 9th	Dead day
May 12-16th	Spring Final Exams
May 17-18th	Spring Commencement
May 21st	Grades are Due
May 22nd	Grades are posted to student records.