General Chemistry for STEM I Syllabus

CHEM1305 (CRN 11151)

Fall 2024

Course and Instructor Information:

Instructor of Record: Dr. H. Patricio Del Castillo

Instructor's contact: hpchem_utep@outlook.com

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

BY EXPLORATION Fall 2024

Resources For PLTL Workshop

FIRST SEMESTER GENERAL CHEMISTRY

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 – 25%

Average of Exams (1 Mock Midterm, 2 Midterms, 1 Final) – 50%

Average of Workshop Quizzes – 15%

Average of Attendances to Workshop - 10%

<u>Homework activities:</u> 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 <u>two attempts per homework</u> 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".

<u>Midterm Exams</u>: The midterm exams will test your knowledge on certain parts of the course, and they will be completed <u>in-person</u> 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 <u>mock midterm exam</u> 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.

<u>Final Exam:</u> 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.

<u>Workshop Quizzes:</u> 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.

<u>Average of Attendances to Workshop:</u> 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. <u>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.</u>

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:

<u>Attendance:</u> The instructor <u>will not</u> 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.

<u>Late policy:</u> 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 <u>in-person</u>:

- 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. Do consider using the health center's services located behind the Union Building at UTEP (link to the center: https://www.utep.edu/chs/shc/).
- 2) An instance regarding an <u>athletic or academic event</u>. 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 <u>online</u> activity:

- An instance regarding a situation that <u>physically incapacitates you from working from home</u>, and/or at <u>UTEP's computer laboratories</u> (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_Comp_uterPrintingLabs.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 – Aug 26 th – 30 th	Module 1 - Class check-in	Module 3 – Atoms	
2 – Sep 2 nd – 6 th	Module 3 – Atoms	Module 4 – Periodic Relationships	
		Online Mock Midterm Exam	
3 – Sep 9 th – 13 th	Module 4 – Periodic Relationships	Module 5 – Chemical Bonds I	
4 – Sep 16 th – 20 th	Module 5 – Chemical Bonds I	NO CLASSES	
5 – Sep 23 rd – 27 th	Module 6 – Chemical Bonds II	Module 6 – Chemical Bonds II	
6 – Sep 30 th – Oct 4 th	Review for 1 st Midterm Exam*	Review for 1 st Midterm Exam*	
7 - Oct 7 th - 11 th	1 st Midterm Exam – During class time	Module 7 – Chemical Reactions	
8 - Oct 14 th - 18 th	Module 7 – Chemical Reactions	Module 8 – Aqueous Reactions	
9 - Oct 21st - 25th	Module 8 – Aqueous Reactions	Module 9 – Gases	
10 – Oct 28 th – Nov 1 st	Module 9 - Gases	NO CLASSES	
11 - Nov 4 th - 8 th	NO CLASSES	Module 10 – Thermochemistry	
12 – Nov 11 th – 15 th	Module 10 – Thermochemistry	Module 11 – Quantum Chemistry	
13 – Nov 18 th – 22 nd	Module 11 – Quantum Chemistry	Daview for 20d Midtown France	
	Review for 2 nd Midterm Exam*	<u>Review for 2nd Midterm Exam*</u>	
14 – Nov 25 th – 29 th	2 nd Midterm Exam – During class time	Thanksgiving Holiday – NO CLASSES	
15 – Dec 2 nd – 6 th	Review for Final Exam*	Review for Final Exam*	
16 – Dec 9 th – 13 th	Final Exam (Tuesday, December 10 th from 1:00 PM – 3:45 PM MT)		

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

^{*}If the lecture section of this course is dropped, you risk being dropped from the laboratory section as well! Please talk to your career advisor for more information.

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

^{*&}quot; 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

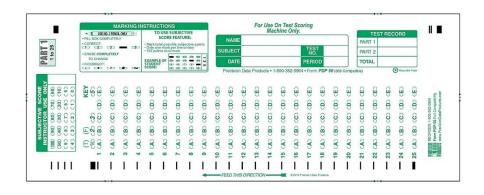
	Topic	Due date of homework activity in Blackboard	
Homework 1	Module 1 – Check-in to the course	Fri, Aug 30 th before 10:00 PM MT	
Homework 2	Module 2 – Chemistry and Measurement	Fri, Sep 6 th before 10:00 PM MT	
Homework 3	Module 3 – Atoms		
Homework 4	Module 4 – Periodic Relationships	Fri, Sep 13 th before 10:00 PM MT	
<u>Homework 5</u>	Module 5 – Chemical Bonds I	Fri, Sep 20 th before 10:00 PM MT	
<u>Homework 6</u>	Module 6 – Chemical Bonds II	Tue, Oct 1 st before 10:00 PM MT	
Homework 7	Module 7 – Chemical Reactions	Fri, Oct 18 th before 10:00 PM MT	
Homework 8	Module 8 – Aqueous Reactions	Fri, Oct 25 th before 10:00 PM MT	
Homework 9	Module 9 – Gases	Fri, Nov 1 st before 10:00 PM MT	
Homework 10	Module 10 – Thermochemistry	Fri, Nov 15 th before 10:00 PM MT	
Homework 11	Module 11 – Quantum Chemistry	Fri, Nov 22 nd before 10:00 PM MT	
Homework 12	Extra credit – All modules	Fri, Dec 6 th before 10:00 PM MT	

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

Exams Dates:

Mock Midterm Exam – Friday, Sep 6th, in Bb before 10:00 PM MT[Module 1]Midterm exam 1 – Tuesday, Oct 8th, during class time[Modules 2 – 6]Midterm exam 2 – Tuesday, Nov 26th, during class time[Modules 7 – 11]Cumulative Final exam – Tuesday, Dec 10th, from 1:00 PM – 3:45 PM MT[All Modules]

For <u>ALL</u> the in-person exams in the semester you will need to bring a green scantron. You can purchase them at UTEP's bookstore.



^{*}Acknowledge "MT" as "Mountain Time", which is the official time of El Paso, Texas!

Office hours Schedules:

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

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30 AM	Hanna/Anjolie	Aaron	OsvaldolGio	Aylin	Paulina/Danisa
10:00 AM	9:30 - 10:30 AM	9:30 - 10:30 AM	9:30 - 10:30 AM	9:30 - 10:30 AM	9:30 - 10:30 AM
10:30 AM	Camila/Ale	Asher/Frida	Osvaldo	Emily B / <i>Ivan</i>	Aylin/Eduardo
11:00 AM	10:30 - 11:30 AM	10:30 - 11:30 AM	10:30 - 11:30 AM	10:30 - 11:30 AM	10:30 - 11:30 AM
11:30 AM 12:00 PM	Preview	Leslie/Isabella 11:30 - 12:30 PM	Angelina/Luisa 11:30 - 12:30 PM	Asher/ <i>Alyssa</i> 11:30 - 12:30 PM	Preview
12:30 PM	Christian/Ana	Eduardo/Ana	Gio/Mary	Leslie/Danisa	Christian/Ale
1:00 PM	12:30 - 1:30 PM	12:30 - 1:30 PM	12:30 - 1:30 PM	12:30 - 1:30 PM	12:30 - 1:30 PM
1:30 PM 2:00 PM	Angelina/Luisa 1:30 - 2:30 PM	Karim/Mary 1:30 - 2:30 PM	Camila 1:30 - 2:30 PM	Aaron/Frida 1:30 - 2:30 PM	Carlos/Fabi 1:30 - 2:30 PM
2:30 PM 3:00 PM	Oscar/Eli 2:30 - 3:30 PM	Fabi/Anjolie 2:30 - 3:30 PM	Karim/Daire 2:30 - 3:30 PM	Paulina/Carlos 2:30 - 3:30 PM	<i>Emily B</i> /Daire 2:30 - 3:30 PM
3:30 PM	Emily Z/Alyssa	Matthew/Oscar	<i>Emily Z</i> /Eli	Ivan/	Isabella/Matthew
4:00 PM	3:30 - 4:30 PM	3:30 - 4:30 PM	3:30 - 4:30 PM	3:30 - 4:30 PM	3:30 - 4:30 PM

Module-Book Chapter (Raymon 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	
	(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	

<u>UTEP Academic Calendar – Fall 2024:</u>

Aug 26th	Fall classes begin		
Aug 26th-30th	Late registration period (fees are incurred)		
Sept 2nd	Labor Day holiday - University Closed		
Sept 11th Sept 23rd	Fall Census Day Note: This is the last day to register for classes. Payments are due by 5:00 pm. 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.		
Oct 4th	Graduation application deadline for degree conferral		
Oct 23rd	Freshman Midterm grades are due		
Nov 1st	Fall 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.		
Nov 15th	Deadline to submit candidates' names for commencement program		
Nov 28-29th	Thanksgiving Holiday - University Closed		
Dec 5th	Fall last day of classes		
Dec 6th	Dead Day		
Dec 9-13th	Fall Final Exams		
Dec 14-15th	Fall Commencement		
Dec 18th	Grades are due		
Dec 19th	Grades are posted to student records; students are notified of grades and academic standing		