

# General Chemistry for STEM I Syllabus

CHEM1305 (CRN 30534)

Summer 2024

## Course and Instructor Information:

**Instructor of Record:** Dr. H. Patricio Del Castillo

**Instructor's contact:** [hpdelcastil@utep.edu](mailto:hpdelcastil@utep.edu)

**Office hours and location:** Upon request at room PSCI 203-A

**Technical support contact:** [helpdesk@utep.edu](mailto:helpdesk@utep.edu)

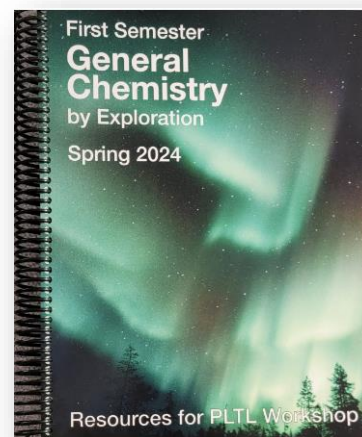


## Course description

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**"  
ISBN: 978-1-943668-35-9
- 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. Two Blackboard platforms will be used in the course: **The Lecture** and the **Workshop** platforms. 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 – 25%**

**Homework activities:** They are designed to test your knowledge on the topics that we have seen in class. Most homework activities (HW 2-11) of the semester will be submitted as assignments in the [Workshop's Blackboard Platform](#); inside the folder "Homework Activities". Each homework will have a set of questions from your "General Chemistry by Exploration" manual, and you will need to prepare one single pdf file that contains all of the pictures of the homework problems solved by you. 20 POINTS WILL BE TAKEN OFF FROM EACH HOMEWORK IN WHICH STUDENTS SUBMIT MORE THAN ONE DOCUMENT THAT IS NOT IN THE PDF FORMAT.

Some other homework activities (HW1 and [HW12](#)) will be displayed in the form of Blackboard quizzes that must be completed before the specified due date in the [Workshop's Blackboard Platform](#). Make sure to always check the "Course and Assignments" section of the syllabus to check for the HW activity due dates.

Look up for the "Location of Homework Activities in Your Manual" section in this syllabus that will direct you to the location of each homework in your chemistry manual.

**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 "Guide to complete Homework activities" available in "**Module 1 – Check-in to the course**" of the [Lecture's Blackboard Platform](#).

**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. Ask more questions about how they will be graded during your first workshop session.

**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 as part of your grade. 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.

**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. 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 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 prelab or lab report 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](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](mailto:helpdesk@utep.edu). **Make sure to always contact them during office hours to maximize your chances to get a reply!**

Contact the helpdesk for more information: [helpdesk@utep.edu](mailto:helpdesk@utep.edu)

## Course and Assignment Calendars

Week	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 June 10 <sup>th</sup> – 14 <sup>th</sup>	<p><b>Module 1</b> Check-in to the course</p> <p><b>Module 2</b> Chemistry and Measurement</p>	<p><b>Module 2</b> Chemistry and Measurement</p>	<p><b>Module 3</b> Atoms, Molecules, and Ions</p> <p><b>Mock Midterm Exam</b></p>	<p><b>Module 3</b> Atoms, Molecules, and Ions</p> <p><b>Module 4</b> Chemical Bonds I</p>	<p><b>Module 4</b> Chemical Bonds I</p> <p><b>Module 5</b> Mass Relationships in Chemical Reactions</p>
Week 2 June 17 <sup>th</sup> – 21 <sup>st</sup>	<p><b>Module 5</b> Mass Relationships in Chemical Reactions</p> <p><b>Module 6</b> Reactions in Aqueous Solutions</p>	<p><b>Module 6</b> Reactions in Aqueous Solutions</p> <p><b>Review for 1<sup>st</sup> Midterm Exam</b></p>	<p><b>NO CLASSES JUNETEENTH</b></p>	<p><b>Review for 1<sup>st</sup> Midterm Exam</b></p>	<p><b>First Midterm Exam</b></p>
Week 3 June 24 <sup>th</sup> – 28 <sup>th</sup>	<p><b>Module 7</b> Gases</p>	<p><b>Module 7</b> Gases</p> <p><b>Module 8</b> Thermochemistry</p>	<p><b>Module 8</b> Thermochemistry</p> <p><b>Module 9</b> Quantum Theory</p>	<p><b>Module 9</b> Quantum Theory</p> <p><b>Module 10</b> Periodic Relationships among Elements</p>	<p><b>Module 10</b> Periodic Relationships among Elements</p> <p><b>Module 11</b> Chemical Bonds II</p>
Week 4 July 1 <sup>st</sup> – 5 <sup>th</sup>	<p><b>Module 11</b> Chemical Bonds II</p> <p><b>Review for 2<sup>nd</sup> Midterm Exam</b></p>	<p><b>Review for 2<sup>nd</sup> Midterm Exam</b></p>	<p><b>Second Midterm Exam</b></p>	<p><b>NO CLASSES INDEPENDENCE DAY</b></p>	<p><b>Review for Final Exam</b></p>
Week 5 July 8 <sup>th</sup> – 12 <sup>th</sup>	<p><b>Review for Final Exam</b></p>	<p><b>Final Exam</b></p>	-	-	-

**\*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.**

	Topic	Due date and location of the homework activity	Format of the Homework
<a href="#">Homework 1</a>	<b>Module 1</b> – Check-in to the course	Wed, June 12 <sup>th</sup> before 10:00 PM in the <a href="#">Lecture's Blackboard Platform</a>	Blackboard Quiz
<a href="#">Homework 2</a>	<b>Module 2</b> – Chemistry and Measurement		<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 3</a>	<b>Module 3</b> – Atoms	Fri, June 14 <sup>th</sup> before 10:00 PM in the <a href="#">Workshop's Blackboard Platform</a>	<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 4</a>	<b>Module 4</b> – Chemical Bonds I		<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 5</a>	<b>Module 5</b> – Chemical Reactions	Thu, June 20 <sup>th</sup> before 10:00 PM in the <a href="#">Workshop's Blackboard Platform</a>	<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 6</a>	<b>Module 6</b> – Aqueous Reactions		<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 7</a>	<b>Module 7</b> – Gases	Tue, June 25 <sup>th</sup> before 10:00 PM in the <a href="#">Workshop's Blackboard Platform</a>	<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 8</a>	<b>Module 8</b> – Thermochemistry	Thu, June 27 <sup>th</sup> before 10:00 PM in the <a href="#">Workshop's Blackboard Platform</a>	<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 9</a>	<b>Module 9</b> – Quantum Theory		<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 10</a>	<b>Module 10</b> – Periodic Relationships	Monday, July 1 <sup>st</sup> before 10:00 PM in the <a href="#">Workshop's Blackboard Platform</a>	<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 11</a>	<b>Module 11</b> – Chemical Bonds II		<a href="#">PDF file</a> that must be submitted as an assignment in Blackboard
<a href="#">Homework 12</a>	<b>Extra credit</b> – All modules	Friday, July 5 <sup>th</sup> , before 10:00 PM in the <a href="#">Lecture's Blackboard Platform</a>	Blackboard Quiz

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

**Midterms, Cumulative Final Exam and Final Project Dates:**

**Mock Midterm Exam** – Wednesday, June 12<sup>th</sup>, in Bb before 10:00 PM *[Module 1]*

**Midterm exam 1** – Friday, June 21<sup>st</sup> during class time *[Modules 2 – 6]*

**Midterm exam 2** – Wednesday, July 3<sup>rd</sup> during class time *[Modules 7 – 11]*

**Cumulative Final exam** – Tuesday, July 9<sup>th</sup> during class time *[All Modules]*

**Location of Homework Activities in your manual:**

<b>Homework Activity</b>	<b>Location in the Manual</b>
HW 1 – Check-in to the course	<b>Not in the manual, look for it inside the Workshop's Blackboard platform</b>
HW 2 – Chemistry and Measurement	Worksheet 0, p. 31 and 32 Worksheet 1, p. 51-55
HW 3 – Atoms	Worksheet 2, p.77 only Obtain the electron configuration of all the species in this page too.
HW 4 – Chemical Bonds I	Worksheet 2, p.78,79,81,82,84 Worksheet 13, p. 291- only exercises 1,2,3,8 and 9
HW 5 – Chemical Reactions	Worksheet 3, p. 93-98 (Do not include problem 9) Worksheet 4, p. 121-124 (Problem 2b) should be “potassium sulfate) (Ask your peer leader for the arrangements needed to problems 2, 4, 5, and 6). (Problem 7 and forth are not included)
HW 6 – Aqueous Reactions	Worksheet 5, p. 145-148 (There will be two extra credit problems: Problems 8, 9, 10b) and challenge problem 1) Worksheet 6, p. 163-166 (Do not include problem 6-10 and challenge problem 2) (Challenge problem 1 will be extra credit)
HW 7 - Gases	Worksheet 7, p. 187-191 (Challenge problem 1, sodium not potassium) (Do not include problem 10)
HW 8 – Thermochemistry	Worksheet 8, p. 219-224 (Problems 6 and forth only) Worksheet 9, p. 233-236 (Do not include problem 2)
HW 9 – Quantum Theory	Worksheet 10, p. 243-245 Worksheet 11, p. 257-259
HW 10 – Periodic Relationships	Worksheet 12, p.277-279 Worksheet 4 (Problems 7-12)
HW11 – Chemical Bonds II	A special handout will be provided by the instructor
HW12 – Extra Credit	<b>Not in the manual, look for it inside the Workshop's Blackboard platform</b>

## Office hours Schedules:

Throughout the semester, office hours will be available to all students. They will be provided by the peer leaders in the following schedules. You can assist to the office hours session that best first your schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
10:00	CHEM1305 Office Hours		CHEM1305 Office Hours	CHEM1305 Office Hours / Oscar	
11:00	Oswaldo		Oscar	PSCI 403	
12:00	PSCI 403		PSCI 403	CHEM1305 Office Hours / Oswaldo	
				PSCI 403	
13:00					
14:00	CHEM1305 Office Hours	CHEM1305 Office Hours	CHEM1305 Office Hours	CHEM1305 Office Hours	CHEM1305 Office Hours
15:00	Frida	Leslie	Aaron	Paulina	Eduardo
16:00	PSCI 403	PSCI 403	PSCI 403	PSCI 403	PSCI 403

Peer Leader	Time and day	Contact
Oswaldo	Monday 10:30 AM - 12:30 PM	<a href="mailto:josaucedosa@miners.utep.edu">josaucedosa@miners.utep.edu</a>
	Thursday 11:30 AM - 12:30 PM	
Frida	Monday 1:30 PM - 4:30 PM	<a href="mailto:fcporras@miners.utep.edu">fcporras@miners.utep.edu</a>
Leslie	Tuesday 1:30 PM - 4:30 PM	<a href="mailto:lecarrillog@miners.utep.edu">lecarrillog@miners.utep.edu</a>
Oscar	Wednesday 10:30 AM - 12:30 PM	<a href="mailto:oecamacho2@miners.utep.edu">oecamacho2@miners.utep.edu</a>
	Thursday 10:30 AM - 11:30 AM	
Aaron	Wednesday 1:30 PM - 4:30 PM	<a href="mailto:aarivassime@miners.utep.edu">aarivassime@miners.utep.edu</a>
Paulina	Thursday 1:30 PM - 4:30 PM	<a href="mailto:pigarayluna@miners.utep.edu">pigarayluna@miners.utep.edu</a>
Eduardo	Friday 1:30 PM - 4:30 PM	<a href="mailto:ecarrerahe@miners.utep.edu">ecarrerahe@miners.utep.edu</a>



## UTEP Academic Calendar – Summer one 2024:

<b>Apr 1st</b>	Summer Registration Begins
<b>May 30th</b>	Last Day to Clear Students on Suspension/Probation as well as those with Insufficient Prerequisites
<b>May 31st</b>	Drops for Students with Unsatisfactory Academic Standing, Insufficient Prerequisites, and Prior Grades of C in the Course
<b>June 3rd</b>	Financial Aid is Disbursed
<b>June 10th</b>	Summer I & Full-Term classes begin
<b>June 12th</b>	Summer I Census Day; Last Day to Register for Summer I; Summer I Payment Deadline
<b>June 17th</b>	Summer Full Term Census Day; Last day to register for Summer Full term; Summer Full term payment deadline
<b>June 19th</b>	Juneteenth Holiday - No classes
<b>July 1st</b>	Summer I 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.
<b>July 4th</b>	Independence Day Holiday – University Closed
<b>July 8th</b>	Summer I - Last day of Classes
<b>July 9th</b>	Summer I Final Exams; Full Term classes do not meet