

## UTTyler CHEMISTRY & BIOCHEMISTRY

SYLLABUS FALL 2023

## GENERAL CHEMISTRY I **CHEM 1311**

THE UNIVERSITY OF TEXAS AT TYLER 3900 University BLVD. TYLER, TX 75799

# General Chemistry **CHEM 1311**

Aluminium



### Instructor

## Jason DiStefano

Lecturer of Chemistry Department of Chemistry & Biochemistry

Office: RBS 3007

Email: jdistefano@uttyler.edu

Phone: (903) 566-7185

## Office Hours

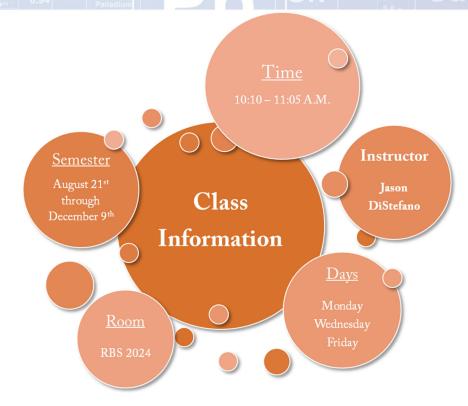
By appointment Tues. 10 A.M. – 12 P.M. Wed. 2-3 P.M.

Thurs. 10 A.M. – 12 P.M.

## Recommended Content

Brown/LeMay/Bursten. 2022 Chemistry The Central Science. Pearson Publishing ISBN-13: 9780137542970

www.uttyler.edu/chemistry/

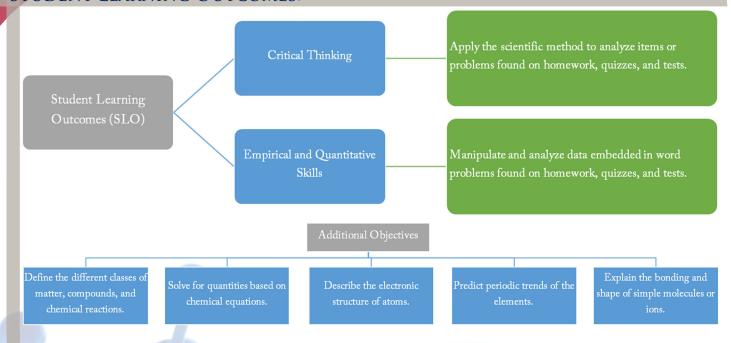


## WELCOME TO GENERAL CHEMISTRY I

General Chemistry I is a foundational course for all new scientists wanting to pursue a career in chemistry, engineering, health professions, and more. In this course, you will learn an understanding of the underlying principles of chemistry. These principles are fundamental to all disciplines of science. All things are comprised of matter, and therefore, understanding the composition, structure, properties, and reactivity of matter is paramount. We will discuss topics of the physical and electronic properties of atoms, chemical formulas and reactions, periodic trends and the basic principles of chemical bonding (Chapters 1-10 in the textbook). We will explore the underlying notions of how matter and life functions and interacts.

However, understanding the chemical properties of life is not an easy task. Good study habits will be essential to your success. You will have to employ logic and critical thinking in order to solve a wide variety of problems. You have many resources available including Supplemental Instruction (SI), PASS tutoring and office hours. Of course, I am happy to help you outside of class; just drop me an email to get an appointment. It boils down to this: You will have questions. If you don't ask the questions, I can't answer them!

#### **STUDENT LEARNING OUTCOMES:**



### **RECOMMENDED MATERIALS FOR SUCCESS:**



#### Course Textbook

- •The course is designed to follow *Chemistry: The Central Science*, 15<sup>th</sup> Edition by Brown, Lemay, Bursten, Murphy. Woodward & Stoltzfus
- •e-book ISBN: **9780137542970**
- •Any format is great hardcover, paperback, e-bool, etc.
- •OER Option ChemLibre Texts



#### Scientific Calculator

- Capable of exponents and logarithms. This does NOT need to be fancy.
- Practice using your calculator. During the quiz is not the time for a tutorial.
- •I will be happy to help but am not an expert on all calculators.



#### Periodic Table

- This will be quite useful to have in class and when doing homework
- To be most useful, it should include element names, symbols and atomic masses



#### Supplemental Guides

- •Some students find the resources available in the Student Guide to be useful for the course. Others looking for additional practice problems like to utilize the book problems and find the Student Solution Guide Useful. The speed of the summer session tends to reduce the use of these additional materials.
- Student Guide ISBN: 9780134554075
- Solutions to Red Exercises ISBN: 9780134552231

## COURSE INFORMATION:

This course meets every Monday, Wednesday, and Friday between August 21st and December 9th from 10:10 am — 11:05 am in RBS 2024.

Prerequisite: Credit for High School Algebra II or Math 1314.

High school chemistry is strongly recommended. If you haven't had chemistry before don't run away - just know that, you will likely need to set aside some extra study time to be sure you succeed.

General Chemistry I Lab (CHEM 1111) is a separate course. If you are a science major, in order to fulfill your degree requirements you must take both lecture and lab. For all majors, either course may be used toward the STEM core requirement. So, if you are not a STEM major, you may enjoy the course without the lab!

To receive a passing grade for the course, you must take the **comprehensive final exam**; otherwise, you will fail the course regardless of your other grades.

The last day to withdraw with a "W" is October 30th. If you choose to withdraw, you must file the required paperwork. If you just stop coming to class, you will receive an F.

If you withdraw from this course, you are encouraged, but not required to, withdraw from the laboratory course (CHEM 1111). The lab assumes you have the knowledge from this course. If you drop the lecture and stay in the lab, it will be your responsibility, not that of your lab instructor, to learn the relevant material you missed in lecture.

## Canvas (Learning Management System)

Canvas is an integral part of this course. I will communicate with you mostly through Canvas. All course content will also be uploaded to Canvas. Canvas can be accessed via: <a href="https://www.uttyler.edu/canvas/">https://www.uttyler.edu/canvas/</a>

Your Canvas access will begin once you accept the emailed invitation for this course.



#### Attendance Policy

Attendance is essential. This is a 15-week course that covers a lot of material. Lectures are in-person and will not be posted online. The Department of Chemistry & Biochemistry requires a certain amount of material to be covered to prepare students for General Chemistry II. An unexcused absence results in a grade of zero for any exam missed.

Normally, an excused absence includes medical emergencies, a death in your family or required travel for a UT Tyler's event (e.g., athletic team travel). All supporting documentation should be presented to the instructor.

Students who anticipate being absent from class due to a religious observance are *required* to inform their instructors of such absences as soon as possible (at least one week before the religious holiday). Students who anticipate being absent from class due to a required travel for a UT Tyler's event (e.g., athletic team travel) are *required* to inform their instructor(s) of such absences at least one week before the absence.

PAGE 4

## **COURSE GRADING**

The grading of all assignments are up to the instructor; however the average weighting for the assignments will be uniform across all sections (see below). The overall course grade will tentatively be based on the 90/80/70/60 percentage scale, but it may be adjusted based upon the instructor's judgment of the overall class performance.

#### **ONLINE HOMEWORK (ACHIEVE):**

Homework will be assigned for each chapter. Due dates will be announced in class and posted on Canvas. The online homework problems are accessed in Canvas. It will be very difficult to succeed in the course without doing the homework. Homework counts as 20% of your total course grade.

Homework can be attempted multiple times before the due date passes with the highest grade being kept.

While due dates coincide with test dates, students are strongly encouraged not to wait until the last minute to do homework. This is not a course for which cramming a good idea. "Poor planning equals poor performance." Homework assignments alone are not sufficient enough to study for an exam. You should be developing additional study skills to succeed on exams.

The grades for this course will be weighted as follows:			
20%	Online Homework		
60%	Mid-Term Exams		
15%	Final Exam		
5%	Daily Attendance		
100%	Total		

#### MID-TERM EXAMS:

The mid-term exam dates listed on page 6 are tentative. The exams will consist of ~25 multiple-choice questions and 1-3 partial credit short answer/calculation questions.

Exams start promptly at 10:10 am and end at 11:05 am.

Scantrons and scratch paper will be provided. You may bring a pencil and a scientific non-programmable, non-graphing calculator. You may also choose to use one 3½" x 5" note card with handwritten notes on both sides (turned in at exam). No other materials are permitted during the test.

Cell phones, smart watches, and any similar electronic devices must be turned off and put away during exams! If they are observed out in a visually accessible place (i.e. between legs, on the floor, etc.), it will be assumed that they are being used to cheat; your exam will taken away, you will receive a zero score (0 points) for the test, and you will be referred to the Office of Judicial Affairs.

I will do my best for accurate and quick grading. However, I do make mistakes from time to time. If you have a question about a scantron marking, see me before leaving class the day they are returned. If you feel that I make a grading error, please see me within one week after receiving the graded exam. All scores are considered final one week after grades are posted on Canvas!

#### FINAL EXAM:

The final examination will be given at the date and time according to the final exam schedule posted by the University.

You are required to take the final examination in order to receive a passing grade in the course. There will be no make -up of the final exam!

The comprehensive final examination is written by the American Chemical Society for first-term general chemistry (70 multiple-choice questions). The questions are not overly hard, but there are A LOT of them.

#### **DAILY ATTENDANCE**

Chemistry can be a challenging course, and I'm a firm believer that attending class is paramount to succeed in this course. Therefore, a small portion of your grade will be dependent on attendance. Attendance may be recorded physical through a sign-in sheet or recorded via a daily quiz (in-person or online).

## **DROPPING THE COURSE:**

The last day to withdraw from the course with an automatic grade of "W" is listed on the schedule. Before dropping the course, you should consult with your instructor to examine all of your options. Dropping this course does not obligate you to also drop the laboratory course because they are two separate courses. However, dropping the lecture course may significantly hinder your progress in the laboratory course because you will be expected to learn the chemical theories and concepts on your own.



Achieve Online Homework is <a href="REQUIRED">REQUIRED</a> for homework assignments

Scientific calculator capable of exponents and logarithms is required for the homework, mid-term exams, and final exam.

#### Achieve Access Code Options

- Bookstore, ISBN: 9781319399900
- Purchase online (easier/cheaper) when you register for Achieve through this class's Canvas course.

## Online Homework (20% of Total Grade)

- Homework will be assigned for each chapter and will be <u>due 5 days after we</u> <u>finish that chapter's material</u>. Depending on the class schedule for the semester, this means that assignments may be due either on the weekend (Saturday or Sunday).
- All assignment notices will be posted on Canvas. Please try to complete homework assignments on time. Microsoft Edge may not work with Achieve, so you may want to use another browser instead (Chrome, Firefox, etc.). Mobile devices also don't play well with Achieve; so using a desktop computer, laptop, or tablet is recommended.
- Please stay proactive with the homework assignments. I have a family that I attend to in the evening and may not be available for questions or responding to emails before the homework deadlines.
- Do not buy "USED" Achieve access codes, they probably won't work!

#### To enroll in the Achieve section for this course follow the steps below

- Click the Macmillan Learning link (between the Home and Syllabus links)
- Then click the Achieve link (goes to Achieve home page) and you will be prompted to enter your name and email address.
- Follow these <u>instructions</u> for help connecting your <u>Canvas</u> and Achieve accounts. You will have the option to pay for access, enter a code from a purchase, or start the free 2-week trial. Note: I will not post all the assignments in the first two weeks.

#### Other helpful links

- Disable your browser's pop-up blockers and refer to the <u>troubleshooting</u> <u>guide</u> if you experience any difficulty accessing Achieve.
- Browse Achieve > Getting Started Guide for Students.
- <u>Chat</u> with Macmillan Customer Support.



- Cost: \$42 or \$64 (2-semester access).\*\* There is a 2-week grace period before you must purchase it.
- I will not allow you to work all the homework for the semester in 2 weeks!
- Homework is 20% of your grade. It can make or break your grade.
- Don't wait till the last minute. Everyone logging in at the same time causes problems.
- A 10% penalty, per day, is applied to assignments not finished by the due date.

\*\*Price in Spring 2023, they may have changed.

## **CLASS SCHEDULE\***

Date:	Tentative Schedule
	I CIICULI O COLICO GIALO

Aug. 14-18 Chapters 0 & 1

Aug. 21-25 Chapters 1 & 2

Aug. 28-Sep. 1 Chapter 2

Sep. 4 Labor Day holiday. No classes held.

Sep. 6-8 Chapter 3

Sep. 11-15 Chapters 3 & 4

Sep. 18-22 Chapter 4

Sep. 25-29 Chapter 4

Oct. 2-6 Chapter 5

Oct. 9-13 Chapters 5 & 6

Oct. 16-20 Chapter 6 & 7

Oct. 23-27 Chapter 7

Oct. 30-Nov. 3 Chapter 8

Oct. 30 Last day to withdraw from a course with a "W".

Nov. 6-10 Chapters 8 & 9

Nov. 13-17 Chapter 9

Nov. 20-24 Thanksgiving holiday. No classes held.

Nov. 27-Dec. 1 Chapter 10

Dec. 4-8 Final Exam week (ACS Comprehensive Exam)

#### Mid-Term Schedule

All mid-term exams will be scheduled exactly one week after the respective chapters for the exam has

Exam	Chapters	Tentative Date
Mid-Term Exam 1	1 & 2	September 8 <sup>th</sup>
Mid-Term Exam 2	3 & 4	October 6 <sup>th</sup>
Mid-Term Exam 3	5, 6, & 7	November 3 <sup>rd</sup>
Mid-Term Exam 4	8 & 9	November 27 <sup>th</sup>

<sup>\*</sup> Note: the right to substitute, switch, or rearrange the lecture and exam schedule, as required by unforeseen circumstances, is reserved.

## **UNIVERSITY POLICIES & IMPORTANT INFORMATION**

#### Withdrawing from Class

Students are allowed to withdraw (drop) from a course through the University's Withdrawal Portal. Texas law prohibits students who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. The number includes courses dropped at other 2-year or 4-year Texas public colleges and universities. Make sure to consider the impact withdrawing from any course has on your academic progress as well as the financial implications. We encourage you to consult your advisor(s) and financial aid for additional guidance. CAUTION #1: Withdrawing before census day does not mean students receive a full refund. Please see the Tuition and Fee Refund Schedule. CAUTION #2: All international students must check with the Office of International Programs before withdrawing. All international students are required to enroll full-time for fall and spring terms.

#### **Final Exam Policy**

Final examinations are administered as scheduled. If unusual circumstances require that special arrangements be made for an individual student or class, the dean of the appropriate college, after consultation with the faculty member involved, may authorize an exception to the schedule. Faculty members are required to maintain student final examination papers for a minimum of three months following the examination date.

#### **Incomplete Grade Policy**

If a student, because of extenuating circumstances, is unable to complete course requirements by the end of the semester, then the instructor may recommend an Incomplete (I) for the course. The "I" may be assigned in lieu of a grade only when all of the following conditions are met: (a) the student has been making satisfactory progress in the course; (b) the student is unable to complete all course work or final exam due to unusual circumstances that are beyond personal control and are acceptable to the instructor; and (c) the student presents these reasons prior to the time that the final grade roster is due. The semester credit hours for an Incomplete will not be used to calculate the grade point average for a student. The student and the instructor must submit an Incomplete Form detailing the work required and the time by which the work must be completed to their respective department chair or college dean for approval. The time limit established must not exceed one year. Should the student fail to complete the work for the course within the time limit, the instructor may assign zeros to the unfinished work, compute the course average for the student, and assign the appropriate grade. If a grade has not been assigned within one year, then the Incomplete will be changed to an F or to NC, if the course was initially taken under the CR/NC grading basis.

#### **Grade Appeal Policy**

UT Tyler's Grade Appeal policy requires the completion of a Grade Appeal form for this action to take place. The grade appeal begins with the instructor of the course. If a student does not agree with the decision of the instructor, the student may then move the appeal to the department chair/school director for that course. If the student is still dissatisfied with the decision of the chair/director, the appeal moves to the Dean of the College offering that course, who has the final decision. Grade appeals must be initiated within sixty (60) days from the date of receiving the final course grade. The Grade Appeal form is found on the Registrar's Form Library.

#### Disability/Accessibility Services

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA), The University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If a student has a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or a history of modifications or accommodations in a previous educational environment, the student is encouraged to visit https://hood.accessiblelearning.com/UTTyler and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact the student when the application has been submitted and schedule an appointment with the Assistant Director Student Accessibility and Resources/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at http://www.uttyler.edu/disabilityservices, the SAR office located in the University Center, # 3150 or call 903.566.7079."

#### **Military Affiliated Students**

UT Tyler honors the service and sacrifices of our military-affiliated students. If you are a student who is a veteran, on active duty, in the reserves or National Guard, or a military spouse or dependent, please stay in contact with your faculty member if any aspect of your present or prior service or family situation makes it difficult for you to fulfill the requirements of a course or creates disruption in your academic progress. It is important to make your faculty member aware of any complications as far in advance as possible. Your faculty member is willing to work with you and, if needed, put you in contact with university staff who are trained to assist you. Campus resources for military-affiliated students are in the Military and Veterans Success Center (MVSC). The MVSC can be reached at MVSC@uttyler.edu or via phone at 903.565.5972.

## UNIVERSITY POLICIES & IMPORTANT INFORMATION

#### Academic Honesty and Academic Misconduct

The UT Tyler community comes together to pledge that "Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do." Therefore, we enforce the Student Conduct and Discipline policy in the Student Manual Of Operating Procedures (Section 8).

#### **FERPA**

UT Tyler follows the Family Educational Rights and Privacy Act (FERPA) as noted in University Policy 5.2.3. The course instructor will follow all requirements in protecting your confidential information.

#### Recording of Class Sessions

Class sessions may be recorded by the instructor for use by students enrolled in the course. Recordings that contain personally identifiable information or other information subject to FERPA shall not be shared with individuals not enrolled in the course unless appropriate consent is obtained from all relevant students. Class recordings are reserved only for the use of students enrolled in the course and only for educational purposes. Course recordings should not be shared outside of the course in any form without express permission.

#### Absence for Official University Events or Activities

All courses follow the practices related to approved absences as noted by the Student Manual of Operating Procedures (Sec. 1 -501).

#### Absence for Religious Holidays

Students who anticipate being absent from class due to a religious holiday are requested to inform the instructor by the second class meeting of the semester.

#### Campus Carry

We respect the right and privacy of students who are duly licensed to carry concealed weapons in all courses. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at

http://www.uttyler.edu/about/campus-carry/index.php.



CHEMISTRY IS LIKE KUNG FU. A BUNCH OF FANCY TECHNIQUES THAT TAKES PATIENCE, ENERGY, HARD WORK, PRACTICE, AND TIME TO SEE RESULTS.

JASON DISTEFANO

"NEVER FORGET THAT, AT THE MOST, THE TEACHER CAN GIVE YOU FIFTEEN PERCENT OF THE ART. THE REST YOU HAVE TO GET FOR YOURSELF THROUGH PRACTICE AND HARD WORK. I CAN SHOW YOU THE PATH BUT I CAN NOT WALK IT FOR YOU."

— MASTER TAN SOH TIN

## STUDENT RESOURCES

#### Resources to assist you in the course

- UT Tyler Student Accessibility and Resource (SAR) Office (provides needed accommodations to students with document needs related to access and learning)
- UT Tyler Writing Center
- The Mathematics Learning Center
- UT Tyler PASS Tutoring Center
- UT Tyler Supplemental Instruction
- Upswing (24/7 online tutoring) covers nearly all undergraduate course areas
- Robert Muntz Library and Library Liaison
- Digital Support Toolkit (For supported courses only. Students are automatically enrolled in the toolkit for supported courses)
- LIB 422 -- Computer Lab where students can take a proctored exam
- The Career Success Center
- UT Tyler Testing Center
- Office of Research & Scholarship Design and Data Analysis Lab

#### Resources available to UT Tyler Students

- UT Tyler Counseling Center (available to all students)
- TAO Online Support Center (online self-help modules related to mental & emotional health)
- Military and Veterans Success Center (supports for our military-affiliated students)
- UT Tyler Patriot Food Pantry
- UT Tyler Financial Aid and Scholarships
- UT Tyler Registrar's Office
- Office of International Programs
- Title IX Reporting
- Patriots Engage (available to all students. Get engaged at UT Tyler.)