

THE UNIVERSITY OF TEXAS AT TYLER
SYLLABUS FOR CHEM 5301
Introduction to Graduate Teaching and Research

Fall 2025– RBS 2015

Instructor- Dr. Laura Miller

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Office Hours: RBS 3032 M,W,F 10:00 - 11:00 AM,

T 9:30 - 11:30 AM,

and other times by appointment

I. INTRODUCTION

This course is designed to introduce new graduate students to faculty research opportunities and what to expect when teaching undergraduate labs. Topics include university policies, safety in the laboratory, first aid techniques, teaching techniques, research opportunities within the department, and using the scientific literature.

Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry.

II. STUDENT LEARNING OUTCOMES

By the end of the course, successful students should:

- 1) Select a faculty research advisor or mentor for non-thesis track.
- 2) Pass the University Lab Safety Training modules.
- 3) Create 3 Pre-lab quizzes
- 4) Create and give multiple Pre-lab lectures to the class
- 5) Give 1 pre-lab lecture to undergraduate lab section

III. MATERIALS

There is no text required for this course. However, there will be material on Canvas throughout the semester. You will need a computer with internet and a webcam if this course for any online portions.

VI. COURSE REQUIREMENTS

Class will meet in RBS 2015 each Tuesday night, August 26th – Dec 2nd except Tuesday, November 25th (Thanksgiving Break) from 6 – 8:45 PM.

Attendance Policy. Attendance is required. Since we only meet once a week it is very crucial that you be at every meeting.

The last day to withdraw from the course without penalty is September 8, 2025. The last day to withdraw from the course with an automatic grade of “W” is November 3, 2025. To withdraw from the course, students should initiate withdrawals with the instructor.

V. GRADING

This course is a credit or non-credit option. In order to obtain credit for this course, students must complete all learning outcomes at a satisfactory level and complete the following:

1. Create a quiz for at least 3 experiments for either General Chemistry I lab or Introductory Chemistry lab. (2 must be online quizzes created on Canvas) The paper quiz will be emailed to the instructor before your in-class pre-lab lecture.
2. The student must create and give a pre-lab lecture for multiple experiments to the class and then again to an undergraduate lab course in which a faculty member will observe. The faculty member and graduate student will then meet to discuss suggested improvements and techniques.

AI is encouraged during the course, and appropriate acknowledgment is expected. You can use AI programs (ChatGPT, Copilot, etc.) in this course. These programs can be powerful tools for learning and other productive pursuits, including completing assignments in less time, helping you generate new ideas, or serving as a personalized learning tool. However, your ethical responsibilities as a student remain the same. You must follow UT Tyler’s Honor Code and uphold the highest standards of academic honesty. This applies to all uncited or improperly cited content, whether created by a human or in collaboration with an AI tool. If you use an AI tool to develop text for an assignment, you must cite the tool’s contribution to your work.

CHEM 5301: Introduction to Graduate Teaching and Research

Tentative Schedule: These dates and material covered are tentative and are subject to change.

Date	Lecture/Laboratory Activities
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Welcome to the Department of Chemistry and Biochemistry Graduate Program, Syllabus, University Policies, Schedule, Departmental Requirements for Graduate Students/Picking a research advisor/mentor (procedures, considerations, responsibilities of the student and the faculty member)

Guide for Graduate Teaching Assistants: Email etiquette, professionalism, Job expectations, confidentiality, social media, academic integrity, consequences, how to work Canvas as an instructor, grading and University policies regarding disabilities.

Sep 2	Departmental Requirements for Graduate Students/Picking a research advisor/mentor (procedures, considerations, responsibilities of the student and the faculty member)
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	Compliance Training and Lab Safety Training due Instrumentation and facilities and Chemical Waste Management Pre-lab lecture – Exp 1: (Grad student teach)
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Sep 9	Faculty Research Presentations: Dr. Lutz, Dr. Zhang Dr. Lee Pre-lab lecture – Exp 2: (Grad student teach)
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Sep 16	Pre-lab lecture – Exp 3: (Grad student teach)
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Sep 23	Faculty Mentor Selection paper due Pre-lab lecture – Exp 4: (Grad student teach)
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Sep 30	Guide to scientific literature and using the library Pre-lab lecture – Exp 5: (Grad student teach)
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Oct 7	Guide to Being a Better Teacher Pre-lab lecture – Exp 6: (Grad student teach)
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Oct 14	Pre-lab lecture – Exp 7: (Grad student teach)
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Oct 21	Ethics Pre-lab lecture – Exp 8: (Grad student teach)
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Oct 28	Pre-lab lecture – Exp 9: (Grad student teach)
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Nov 3	<i>Last day to drop or withdraw from a course with an automatic grade of “W”</i>
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Nov 4	Stop the Bleed Training (2 online experimental quizzes due by this date)
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Nov 11	Career Success Services
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Nov 18	Assessment
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Nov 25	Thanksgiving break
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Dec 2	Study week/Grading
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Dec 9	FINAL EXAMINATIONS None for this course
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VI. UNIVERSITY POLICIES AND INFORMATION

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: [University Policies and Information](#)

Withdrawing from Class Students may [withdraw](#) (drop) from this course using the [Withdrawal Portal](#).

Withdrawing (dropping) this course can impact your Financial Aid, Scholarships, Veteran Benefits, Exemptions, Waivers, International Student Status, housing, and degree progress. Please speak with your instructors, consider your options, speak with your advisor, and visit the One-Stop Service Center (STE 230) or email enroll@uttyler.edu to get a complete review of your student account and the possible impacts to withdrawing. We want you to make an informed decision. UT Tyler faculty and staff are here for you and often can provide additional support options or assistance. Make sure to carefully [read the implications for withdrawing from a course and the instructions](#) on using the [Withdrawal portal](#).

Texas law prohibits students from dropping more than six courses during their entire undergraduate career*. The six courses dropped include those from other 2-year or 4-year Texas public colleges and universities. Consider the impact withdrawing from this class has on your academic progress and other areas, such as financial implications. We encourage you to consult your advisor(s) and Enrollment Services for additional guidance. CAUTION

#1: Withdrawing before census day does not mean you get 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. CAUTION

#3: All UT Tyler Athletes must check with the Athletic Academic Coordinator before withdrawing from a course. CAUTION #4: All veterans or military-affiliated students should consult with the [Military and Veterans Success Center](#).

* Students who began college for the first time before 2007 are exempt from this law.

Artificial Intelligence Statement UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy. Refer to the About This Course section of the UT Tyler Syllabus Module for specific information on appropriate use of AI in your course(s).

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 must 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 all of the requirements for a course by the end of the semester, then the instructor may recommend an Incomplete (I) for the course. The "I" may be assigned in place 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 coursework 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 before 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.

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 meet all of the work for the course within the time limit, then 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 yet to be assigned within one year, then the Incomplete will be changed to an F, or NC. If the course was initially taken under the CR/NC grading basis, this may adversely affect the student's academic standing.

Grade Appeal Policy Disputes regarding grades must be initiated within sixty (60) days from the date of receiving the final course grade by filing a Grade Appeal Form with the instructor who assigned the grade. A grade appeal should be used when the student thinks the final course grade awarded does not reflect the grades earned on assessments or follow the grading scale as documented in the syllabus. The student should provide the rationale for the grade appeal and attach supporting document about the grades earned. The form should be sent via email to the faculty member who assigned the grade. The faculty member reviews the rationale and supporting documentation and completes the instruction section of the form. The instructor should return the form to the

student, even if a grade change is made at this level. If the student is not satisfied with the decision, the student may appeal in writing to the Chairperson of the department from which the grade was issued. In situations where there is an allegation of capricious grading, discrimination, or unlawful actions, appeals may go beyond the Chairperson to the Dean or the Dean's designee of the college from which the grade was issued, with that decision being final. The Grade Appeal form is found in the [Registrar's Form Library](#). **NOTE:** The Grade Appeal Form is different from the Application for Appeal form submitted to the Student Appeals Committee, which does not rule on grade disputes as described in this policy.

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 you have 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, you are encouraged to visit <https://hood.accessiblelearning.com/UTTyler/> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and 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 <https://www.uttyler.edu/disability-services>, the SAR office located in the Robert Muntz Library, LIB 460, email saroffice@uttyler.edu, 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. The [Military and Veterans Success Center \(MVSC\)](#) has campus resources for military-affiliated students. The MVSC can be reached at MVSC@uttyler.edu or via phone at 903.565.5972.

Students on an F-1 Visa To remain in compliance with Federal Regulations requirements you must do the following:

- * Traditional face-to-face classes: Attend classes on the regular meeting days/times.
- * Hybrid Classes: Attend all face-to-face classes convened by the instructor according to the schedule set for your specific course.

Online course: Only one online course can count toward your full-time enrollment. Students are expected to be fully engaged and meet all requirements for the online course.

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 to protect your confidential information.

Absence for Official University Events or Activities This course follows the practices related to [Excused Absences for University Events or Activities](#) as noted in the Catalog.

Absence for Religious Holidays This course follows the practices related to [Excused Absences for Religious Holy Days as noted in the Catalog](#).

Absence for Pregnant Students This course follows the requirements of Texas Laws SB 412, SB 459, SB 597/HB 1361 to meet the needs of pregnant and parenting students. Part of the supports afforded pregnant students includes excused absences. Faculty who are informed by a student of needing this support should make a referral to the Parenting Student Liaison. **NOTE:** Students must work with the Parenting Student Liaison in order to receive these supports. Students should reach out to the Parenting Student Liaison at parents@uttyler.edu and also complete the [Pregnant and Parenting Self-Reporting Form](#).

Campus Carry We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. 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>.

UT Tyler a Tobacco-Free University All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.