



CHEM 1105 INTRODUCTORY CHEMISTRY LABORATORY I

COURSE SYLLABUS FALL 2025

INSTRUCTOR INFORMATION

Instructor: Dr. Xingzhong Yan

Office Location: STC 307B

Office Hours: M and W 3:00-5:00

Office Phone: 903-886-5386

University Email Address: Xingzhong.Yan@etamu.edu

Preferred Form of Communication: Email

Response Time: via email within 24 hours

(over the weekend and holiday periods responses may be delayed)

COURSE INFORMATION

Course Chemistry 1105 meet 08/25/2025 through 12/12/2025:

Chem 1105.03L: Wednesday 6:00 – 8:50 pm, STC 310

Chem 1105.04L: Wednesday 6:00 – 8:50 pm, STC 311

Text/Manual and other required material

- **Custom Laboratory Manual:** Laboratory Experiments – Survey of General Chemistry, Bettelheim | Landesberg, ISBN: 978-1-337-90732-3 (**available only in the campus bookstore**)
- A pair of safety goggles
- A combination padlock (one per a group; bring to your first laboratory meeting)
- Appropriate lab attire (long pants without holes, no open-toed shoes, long hair tied back, no sleeveless shirts)
- Calculator
- Lab coat (optional)

Course Description

A one semester experimental survey of the fundamentals of chemistry, exploring the basic physical principles and the descriptive chemistry of metals and non-metals, with applications to related fields. This course is not suitable for biological science majors or minors. (Students planning to enter professional and/or graduate schools should elect Chemistry 1311-1312.) Prerequisites: MATH 1314 with a minimum grade of

C, MATH 1324 with a minimum grade of C, MATH 179 with a minimum grade of C or MATH 1332 with a minimum grade of C (concurrent or adequate high school mathematical preparation). Corequisites: CHEM 1305.

Student Learning Outcomes

By the end of the semester, I intend my students to have realized a number of objectives:

- All students must be able to readily identify glassware commonly used in the chemistry laboratory and know how to properly utilize the glassware.
- Learn basic chemistry techniques, such as how to calculate percent yields, how to properly use measuring devices, how to properly clean glassware at the end of an experiment.
- Learn the safety requirements and methods needed to work in a chemistry laboratory. Learn how to safely handle, utilize and dispose of chemicals.
- Learn how to document laboratory experiments, how to maintain a scientific notebook.
- Communication in the form of laboratory reports will be clear, purposeful, and make appropriate use of evidence, data, and technology as applicable.
- In laboratory experiments, you should be able to understand how to conduct laboratory experiments, critically analyze data, draw conclusions from the data, and clearly and concisely report the observations and conclusions drawn from the laboratory experiments.
- In written, oral, and/or visual communication, A&M-Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure.
- Students will be able to work together toward a shared purpose relevant to the course or discipline with a sense of shared responsibility for meeting that purpose.

COURSE REQUIREMENTS

Instructional Methods

- In the lab, you will work in small groups (2-3 students) to complete the lab experiment for that day. **Groups of more than 3 students are not allowed.**
- The observation section (Report Sheet) must be original notes taken during the experiment.
- All submission of your lab report consisting of the pre-lab report (Pre-Lab Questions) and post lab report (Report Sheet and Post Lab Questions) should be done in a timely manner. The Pre-Lab Questions should be submitted before starting the experiment. The post-lab report is due one week after completion of the experiment.

Course Specific Procedures

- Labs cannot be carried out without safety goggles and gloves. **Goggles should be worn during all lab activities except for the pre-lab lecture. Students who do not wear goggles will receive two reminders. A third notification for failing to wear goggles will result in a score of zero for the laboratory assignment, and the student will be asked to exit the laboratory.**
- It is essential to be prepared for the lab, which means students must:
 - 1) read the background information and the procedure of the experiment in the lab manual.
 - 2) **submit the pre-lab report (Pre-Lab Questions) before starting the instructor's pre-lab lecture.**
- Attending the pre-lab lecture is mandatory on time. If a student arrives more than 15 minutes late for the pre-lab lecture, they will forfeit the opportunity to participate in the laboratory portion of that class period and will receive a zero for that day's lab exercise.
- Note-taking during the lecture portion is highly recommended.
- **Data sheets must be initialed by the teaching assistant/instructor on the day the data is taken and data sheets with no initials will not be accepted.**
- You will incur a 10% penalty for every day that your lab report is late; thus, if a lab report is more than 10 days late, you will receive a zero for that report.
- If you miss a lab session, your lab report will not be accepted, and you will receive a zero grade for that assignment. **No lab—no report.**
- There will be absolutely no make-ups for laboratory experiments. It is the student's responsibility to inform the instructor of their absence before class starts.
- **No phones are allowed!**

Lab Cleanliness

- You will be expected to maintain a clean and orderly lab. At the end of every experiment, your bench and hood space must be cleaned. Any equipment utilized during the experiment must be cleaned as well (balances, equipment from the Stockroom and your drawers). You should ensure that sinks and floors are also clean. If the lab space and equipment that you utilized during the experiment is left dirty and unorganized, you will be penalized 20% on your lab report.

GRADING

Methods of Student Evaluation and Grading Scale

Individual Pre-laboratory Report (Pre-Lab Questions) – 25 points

Individual Post-lab Report (Report Sheet and Post-Lab Questions) – 75 points

Total – 100 points

There will be eleven labs assigned with written lab reports. The lab report with the lowest score will be dropped. Your final grade will be the arithmetic average of the remaining ten lab reports.

Grading will be based on a standard percentage scale: 100-90 = A; 89-80 = B; 79-70 = C; 69-60 = D; 59-below =F. Dishonest scholarship will earn an automatic zero (0) and initiate prosecution to the fullest extent. Incomplete grades may be given only if the student has a current average above 70% and is precluded from completion of the course by a documented illness or family crisis.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Video Conferencing Tool

https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a ETAMU campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

Interaction with Instructor Statement – Primary and preferred communication is through email.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

<https://inside.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf> .

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

ETAMU Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and Procedures 13.99.99.R0.01

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

Academic Integrity

Students at East Texas A&M University are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

[Undergraduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

Graduate Students Academic Integrity Policy and Form

[Graduate Student Academic Dishonesty Form](#)

<https://inside.tamuc.edu/aboutus/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10.pdf>

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

East Texas A&M University

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Student Disability Services](http://www.etamu.edu/student-disability-services/)

<https://www.etamu.edu/student-disability-services/>

Nondiscrimination Notice

East Texas A&M University will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

East Texas A&M University Supports Students' Mental Health

The Counseling Center at East Texas A&M University, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Mental Health and Well-Being

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



<http://telusproduction.com/app/5108.html>

AI use policy [Draft 2, May 25, 2023]

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course. Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

[Graduate Student Academic Dishonesty Form](#)

Tentative Lab Schedule for CHEM1105 Fall 2025

Week	Dates of Experiment	Assignment/ Experiment
1	08/27	Syllabus, Safety lecture, Check in equipment
2	09/03	Experiment 1: Laboratory Techniques: Using the Laboratory Gas Burner; Making Laboratory Measurement
3	09/10	Experiment 2: Density Determination
4	09/17	Experiment 3: Separation of the Components of a Mixture
5	09/24	Experiment 5: The Empirical Formula of a Compound: The Law of Constant Composition
6	10/01	Experiment 6: Determination of the Formula of a Metal Oxide
7	10/08	Experiment 7: Classes of Chemical Reactions (I part)
8	10/15	Experiment 7: Classes of Chemical Reactions (II part)
9	10/22	Experiment 8: Chemical Properties of Consumer Products
10	10/29	Experiment 11: Charles Law: The Volume –Temperature Relationship of a Gas
11	11/05	Experiment 14: Solubility and Solution
12	11/12	Experiment 15: Water of Hydration
13	11/19	Experiment 19: Analysis Vinegar by Titration
14	11/26	Check out, Return Equipment to the Stockroom