



TEXAS WOMAN'S UNIVERSITY™

SYLLABUS

In the event of a significant disruption of course activities because of an extraordinary environmental situation, this syllabus is subject to change. Any and all changes will be communicated with students in as timely a manner as the situation allows.

Semester: Summer II

Course Prefix: CHEM

Course Title: General Chemistry Lab I

Lab: ASSC 239

Year: 2024

Course #: 1111.01

Course Description and Overview

General Chemistry I (CHEM 1113) is a co-requisite for General Chemistry Laboratory (CHEM 1111, TCCN CHEM 1111). The two courses go together as a pair. If you enroll in one course, you must enroll in its co-requisite unless you already have credit for the course on your TWU transcript. If you drop one, then you must drop the other as well. Three lab hours per week, one credit hour.

Faculty Contact Information

Name of Instructor: Dr. Shiru Lin

Office Location: SRC 104 E

Phone Number: 940-898-2567

Office Hours: email for appointment

Email Address: slin6@twu.edu

Name of TA: Alaina Jordan

Email Address of TA: AJordan14@twu.edu

Measurable Student Learning Outcomes

At the end of this course, the student should be able to—

- Describe and practice safety procedures in chemistry laboratories
- Identify and be adept at using chemistry laboratory equipment and apparatuses.
- Measure physical properties of substances.
- Perform unit conversion calculations.
- Use the rules for significant figures in reporting results of laboratory experiments.
- Follow laboratory experiment instructions relatively independently.
- Demonstrate laboratory technique at a level that allows reproducibility of experimental results.
- Make complete observations of chemical reactions.
- Apply critical thinking and problem-solving skills to interpret experimental data.

- Write detailed reports on observations made while performing chemical experiments.

Course Materials and Supplies

COURSE MATERIALS AND SUPPLIES: There is no required textbook or lab manual this term. Instead, students will access open resource files for each experiment using LabFlow, Safety Goggles, appropriate lab clothing (see below), and Canvas. This course is a hybrid laboratory with synchronous face-to-face and online components, so you should have devices that can connect to the internet.

ONLINE SUPPORT: LabFlow will be needed for online access to experimental documents, prelab videos, and quizzes. Instruction on how to enroll in LabFlow will be posted in the course Canvas page. The cost is \$33. Due dates will be available in LabFlow. To sign up with LabFlow, click on the link in your Canvas page.

REQUIRED SUPPLIES: Access to LabFlow. Also, students must have a scientific calculator capable of displaying numbers in scientific notation and should know how to use it with ease. (TI 36x Pro calculator is recommended for lab) In addition, students will need pens and pencils, an eraser, notebook paper, and ***Safety goggles*** (see Lab Safety below). Appropriate clothing will be required for lab attendance (see safety rules below).

Activities, Assignments, and Grading Policy

Laboratory Safety:

Proper Dress for Lab:

- Goggles must be worn at all times
- No exposed skin at or below the waist
- No open toed shoes, any part of the foot or ankle cannot be exposed
- No shorts, pants must go below the ankles
- Socks must go above the ankles
- Shirts must cover to the waist and to the wrists
- Lab coats can be worn over your clothes, lab coats must cover to the wrist

On occasion, you may be using chemicals in the laboratory activities that have been designated as hazardous chemicals. Your instructor will notify you when this occurs, the type of hazard the substance represents, instructions on the proper procedures to use, and proper disposal protocol. If you follow instructions, the laboratory activities are not hazardous.

Proper dress is essential for safety in the chemistry laboratory. Your goggles and the lab coat or proper clothing must be worn (with snaps closed) during every lab (including those in which chemicals are not being used). In addition, long pants, crew socks, and closed toe shoes (preferably leather) MUST be worn for lab at all times. It is important to protect your skin from contact with chemicals. You may have no exposed skin at or below your waist. If a student arrives to lab without proper clothing, they will not be permitted to participate and will receive a grade of zero for that day.

Each student is expected to clean up his/her lab station before leaving the lab room each day. The instructor or TA will dismiss you when your work is completed, lab report turned in, your work area clean, and lab coat returned to the rack.

Safety goggles MUST be worn over the eyes at all times when one is in the laboratory. SAFETY GOGGLES ARE REQUIRED EVEN IF YOU WEAR GLASSES. You will not have an assigned locker and must bring your goggles to every lab session. The Chemistry Department does not furnish or loan goggles. It is your responsibility to acquire them. **No one will be permitted in the laboratory without safety goggles.** Goggles may be purchased in SLRC 365, or at other stores (if you purchase them elsewhere, be sure they are chemical splash goggles and not particulate safety goggles.)

Lab reports will be submitted through the LabFlow. Find the appropriate Lab in LabFlow to submit your lab. Open and Due dates will be available in LabFlow or Canvas.

Grading:

Pre-Lab Quizzes	20%
Weekly Lab Reports	80%

Grading Scale: A – 90% to 100%, B – 80% to 89%, C – 70% to 79%, D – 60% to 69%, F – Below 69%

Weekly pre-lab quizzes will be given through LabFlow.

No Make-up Laboratory Sessions: No make-up laboratory exercises will be permitted for any reason (*this is a departmental policy*). A student who is absent will earn a grade of zero for both the missed quiz and the lab exercise.

Calendar of Classes, Sessions, Activities, Readings, Examinations & Assignments

Date	#	Mode of Instruction	Experiment (Schedule Subject to Change) Note: Lab reports, Quizzes, Videos and Lab descriptions for the labs can be obtained through LabFlow. Online labs will be conducted through LabFlow.
Mon June 3	1	In Lab	Quiz: Lab Safety Quiz: Chemistry Math and Labware
Wed June 5	2	In Lab	Quiz: Determination of Density Report: Determination of Density
Mon June 10	3	In Lab	Quiz: Atomic Spectra Report: Atomic Spectra
Wed June 12	4	In Lab	Quiz: Chemical and physical properties Report: Chemical and physical properties
Mon June 17	5		Quiz: Modeling Geometry and Polarity Report: Modeling Geometry and Polarity
Wed June 19	6	In Lab	***** Holiday – No Lab ***** ***** Holiday – No Lab *****
Mon June 24	7	In Lab	Quiz: Qualitative Analysis Report: Qualitative Analysis
Wed June 26	8	In Lab	Quiz: Chemistry of Copper and Percent Yield Report: Chemistry of Copper and Percent Yield
Mon July 1	9	In Lab	Quiz: Alum from Aluminum

			Report: Alum from Aluminum
Wed July 3	10		Review
			Review

Policy Statements

Disability Access Policy Statement

Texas Woman's University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (e.g. mental health conditions, learning disabilities, chronic medical conditions, temporary medical conditions, etc.), please register with Disability Services for Students (DSS) to establish reasonable academic accommodations. After registration with DSS, please contact me so that we may discuss how to implement your accommodations. Applicable policy: [URP: 01.242 Academic Accommodations for Students \(https://public.powerdms.com/TWU1/documents/1765594\)](https://public.powerdms.com/TWU1/documents/1765594). **DSS contact information:** [DSS website \(https://twu.edu/disability-services/\)](https://twu.edu/disability-services/); dss@twu.edu; 940-898-3835; CFO Ste. 106.

Title IX: Sexual Violence Education

TWU is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and TWU policies prohibit discrimination on the basis of sex and therefore prohibit sexual misconduct. As students, if you or someone you know is experiencing sexual harassment, relationship violence, stalking, or sexual assault, there are campus resources available to provide support and assistance. Alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at the [Report an Incident website \(https://twu.edu/civility/report-an-incident/\)](https://twu.edu/civility/report-an-incident/) or at (940) 898-2968. Additionally, please be aware that under Title IX of the Education Amendments of 1972, all employees are required to disclose information about such misconduct to the Title IX Office. Students who wish to speak to a confidential employee who does not have this reporting responsibility can contact TWU Counseling and Psychological Services at (940) 898-3801 for the Denton Campus, (214) 689-6655 for the Dallas Campus, and (713) 794-2059 for the Houston Campus.

Title IX: Pregnant Students

Title IX is a federal law that requires schools that receive federal funds to provide reasonable accommodations to students who are pregnant or have pregnancy-related conditions. This includes pregnancy, pre-natal doctor appointments, childbirth, false pregnancy, miscarriage, termination of pregnancy, or recovery from any of these conditions. Students who may need academic accommodations due to pregnancy-related conditions should complete the [Pregnancy Accommodation form \(https://twu.edu/pregnancy-accommodation-form/\)](https://twu.edu/pregnancy-accommodation-form/) to coordinate academic needs.

Academic Integrity

Honesty in completing assignments is essential to the mission of the University and to the development of the personal integrity of students. In submitting graded assignments, students affirm that they have neither given nor received unauthorized assistance and that they have abided by all other provisions of the Academic Integrity Policy and the Student Code of Conduct as found on the TWU website and in the TWU Student Handbook. Cheating, plagiarism, collusion, dual submission of a paper, or other kinds of academic dishonesty will not be tolerated and will result in appropriate sanctions that may include failing an assignment, failing the class, removal from an academic program, or being suspended or expelled. Allegations of academic dishonesty in this course may be reported to the Office of Civility and Community Standards. The specific disciplinary process for academic dishonesty is in the [TWU Student Code of Conduct \(https://public.powerdms.com/TWU1/documents/1745742\)](https://public.powerdms.com/TWU1/documents/1745742) and [Academic Integrity Policy \(https://public.powerdms.com/TWU1/documents/1748544\)](https://public.powerdms.com/TWU1/documents/1748544). For details on avoiding

plagiarism, review the Library [Tutorial: Avoiding Plagiarism](https://libguides.twu.edu/c.php?g=270163&p=1803990) (<https://libguides.twu.edu/c.php?g=270163&p=1803990>).

TWU Attendance Policy

Consistent attendance is vital to academic success and is expected of all students. Grades are determined by academic performance, and instructors may give students written notice that attendance related to specific classroom activities is required. Absences do not exempt students from academic requirements. Excessive absences, even if documented, may result in a student's failing the course. Excused absences are within the purview of the instructor. Students must consult with instructors regarding make-up work.

Student Religious Accommodation Policy

It is the policy of Texas Woman's University to accommodate students who observe work-restricted religious holy days. Upon receipt of proper notice, students who miss classes, examinations, or any other assignments as a consequence of their religious observance will be provided with a reasonable alternative opportunity to complete such academic responsibilities without academic penalty. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the coursework required during the period of absence. Students seeking religious accommodations must complete the [Accommodation for Work-Restricted Religious Holy Day Form](#) as outlined by the dates in the [URP: 06.120 Student Religious Accommodation Policy](#).

Emergency Preparedness Information

TWU is committed to safeguarding the well-being of all students and places a high emphasis on community safety. We have established thorough protocols to address emergencies such as fires, tornadoes, and active assailant events. Regular drills and training sessions are conducted to ensure that everyone is well-prepared to respond efficiently in case of any emergency. Pioneer Alerts notify students and faculty about rising emergencies via phones, email, and university computers. Keep your information updated through Pioneer Portal to receive these important notifications. In emergencies, evacuate during fires, seek shelter-in-place for severe weather, and call 911 and [RUN/HIDE/FIGHT](#) (<https://twu.edu/emergency/active-assailant/>) for active assailants. Review the [TWU Emergency Guidebook](#) (<https://twu.edu/media/documents/risk-management/TWU-Emergency-Guidebook.pdf>) for more details or contact Emergency Management at 940-898-3367 or twuready@twu.edu. Follow @TWUReady for preparedness tips and updates. For severe weather areas, visit the [Shelter-in-Place Maps](#) (<https://twu.edu/emergency/building-maps/>).

Campus Alliance for Resource Education

TWU believes that to learn effectively, a student's basic needs must be met. If you are struggling with housing, enough food to eat, your mental health, financial issues, or any other basic need, TWU has resources that may be able to assist you. Please contact the CARE office at (940) 898-2789 or make an appointment via the [CARE website](https://twu.edu/care/) (<https://twu.edu/care/>).