Introductory Chemistry I Lab (CHEM 1106 Lab F2F)

LAMAR INSTITUTE OF TECHNOLOGY

INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Rama Devarakonda
Email: rdevarakonda@lit.edu
Office Phone: (409)247-4871
Office Location: MPC 213
Office Hours: Tuesday – 12.30 pm – 5.30 pm
Wednesday, Thursday -2.30 pm - 5.30 pm

Preferred contact: Blackboard message or email

CREDIT
1 SCH, Semester Credit Hours (2 hours lab)

MODE OF INSTRUCTION
Face to Face

PREREQUISITE/CO-REQUISITE:
Prerequisite:
Co-requisite: CHEM 1306 Introductory Chemistry I (Lecture)

Core Applicability: Life & Physical Sciences

COURSE DESCRIPTION
Survey Course introducing chemistry. Topics include inorganic, organic, biochemistry, food/ physiological chemistry and environmental/ consumer chemistry. Designed for non-science and allied health students

COURSE OBJECTIVES
- Upon completion of this course, the student will be able but not limited to:
- Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
- Demonstrate safe and proper handling of laboratory equipment and chemicals.
- Conduct basic laboratory experiments with proper laboratory techniques.
- Make careful and accurate experimental observations.
- Relate physical observations and measurements to theoretical principles.
- Interpret laboratory results and experimental data and reach logical conclusions.
- Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
- Design fundamental experiments involving principles of chemistry.
- Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

CORE OBJECTIVES

In addition to the course objectives above, the student will also develop the following:

- Critical Thinking Skills (CT) - creative thinking, innovation, inquiry and analysis, evaluation and synthesis of information.
- Communication Skills (COM) – effective development, interpretation and expressions of ideas through written, oral, and visual communication.
- Empirical and Quantitative Skills (EQS) – manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
- Teamwork (TW) – ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

REQUIRED TEXTBOOK AND MATERIALS

Required Textbook – Bauer, Introduction to Chemiostry,6th Edition
Supplementary Textbook -OpenStax, Chemistry 2nd edition
Scientific calculator

ATTENDANCE POLICY

Attendance in lab is mandatory. There is no make-up for missed wet labs (an experiment using chemicals), missed wet labs will result in a grade of zero (0) except in exceptional circumstances with evidence. Attendance is a part of your grade.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

GRADE DETERMINATION

Final grades will be calculated according to the following criteria:

Lab Reports	55 %
Attendance and Participation	5%
CORE Assignment	20 %
Mid Term and Final Exam	20 %

LETTER GRADE

Percentage	Letter
90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

TENTATIVE COURSE CALANDER Spring 2026

WEEKS	Labs	Lab Reports	Due date for submission
1 01/20- 01/30	Introduction and Lab 1: Safety and Equipment	Quiz and Safety Agreement	
2 01/26 - 02/01	Lab 2: Density	Lab Report 1 Lab Report 2	02/01
3 02/02- 02/08	Lab 3: Separation of Mixture	Lab Report 3	02/08
4 02/09 – 02/15	Lab 4: Nomenclature	Lab Report 4	02/15
5 02/16 - 02/22	Lab 5: Understanding Moles (Mole bean Lab)	Lab Report 5	02/22
6 02/23 - 03/01	Lab 6: Percentage Composition	Lab Report 6	03/01
7 03/02 – 03/07	Mid Term (comprehensive Exam on Labs 1-6)		
Spring break			
8 03/16 - 03/22	Lab 7: Constant Composition	Lab Report 7	03/22
9 03/23 – 03/29	Lab 8: Stoichiometry – Decomposition of Baking Soda	Lab Report 8	03/29
10 03/30 – 04/05	Lab 9: Soda can Calorimetry	Lab Report 9	04/05
11 04/06 - 04/12	Lab 10: Calorimetry	Lab Report 10	04/12
12 04/13 – 04/19	Lab 11: Covalent Bonding, Shapes and VSEPR Theory	Lab Report 11	04/19
13 04/20 –04/26	Lab 12: Gas Laws	Lab Report 12	04/26
14 04/27 - 05/03	Lab 13: Acid Base Titrations	Lab Report 13	05/03
15 05/04 - 05/10	Finals (comprehensive exam on labs 7-11) and Core Assignments (poster)	Core Assignment Submission	
16	Core Assignments (poster)	Core Assignment Submission	05/10

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A

functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Special Populations - Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the LIT Catalog and Student Handbook. The LIT Catalog and Student Handbook may be accessed at www.lit.edu. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

INSTRUCTOR GUIDELINES AND POLICIES/INFORMATION ADDUNDUM

- Safety attire and safety glasses must be worn at all times in the chemistry laboratory, no exception.
- Students are expected to stay for the full duration of the lab period or until all data is taken, calculations are performed, and the lab assignment is turned in. Reports are to be neat and complete.
- Safety rules must always be abided by all students. Any student who continually breaks the safety rules will be removed from the class to ensure the safety of the other students in the class.
- The workstation and equipment used during any experiment must be cleaned, dried and returned before leaving the lab. Points will be deducted for poor laboratory habits and leaving dirty glassware and a dirty workstation behind.
- No food, drinks, or use of tobacco products in lab is permitted at any time.
- Children are not allowed in the laboratory at any time.
- No late work will be accepted, unless in exceptional circumstances with evidence (e.g. doctor's note).
- It shall be considered a breach of academic integrity to collaborate with other students during any/all examinations completed throughout the course.
- *Students must work on their reports by themselves, cheating and copying partners work will be treated as violation of academic integrity and the copied reports will be given 0. Only the data collected during the class can be shared.*
- Students with specific accommodation, needs, or medical/personal emergencies should communicate with their instructor regarding individual exceptions/provisions. Furthermore, students with allergies should disclose these to the instructor to ensure no contact with the chemical is made. It is the student's responsibility to communicate such needs to the instructor.