Introductory Chemistry I Lecture (CHEM 1306 3A1)

INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Rama Devarakonda

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Office Phone:(409)247-4871

Office Location: MPC 213

Office Hours:
Tuesday1- 12.30 pm to 5.30 pm
Wednesday, Thursday - 2.30 pm to 5.30 pm

Preferred contact: Blackboard message or email

CREDIT

3 SCH, Semester Credit Hours (3 hours lecture, 0 hours lab)

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

Co- requisite: CHEM 1106 (lab course)

COURSE DESCRIPTION

Survey course introducing chemistry. Topics may 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:

- Define the fundamental properties of matter (mass, volume, and density …)
- Classify matter, compounds, and chemical reactions.
- Determine the basic nuclear and electronic structure of atoms.
- Identify trends in chemical and physical properties of elements using the periodic table.
- Describe the bonding in and the shape of simple molecules and ions.
- Solve stoichiometric problems.
- Write chemical formulas.
- Write and balance equations.

- Use the rules of nomenclature to name chemical compounds.
- Define the types and characteristics of chemical reactions.
- Identify general characteristics of organic compounds.

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 Chemistry 6th edition
Supplementary Textbook – OpenStax, Chemistry 2nd edition
ALEKS Chemistry – Introductory College Chemistry
Scientific calculator

ATTENDANCE POLICY

Attendance is recorded in Starfish and is part of your garde.

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.

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

ALEKS Homework	25%
Attendance and participation	5%
Common CORE Assignment	20%
Chapter Quizzes	30%
Final Exam	20%

LETTER GRADE

Percentage	Letter
90-100	A
80-89	B

70-79	C
60-69	D
0-59	F

TENTATIVE COURSE CALENDAR – CHEM 1306 Fall 2025 F2F

WEEKS	TOPIC AND READING (Bauer, 6e)	ASSIGNMENTS	DUE DATES	CHAPTER QUIZZES
1 08/25- 08/31	Module 1: Matter & Energy (1.1 – 1.4)	Module 1 ALEKS Assignments	09/07	
2 09/01 - 09/07	Module 2: Atoms, Ions & The Periodic Table (2.1- 2.5)	Module 2 ALEKS Assignments	09/14	Mod 1 Quiz Week 2
3 09/08- 09/14				
4 09/15 - 09/21	Module 3: Chemical Compounds (3.1- 3,7)	Module 3 ALEKS Assignments	09/21	Mod 2 Quiz Week 4
5 09/22 - 09/28	Module 4: Chemical Composition (4.1- 4.4)	Module 4 ALEKS Assignments	10/05	Mod 3 Quiz Week 6
6 09/29 - 10/05				
7 10/06 – 10/12	Module 5: Chemical Reactions (5.1- 5.5) (6.1-6.7)	Module 5 ALEKS Assignments **CORE Assignment: Compound & Eq.**	10/19	Mod 4 Quiz Week 7
8 10/13 - 10/19				
9 10/20 – 10/26	Module 6: Chemical Bonding (8.1- 8.5)	Module 6 ALEKS Assignments	10/26	Mod 5 Quiz Week 8
10 10/27 – 11/02	Module 7: Gases (9.1-9.4)	Module 7 ALEKS Assignments	11/09	Mod 6 Quiz Week 10
11 11/03 - 11/09				
12 11/10 – 11/16	Module 8: Solutions (11.1- 11.4)	Module 8 ALEKS Assignments	11/16	Mod 7 Quiz Week 12
13 11/17 – 11/23	Module 9: Acids & Bases (13.1-13.5)	Module 9 ALEKS Assignments **CORE Assignment: Submission & Disc.**	**11/23**	Mod 8 Quiz Week 13

14 11/24 - 11/30	Module 10: Organic Chemistry (16.1- 16.9)	Module 10 ALEKS Assignments	**12/07**	Mod 9 Quiz Week 14
15 12/01 - 12/07				
16 12/08- 12/14	Review & Final Exams	**Finals (comprehensive Exam on all Modules)**		

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 ADDENDUM

How to be Successful in this Course:

This is simple. (O-D-T)

1. **Organized Time Management** – You must be able to balance your time dedicated to this class (apprx. 2-4 hours a day). Science courses demand a much larger amount of your time than other courses.
2. **Disciplined Independent Studying** – This course does not have face-to-face class lectures as featured in traditional college courses. You must be able to study independently and effectively. This includes being proactive and communicating with the instructor for assistance when coming across problems with understanding the material. Online assignments: You will be covering approximately 1 - ½ chapter each week. Each chapter includes a variety of online assignments which must be completed within specified deadlines.
3. **Technology Competence** – You must have a basic understanding of computers and internet usage. You must be able to independently navigate the LIT learning management system (blackboard) and the McGraw-Hill Aleks publisher website used in this course. I have provided you with resources if you need assistance in learning the navigation of these resources.

What You Need To Understand About Taking A Science Course:

1. This is a science class. In general, science classes are more time-consuming and require more extensive studying and preparation due to the complexity of the material.

2. This is an in-person class. You need to attend lectures and labs for proper understanding of the course content
3. This is also an independent study class. While students think in person classes will be less rigorous, they forget the fact that this format will require studying independently (on your own) also, with the support of formal lectures by an instructor.
4. You have chosen to enroll in 1) a science course and 2) an in-person class. If you don't have disciplined study practices and excellent time management skills, you will be at a disadvantage in this course as this is a science course.
5. I do monitor your progress (or lack of) weekly. If you fall behind with the assignment deadlines, stop completing coursework, demonstrate the inability to pass assessments and lab quizzes you will be withdrawn from the class due to a lack of progress.
6. Procrastination = Failure. If you procrastinate and do not make this course a top priority in your daily schedule you will not successfully pass this class. It's that simple.

Time Management: You must be able to balance your time dedicated to this class (3-4 hours a day).

Attendance: To successfully complete the course, your attendance is required. Showing up to class is not enough to score a perfect attendance and participation grade; participation is required! Roll will be taken; being more than 10 minutes late, you risk being counted absent. Attendance is a part of your grade.

Communication: The best way to reach me is by email through email or Remind Texting. You will generally get a response within 24-48 business hours. If you don't get a response within that time frame, please email again.

Late Work: Late work is not accepted, unless in exceptional circumstances with evidence (e.g. doctor's note). Any assignment not submitted by the due date will receive a 0 grade, unless prior arrangements are approved by the instructor.

Make-up Assessments: No make-up assignments, assessments, quizzes and Finals will be administered.

Cell Phones and Computers: Electronic devices are allowed, as long as you do not create a distraction to others.

About the Course: Each Module has assigned topics and homework problems through ALEKS. If you experience any issues with ALEKS, look over the materials in the course information folder and, if none of these fixes work, contact me so that we can find a solution.
Academic Integrity: It shall be considered a breach of academic integrity to collaborate with other students during any/all examinations completed throughout the class (i.e. complete tests/questions as a group). Examinations cannot be submitted after correct answers are revealed to the class to ensure academic integrity.

Accommodations: Students with specific accommodations, needs, or medical/personal emergencies should communicate with their instructor regarding individual exceptions/provisions. It is the student's responsibility to communicate such needs to the instructor.

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