

Introductory Chemistry I Lecture (CHEM 1306 Online)

INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Rama Devarakonda

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Office Phone: (409)247-4871

Office Location: MPC 213

Office Hours:

Tuesday 1- 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)

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.



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- 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

Webcam

ATTENDANCE POLICY

Attendance is recorded in Starfish as you complete your assignments weekly according to due dates.

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	5%
Common CORE Assignment	20%
Chapter Quizzes	30%
Final Exam	20%

LETTER GRADE

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

TENTATIVE COURSE CALENDAR - CHEM 1306 Fall 2025 Online

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	11/23	Mod 8 Quiz Week 13

		CORE Assignment: Submission & Disc.		
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 \(lit.edu\)](https://lit.edu/specialpopulations).

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 My LIT 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

What You Need To Understand About Taking An Online 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 online class.

Contrary to popular assumptions, online courses are NOT easier and less time-consuming than face-to-face classes. They are actually more challenging and much more time-consuming. You also must have basic computing and web browser skills due to the online design of this course

3. This is an independent study class.

While students think online classes will be less rigorous, they forget the fact that this format will require studying independently (on your own) and without the support of formal lectures by an instructor.

4. You have chosen to enroll in 1) a science course and 2) an online format. If you don't have disciplined study practices and excellent time management skills you will be at a disadvantage in this 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.

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 - $\frac{1}{2}$ 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.

Your success will also depends on:

- Disciplined Schedule for studying: You must be proactive and communicate with the instructor for assistance if you come across problems with the learning and understanding the course material.
- You may need to learn and study course material and then finish your Virtual Labs for the week, before the scheduled deadline, Sunday midnight.
- Time Management - You must be able to balance your time dedicated to this class (2-3 hours a day).
- Technology Competence - You must have a basic understanding of computers and internet usage. You must be able to independently navigate the Blackboard and the publisher website used in this course. I have provided you with resources if you need assistance in learning the navigation of these resources
- 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 except for Projects as per the instructor's instructions.
- 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.
- Taking Exam Online

Exams in this course are administered through Blackboard. Exams will be administered with Respondus **LockDown Browser + Respondus Monitor (webcam)**

Requirements to take exams include:

- A reliable computer, desktop or laptop (phones, chromebooks, tablets, and iPads are not allowed).
- Windows: 10, 8, 7
- Mac: OS X 10.10 or higher
- Adobe Flash Player (bundled with the LockDown Browser installation)
- Web camera (internal or external) & microphone
- A reliable internet service provider. A broadband internet connection.
- A room to take the exam where you are alone (other individuals in the room are not allowed)

Watch these overview videos to understand the tools your will be using to take the exam.

Respondus LockDown Browser:

<https://www.youtube.com/watch?v=XuX8WoeAycs#action=share>

Respondus Monitor:

<https://www.youtube.com/watch?v=hv2L8Q2NpO4#action=share>

Respondus **LockDown Browser + Respondus Monitor (webcam)**

The webcam can be the type that's built into your computer or one that plugs in with a USB cable.

Download Instructions:

- Select the quiz in the course
- Under Quiz Requirements you will see "To take this quiz you must use the Respondus LockDown Browser"

- Below this will appear: "You can use the button below if you have not already downloaded LockDown Browser". Click the button to go to the download page and then follow the instructions
- Use the link to download Respondus LockDown Browser to your computer; follow the installation instructions
- Return to the Quiz page in Brightspace (it may still be open in another tab) and select the quiz
- Select "Launch LockDown Browser"
- The quiz will now start

Note: LockDown Browser only needs to be installed once on a computer or device. It will start automatically from that point forward when a quiz requires

Guidelines while taking online quiz, follow these guidelines

- Ensure you're in a location where you won't be interrupted.
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach.
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it.
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices.
- Remain at your computer for the duration of the test.
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam.
- To produce a good webcam video, do the following:
 - Avoid wearing baseball caps or hats with brims.
 - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move.
 - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete.
 - Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted.