CHM 101: Introductory Chemistry

Overview

Atoms make up everything, but what does that really mean, what are atoms, and why should I care? In this course we explain from first principles, but in an easily understandable way, exactly how atoms make up everything, how the molecules of life and the materials of the world are formed, with an emphasis on how these materials and molecules do what they do. You will learn practical applications of chemistry and biochemistry, such as how blood pH is regulated, and answers to fundamental questions such as where did everything come from and why everything around you actually exists! You will learn the language of molecular level science, and gain an understanding of how basic molecular phenomena helps explain basic biology, materials science and engineering.

What You'll Learn

- Solve problems from the atomic and molecular perspective chemistry
- Apply molecular ideas to understanding the properties of materials and health science
- Predict chemical and physical properties of common materials from molecular or material structures
- Evaluate suitability of chemicals and materials for applications in alternative energy and health sciences

How to Succeed

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

MAT 117 College Algebra or MAT 142 College Mathematics is strongly recommended as a prerequisite for success in this course.

Earn College Credit

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student.

This course includes a lab and satisfies 4 credit hours toward the Natural Science - Quantitative (SQ) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied.

In order to receive academic credit for this course, you must earn a grade of "C" or better. You have one year to add the course to your transcript.

Exams and Grading

10% Learning Activities	**15%** Quizzes	**25%** Labs
20% Midterm Exam	**30%** Final Exam	

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CHM 101: Continued

Time Commitment

This is an asynchronous, online course. This means, while you will have deadlines, you do not need to be at your computer at specific times or participate in live activities.

To be successful in this class, you must view all course pages and complete all graded work by the deadlines indicated. Also, keep in mind that "attendance" in an online course means logging into the platform on a regular basis, checking for course announcements, and visiting and participating in the discussion forums.

This 3 credit, 8 week course requires about 135 hours of work. Therefore, expect to spend approximately 15-20 hours per week preparing for and engaging in this course.

Materials

This course makes use of open educational resources (OERs) provided within the course, **no purchase necessary**.

Graded Assignments

Graded assignments are required and count towards your final grade. Students must submit all assignments via the course site unless otherwise instructed.

Assignment Deadlines

Your instructional team will provide all content and learning activities on or through your course site. It is your responsibility to review all content, fulfill all assignments on time, and ask any questions you have in the designated discussion area. It is also your responsibility to determine the due dates and times for all course assignments according to your time zone. Due to the large-scale format of Universal Learner Courses, late assignments will not be accepted at any point during the course, and we cannot make exceptions.

Course Communication

All communication will take place via the discussion forums and course announcement page. There will be a discussion forum where you can post general questions, comments, and direct inquiries for the instructor and course team. Please use these forums to ensure a timely response. Your instructor will not be able to respond to email.

Additional Information

If you have questions about Universal Learner Courses and how they work, please visit ea.asu.edu or contact our support team at ulcourses@asu.edu.