# General Chemistry

# CHEM 1411 (3-0)

# Course Description

In this class, you will study the fundamental laws and theories of chemistry, chemical

nomenclature, chemical equilibrium, metals and non-metals and their compounds, nuclear chemistry and the quantum theory of structure. **Prerequisites:** Chemistry 1411 is to be completed before Chemistry 1412. Proficiency in algebra required. Only students eligible to take college-level mathematics courses may take Chemistry 1411.

# Grading

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| --- | --- | --- | --- | --- | --- |
| Exams, (40, 60, 100, and 100 pts) | 300 pts | **Point Breakdown** | | |  |
| Final | 150 pts | **A** | = | 90-100% | 900-1000 pts |
| Quizzes, classroom participation | 150 pts | **B** | = | 80-89.9% | 800-899 pts |
| OWL Homework | 200 pts | **C** | = | 70-79.9% | 700-799 pts |
| Laboratory | 200 pts | **D** | = | 60-69.9% | 600-699 pts |
| **Total** | **1000 pts** | **F** | = | <60% | 0-599 pts |

# Attendance

You are expected to attend all class meetings. You are expected to arrive on time and to stay

until the end of the lecture. In-classroom activities such as worksheets and quizzes cannot be made up. You will not be automatically dropped if you stop attending class. If you have the flu, please stay home. Do not help spread the flu to everyone else. Keep your professor informed as to your status by email (preferred) or telephone (if necessary). Your faculty will work with you to keep up to date in the class.

# Blackboard

Grades, information, handouts, homework assignments, and other course documents will be

posted on Blackboard. [http://blackboard.angelo.edu](http://blackboard.angelo.edu/) (or access Blackboard from RamPort).

# Honor Code / Academic Dishonesty

Angelo State University expects its students to maintain complete honesty and integrity in their

academic pursuits. Students are responsible for understanding the Academic Honor Code, which is to be found in the Student Handbook ([www.angelo.edu/cstudent/](http://www.angelo.edu/cstudent/)). The penalty for ANY sort of dishonesty, cheating or plagiarism can range from a grade of zero on the assignment to a F in the course and disciplinary action as warranted in accordance with university guidelines. Don’t even consider it.

# Disabilities

Persons with disabilities which may warrant academic accommodations must contact the Student

Life Office, Room 112 University Center, in order to request and to implement academic accommodations.

**Evaluation of Student Learning Outcomes**

Student learning outcomes will be evaluated by test questions or by the grading of in-classroom activities,

as described by your instructor.

**Texas Higher Education Coordinating Board Natural Sciences Objectives**

The objective of the study of a natural sciences component of a core curriculum is to enable the student to

understand, construct, and evaluate relationships in the natural sciences, and to enable the student to understand the basis for building and testing theories.

**Exemplary Educational Objectives**

1. To understand and apply method and appropriate technology to the study of natural sciences.
2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in

writing.

1. To identify and recognize the differences among competing scientific theories.
2. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
3. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

This course is part of the ASU core. The learning outcomes, assignments/general activities, and assessments are identified below.

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| --- | --- | --- |
| **Course Level Learning Outcomes** | **Proposed 2014 Core Assignments/General**  **Learning Activities for the Core Objectives** | **Proposed 2014 Core Assessments** |
| **CHEM 1411**  **CT1:** Students will be able to design and conduct experiments and analyze the data generated to answer some component of a given causal question.  **CS1:** Students will be able to organize, format and display visual information.  **EQS1:** Students will be able to organize data, prepare suitable graphs and determine if the data supports the working hypothesis.  **EQS2:** Students will be able to understand and apply reasoning in the chemical sciences.  **TW2:** Students will be able work as teams to conduct experiments and produce a written report of their results. | **CHEM 1411**  **CT1:** Laboratory assignments in which students gather and analyze data to reach a logical conclusion about a chemical question  **CS1:** Students will prepare graphs of chemical data suitable for analysis and discussion  **EQS1:** Students will prepare and analyze graphical data to determine if the data supports or denies the working hypothesis  **EQS2:** Students will be able to interpret observable chemical behavior in terms of chemical principles  **TW2:** Students will work as teams to conduct a laboratory experiment, analyze the results and produce a report | **CHEM 1411**  A rubric may be used to assess student work for all SLOs  TW may be assessed by peers. |