

College Prep Chemistry (#4202)

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Textbook: *Chemistry: Matter and Change*, MC Graw Hill Glencoe Science 2005

COURSE CONTENT

Course Objectives

This course is designed to meet state and district graduation requirements and provide students with a basic background in chemistry. It is aimed at students who expect to attend college.

Main concern of this course is to deal with the question” *What is Chemistry?*” and the core ideas which are the foundation of the discipline.

The objective is to understand what does these ideas are, the experimental information on which they are based, and the relationships among them.

Chemistry is based on nine core ideas:

1-Atomic structure

2-The chemical bond

3-Mole concept

4-Molecular geometry

5-Chemical Kinetics

6-Entropy concept

7-conservatoin of energy

8-Reaction mechanisms

9-Intermolecular

In this course we will cover at least 7 concepts.

The presentation will combine descriptive knowledge of chemical substances with mathematical skills to demonstrate the fundamental concepts. Every classroom activity, every experiment, and every homework assignment is deliberately connected to at least one of the Delaware State Standards and Performance Indicators.

Besides lectures, class discussions, demonstrations, films, and textbook readings, the essential link between laboratory research and practical products will be emphasized. Connections of chemical theory to real objects, familiar products, and the students’ everyday experience will be paramount in this course.