Course Prefix and Number: CHM 101  Credits: 4

Course Title: General Chemistry I

Course Description: Emphasizes experimental and theoretical aspects of inorganic, organic, and biological chemistry. Discusses general chemistry concepts as they apply to issues within our society and environment. Designed for the non-science major. Prerequisite: Competency in Math Essentials (MTE), units 1-6, as demonstrated through the placement and diagnostics tests or equivalent. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

General Course Purpose: Provide the non-science major with a laboratory science that is relevant to issues related to society and the environment. Provides non-science majors with a laboratory science. Credits earned from this course do not satisfy the requirements of a laboratory science course in the AS degree in Science.

Course Prerequisites and Co-requisites:
Prerequisites: Competency in Math Essentials (MTE), units 1-6, as demonstrated through the placement and diagnostics tests or equivalent. Completion of MTH 3 is recommended.

Course Objectives:
Upon completing the course, the student will be able to
a. Discuss the application of general scientific principles to given specific environmental problems and other problems of chemical origin;
b. Discuss the application of general chemical principles to given specific environmental problems and other problems of chemical origin;
c. List the major chemical contributions to environmental quality or lack thereof; and
d. Demonstrate a conceptual understanding of general chemical principles through writing, problem-solving, and library or Internet research projects.

Major Topics to Be Included:
a. Atmospheric and natural water content and pollution
b. Global warming
c. Chemical aspects of energy production and consumption
d. Acid precipitation
e. Nuclear fission
f. Alternate energy sources
g. Plastics and polymers, drug design, human nutrition
h. Chemical principles

Effective Date of Course Content Summary: February 16, 2009