


COCONINO COMMUNITY COLLEGE  
COURSE OUTLINE

Prepared by: Rhonda L. Shaeffer  
General Education criteria reviewed  
General Education Outcomes reviewed by: Carl Sheperd  
Revised by: M. Inigo  
Revised by: Troy Cayou  
Status: Permanent

December 4, 1991  
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A. Identification:

1. Subject Area: Chemistry (CHM)
2. Course Number: 130  CHM 1130
3. Course Title: Fundamental Chemistry
4. Credit Hours: 4
5. Catalog Description: General inorganic chemistry, scientific method, and general laboratory procedures.  
Prerequisite: (ENG 100 and MAT 121 or MAT 122) or placement beyond prerequisite courses. General Education: Physical and Biological Sciences. Three lecture. Three lab.

B. Course Goals:

To give students a greater understanding of chemical principles and concepts, familiarize them with Scientific Methods and general laboratory principles, and have them be able to apply basic principles in chemistry.

C. Course Outcomes: Students will:

1. develop a working knowledge of Scientific Methods.
2. communicate laboratory results in written and oral form.
3. manipulate and use the metric system for measurements and analysis.
4. explain basic atomic and molecular structures.
5. develop an understanding of various forms of stoichiometry.
6. demonstrate an elementary understanding of nuclear chemistry and radioactivity.
7. describe the basis for equilibrium.
8. utilize basic laboratory techniques.

D. Course Outcomes Assessment will include:

1. comprehensive final exam.
2. instructor evaluated lab report.

E. Course Content will include:

1. scientific Methods and metric system.
2. atomic structure, chemical formulas and equations.
3. molecular chemistry.
4. chemical bonding and configuration.
5. nuclear chemistry.
6. stages of matter.
7. stoichiometry.
8. acids and bases, solutions and electrolytes.
9. equilibrium.