

# **Course Outcome Summary**

### **Standard Course**

# CHEM 160 Fundamentals of Health Science Chemistry

#### **Course Information**

Division Science/Mathematics

Contact Hours 90 Lecture Hours 45 Lab Hours 45 Total Credits 4

Prerequisites CHEM 150 or CHEM 151

## **Course Description**

A study of organic and biochemistry as it applies to the health sciences. The course is designed for majors in occupational programs relating to the health sciences that require a basic understanding of organic and biochemistry. Course requires laboratory work.

#### **CHEM 160 Course Outcomes**

In order to evidence success in this course, students will be able to:

- 1. Identify and draw organic substances and reactions in terms of functional groups and families.
- 2. Utilize molecular, structural, and condensed formulas to represent organic molecules.
- 3. Identify and draw organic substances and reactions in terms of nomenclature.
- 4. Identify organic substances and reactions in terms of physical and chemical properties.
- 5. Explain organic substances and reactions in terms of structure and bonding.
- 6. Identify, categorize, and draw the biomolecules of life.
- 7. Identify the chemical and physical properties of the biomolecules.
- Define the concept of optical activity and the role of optical isomerism in physiological activity.
- 9. Define and explain the anabolism and catabolism of biomolecules.
- 10. Utilize analytical laboratory techniques to differentiate physical and chemical properties of organic functional groups and families.
- 11. Perform organic preparations and operations in the laboratory including simple analysis of products.
- 12. Demonstrate proper handling and assembling of laboratory equipment.
- 13. Utilize analytical laboratory techniques to evaluate the physical and chemical properties of biomolecules.

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