This course addresses basic concepts of chemistry and biochemistry as they pertain to the health sciences, and is a good preparation for students who intend to pursue a career in nursing. Topics include atomic and molecular structure, dimensional analysis, reactions, acids and bases, organic and biochemical compounds, and introductory metabolism.

- 1: Chemistry, Matter, and Measurement

- 2: Elements, Atoms, and the Periodic Table

- 3: Ionic Bonding and Simple Ionic Compounds

- 4: Covalent Bonding and Simple Molecular Compounds
5: Introduction to Chemical Reactions

6: Quantities in Chemical Reactions

7: Energy and Chemical Processes

8: Solids, Liquids, and Gases
9: Solutions

10: Acids and Bases

11: Nuclear Chemistry

12: Organic Chemistry: Alkanes & Halogenated Hydrocarbons
13: Unsaturated and Aromatic Hydrocarbons

14: Organic Compounds of Oxygen

15: Organic Acids and Bases and Some of Their Derivatives

16: Carbohydrates
17: Lipids

18: Amino Acids, Proteins, and Enzymes

19: Nucleic Acids

20: Energy Metabolism