This is a lecture and laboratory course that covers the fundamental concepts of chemistry. This course assumes no previous knowledge of chemistry, presenting both chemical problem solving and laboratory skills. This course is intended primarily to prepare students for CHEM 400.

- 1: The Chemical World

- 2: Measurement and Problem Solving

- 3: Matter and Energy
4: Atoms and Elements

5: Molecules and Compounds

6: Chemical Composition

7: Chemical Reactions

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</table>
8: Quantities in Chemical Reactions

9: Electrons in Atoms and the Periodic Table

10: Chemical Bonding

11: Gases

12: Liquids, Solids, and Intermolecular Forces
13: Solutions

14: Acids and Bases

15: Organic Chemistry of Hydrocarbons

16: Organic Functional Groups: Structure and Nomenclature