1. Identify, formulate and solve integrative problems using appropriate information and approaches.

2. Demonstrate an understanding of basic chemical transformations, including the ability to predict chemical reactivity and properties.

3. Recognize the relationship between structure, bonding and the properties of molecules and materials.

4. Model chemical systems and experimental data using relevant quantitative, mathematical and computational methods.

5. Design, conduct and analyze experiments safely and successfully.

6. Locate, evaluate and use information in the chemical literature.

7. Communicate chemical knowledge effectively through written reports, oral presentations and visual aids.

8. Work collaboratively with others, both chemists and those from other disciplines, to solve problems and create new knowledge.

9. Recognize how chemistry relates to contemporary issues in our society.

10. Understand professional and ethical responsibility.