General Instructional Objectives
Chapter 15. Aldehydes and Ketones

15.1 The Carbonyl Group
15.2 Compounds Containing a Carbonyl Group
15.3 The Aldehyde and Ketone Funcitonal Groups
15.4 Nomenclature for Aldehydes
15.5 Nomenclature for Ketones
15.6 Isomerism for Aldehydes and Ketones
15.7 Selected Common Aldehydes and Ketones
15.8 Physical Properties of Aldehydes and Ketones
15.9 Preparation of Aldehydes and Ketones
15.10 Oxidation and Reduction of Aldehydes and Ketones
15.11 Reaction of Aldehydes and Ketones with Alcohols
15.12 Formaldehyde-Based Polymers
15.13 Sulfur-Containing Carbonyl GroupsStudents should be able to:

1. Be familiar with the physical and chemical properties of aldehydes and ketones.
2. Write the structures of simple examples of each of the classes of aldehydes and ketones.
3. Name the common aldehydes and ketones.
4. Know the method of synthesizing aldehydes and ketones.
5. Aldehydes and ketones and their reactions.
6. Understand the functionality of aldehydes and ketones in molecules.