**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.