

Lecture 1 Review: Carboxylic acids and the acidity of the OH bond

What we covered last time:

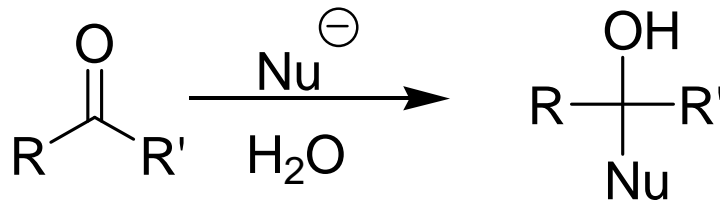
- Introduction to carboxylic acids
 - Nomenclature and physical properties
- Synthesis and Reactions of carboxylic acids
 - Methods for preparation and reactivity
- Bronstead-Lowry Acids
 - Acid-base equilibrium
- Introduction to amino acids
 - Structure and properties

Chemistry at the Carbonyl Carbon: Overview

- Carbonyl chemistry
 - Classes of carbonyl compounds
 - General types of carbonyl reactions
- Oxidation/ reduction chemistry
- Organometallic reagents

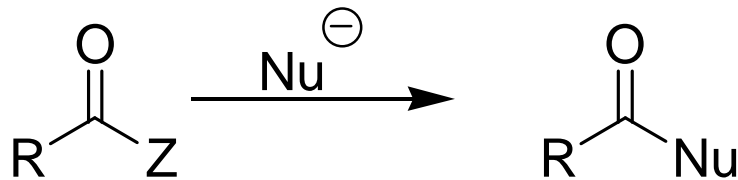
Chapter 20
(lectures 2 + 3)

- Nucleophilic addition reactions



Chapter 21
(lectures 4 + 5)

- Nucleophilic substitution reactions



Chapter 22
(lectures 6 + 7)

Lecture 2 Overview: Introduction to Carbonyl Chemistry

part 1

- Chemistry at the Carbonyl Carbon:
Introduction
- Oxidation/ Reduction of carbonyl compounds
 - Generation of alcohol, aldehydes, ketones, carboxylic acids
 - Stereochemistry and enantioselective reductions
 - Biological reductions
 - Selective oxidizing agents
- Organometallic reagents