

UNIT 17 –CARBOXYLIC ACIDS AND THEIR DERIVATIVES

OCSL: Chapter 6

VTOC: [Nomenclature of Carboxylic Acids](#)
[Natural Products](#)
[Related Derivatives](#)
[Physical Properties](#)
[Acidity](#)
[Reactions of Carboxylic Acids](#)
[Salt Formation](#)
[Substitution of Hydroxyl Hydrogen](#)
[Substitution of the Hydroxyl Group](#)
[Carboxylic Derivatives](#) [Physical Properties](#)
[Nomenclature](#)
[Reactions of Carboxylic Acid Derivatives](#)
[Acyl Group Substitution](#)
[Mechanism](#)

UC Davis: [Carboxylic Acids](#)
[Esters](#)
[Amides](#)
[Nitriles](#)
[Anhydrides](#)
[Acid Halides](#)
[Section 12.1: Introduction to carboxylic acid derivatives and the nucleophilic acyl substitution reaction](#)

UCalgary: [Chapter 19](#): Carboxylic Acids
[Chapter 20](#): Carboxylic Acid Derivatives. Nucleophilic Acyl Substitution

Skills:

- 17A. Name carboxylic acids and carboxylates including common names acetic acid and benzoic acid.
- 17B. Predict products of acid-base reactions of carboxylic acids and predict relative acidity based on structure. Draw three forms of amino acids.
- 17C. Draw the mechanism of nucleophilic acyl substitution, hydrolysis and fisher esterification.
- 17D. Predict the products of acyl substitution, hydrolysis, and conversion of acids to acid derivatives.
- 17E. Devise multistep synthesis using acyl reactions.