

19: Aldehydes + ketones.

- Preparation by PCC oxidation, ozonolysis, alkyne hydrolysis, Friedel Crafts acylation. (section 19.2)
- 19.3 oxidation (Just CrO_3)
- 19.4 Nucleophilic Addition
- 19.5 Relative Reactivity Aldehydes / ketones
- 19.6 Hydration
- 19.7 Cyanohydrin
- 19.8 Grignard / Hydride addition
- 19.9 Imines
- 19.11 Acetals
- 19.12 Wittig Rea

EXAM 4

20 Carboxylic Acids (no nitros)

20.1

20.2 - 20.5 Properties of carbox acids

20.6 oxidation to make, carbox acids,
carboxylation of grignards.

20.8 Reduction of Carbox Acids

Chapter 21 Carboxylic Acid Derivatives

21.1 - 21.2 Classes + relative reactivity

21.3 Reactions of Acids: conversion to chlorides, anhydrides, esters

21.4 Reactions of Acid Halides

preparation

conversion to acids, esters, amides, alcohols

21.5 Anhydrides

preparation

21.6 Esters

preparation

reactions to form acids, amides, alcohols, w/ Grignards.

21.7 Amides

stable to hydrolysis

Chapter 22 α Substitution

22.1 - 22.2, α enol, enolate

22.3 α halogenation

22.8 Enolate Alkylation

Chapter 23 Condensation Rns.

23.2 aldol rxn.

23.4 enone

23.8 claisen rxn

23.11 Michael Rxn (if time)

19.14 conjugate addition .

Topics of chapters 22 + 23 subject
to revision as time permits...