

OCSL: 7.7, 7.8, 8.2, 8.3

VTOC: [The Aldol Reaction](#)
[The Claisen Condensation](#)
[Reactions of Amines](#)
[Electrophilic Substitution at Nitrogen](#)
[Preparation of 1°-Amines](#)
[Preparation of 2° & 3°-Amines](#)

UCalgary: [The aldol reaction: aldehydes, ketones, advanced aspects](#)
[Overview of ester enolate reactions](#)
[Claisen condensation](#)
[Dieckmann condensation](#)
[Alkylation of Ammonia by Alkyl Halides](#)
[Reductions of nitrogen containing functional groups:](#)
 [Nitriles](#)
 [Amides](#)
[Reductive Amination via Imines](#)

UC Davis: [Section 13.3: Aldol reactions](#)
[Section 13.4: Claisen reactions](#)

Skills:

- 21A. Draw the mechanism of Aldol and Claisen condensations.
- 21B. Draw the products of self, mixed, and intramolecular Aldol and Claisen condensations and determine starting materials given a product.
- 21C. Predict the products of reductive amination, and reduction of nitriles and amides.
- 21D. Use condensation and amine forming reactions as part of a multistep synthesis.