



# Chem 342 • Organic Chemistry II

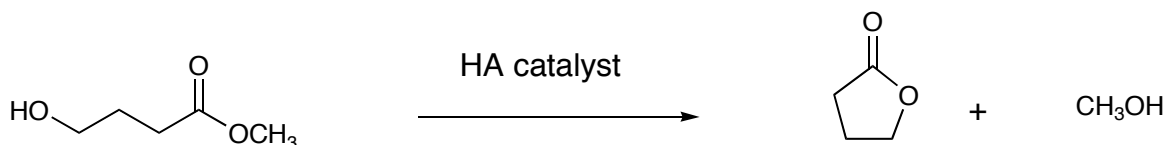
## Suggested Problems for Chapter 21

### Suggested problems from your text:

21.2, 21.4, 21.5, 21.7, 21.9, 21.10, 21.11, 21.16, 21.17, 21.18, 21.19, 21.21, 21.35, 21.36, 21.40, 21.42, 21.44, 21.45, 21.48, 21.53, 21.58

### Additional Practice Problems:

When methyl 4-hydroxybutanoate is treated with an acid catalyst a transesterification takes place to yield a lactone. The mechanism is identical to a Fischer esterification except methanol is the leaving group instead of water. Write out the complete mechanism showing all intermediates and arrows indicating electron flow.



Provide the missing reagents and/or products.

