

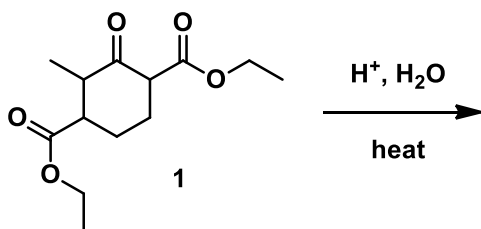




## CHEM 8410\_6410\_4410 – Organic Synthesis

THE UNIVERSITY OF  
**TOLEDO**  
1872

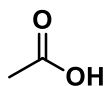
- 2) When compound **1** is treated with aqueous acid and heated, a compound with the molecular formula of  $C_8H_{12}O_3$  is formed. What is the structure of this compound? Provide a mechanism.  
**2 PTS**



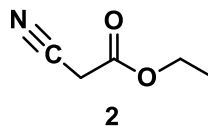
**Answer:**

- 3) Propose a synthesis of compound **2** starting from acetic acid. **4 PTS**

Starting Material



Target Molecule



**Answer:**