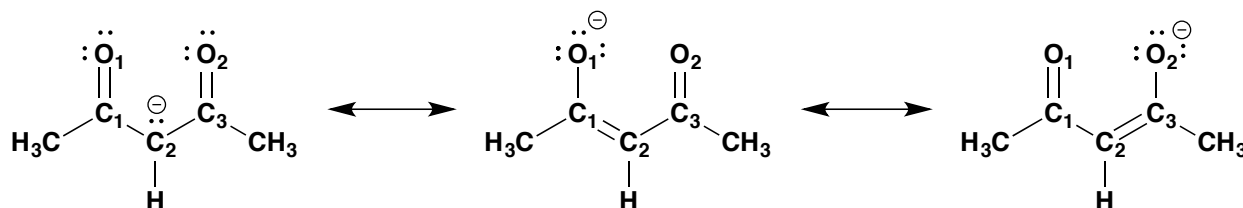


CHE 310 – 002 & 003  
Lecture Homework #5

**Due:** Monday Jan 28, 2019, 10:00 am.

1. Place curved arrows on the structure of the first resonance contributor below that would result in the second structure. On the second structure place arrows that would result in the third structure. Number each of your arrows and in words describe what each arrow represents. The carbons and oxygens are numbered (**C<sub>1</sub>**, **C<sub>2</sub>**, **C<sub>3</sub>**, **O<sub>1</sub>**, **O<sub>2</sub>**) for you to use in your description. For example, "Arrow #1: an electron pair on O<sub>2</sub> is being used to form a bond between C<sub>1</sub> and C<sub>3</sub>." [This example is not one of the answers, just a description of how an answer would be formatted.]



2. List, in order, the features found in stable resonance contributors. (Resonance handout)