

**B. S. Sophomore Year – Spring Semester**

**CEM 352 Organic Chemistry II**

**Description:** Carboxylate derivatives. Conjugation, Aromaticity. Amino acids. Proteins. Carbohydrates. Nucleic acids.

**Credit:** 3 credits (3 hours of lecture, 1 hour of recitation per week)

**Prerequisite:** CEM 351; not open to students with credit in CEM 252.

**Lecture Topics:**

1. Spectroscopy (MS, IR, UV-Visible,  $^1\text{H}$  NMR,  $^{13}\text{C}$  NMR)
2. Aldehydes and Ketones
3. Alcohols and Ethers
4. Enols and Enolates
5. Carboxylic Acids
6. Acyl Derivatives
7. Amines
8. Orbital Symmetry
9. Carbohydrates
10. Amino Acids and Peptides