**SYLLABUS**

**Honors Organic Chemistry**

**2014-2015**



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| **Instructor:** |  **Mr. Durland** |
| **Email:** | **durgre@wilsonsd.org** |
| **Class times:** |  **TBD** |
| **Room:** |  **D430** |
| **Office Hours:**  |

|  |
| --- |
|  **2:40-4:00 pm** |

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**Course Description**:

Organic Chemistry explores the structure and reactivity of organic molecules and their influence on humans.  Organic chemistry topics include organic molecules role in energy, food, air and water pollution, drugs, and other student-generated topics. The course supports students planning careers in science and the health care professions.

**Pre-requisite**: CP Chemistry with Recommendation or Honors Chemistry

**Required Items**:

* Text: Bruice, *Essential Organic Chemistry*, 2nd Edition, 2010.
* Scientific non-programmable and non-graphing calculator (Texas Instruments 30X or 36X or equivalent)

**UNIT TITLES:**

**1. An Introduction into Organic Compounds**

**2. Alkenes and Alkynes**

**3. Isomers and Stereochemistry**

**4. Delocalized Electrons**

**5. Aromaticity**

**6. Substitution and Elimination Reactions**

**7. Reactions of Alcohols Amines Ethers and Epoxides**

**8. Nucleic Acid Substitution**

**9. Reactions of Aldehydes, Ketones and Carboxylic Acids**

**10. Reactions at the α-carbon**

**11. Determining the Structures of Organic Compounds**

**12. Organic Chemistry of Drugs**