**COURSE SYLLABUS**

**Chemistry 313, Organic I**

**Summer 2012**

**Course: Organic Chemistry, CHM 313-61**

**Meets: MTWThF from 9:25 a.m. to 10:40 a.m. in SC 150**

**Instructor: Dr. Kevin Church, SC 407 or Lab 436,** [**kchurch1@udayton.edu**](mailto:kchurch1@udayton.edu)

**Text: Organic Chemistry by Francis A. Carey 8th Ed.**

**Office Hours: 1:00 pm to 2:00 pm MTWThF or by appointment.**

# Course Objective:

By the end of this course the student will be able to recognize common organic functional groups and predict their chemical reactivity and physical properties. The student will also have competency in naming common organic compounds. These goals are accomplished by good class attendance and working assigned practice problems. The goals are evaluated by performance on 3 midterm exams and a comprehensive final exam.

# Tentative Schedule:

Mon. May 12 First Day of Class. Introduction and Start Chapter 1: Structure Determines

Properties.

Wed. May 14 Start Chapter 2: Alkanes and Cycloalkanes. Introduction to Hydrocarbons.

Fri. May 16 Start Chapter 3: Alkanes and Cycloalkanes. Conformations and Cis-Trans Stereoisomers.

Tues. May 20 Start Chapter 4: Alcohols and Alkylhalides.

**Thurs. May 22 First Examination, 8:00am to 10:00am in SC 181, then resume class.**

Mon. May 26 Memorial Day. No Classes

Mon. May 27 Start Chapter 5: Structure and Preparation of Alkenes, Elimination Reactions

Thurs. May 29 Start Chapter 6: Addition Reactions of Alkenes.

Tues. . June 3 Start Chapter 7: Stereochemistry.

**Wed. June 4 Second Examination, 8:00 am to 10:00 in SC 181, then resume class.**

Fri. June 6 Start Chapter 8: Nucleophilic Substitution.

Tues. June 10 Start Chapter 9: Alkynes.

Thurs. June 12 Start Chapter 10: Conjugation in Alkadienes and Allylic Systems.

Mon. June 16 Start Chapter 11: Arenes and Aromaticity.

**Tues. June 17 Third Examination, 8:00 am to 10:00 am in SC 181, then resume class.**

Fri. June 20 Last Day of Class.

**Sat. June 21 Comprehensive Final Exam, 8:00am to 9:50 am in SC 150.**

**Homework and Grading Policy;**

Homework problems appear below. These problems will not be graded but will serve as a vehicle for test

Preparation. **I strongly encourage you to do the assigned problems**. There will be three midterm exams

each one worth 125 pts. The comprehensive final exam will also count for 125 pts and must be taken to pass

the course. If your final exam grade is higher than the lowest midterm then I will substitute the final exam grade for the lowest midterm grade and the final exam will then count twice. You must take all 3 midterms for the policy to take effect. Your course grade will be determined by the percentage of points you have earned from a total of 500 points. Cheating will not be tolerated and will result in a failing grade. I will not be using the +/- grading system in this course.

**Additional Materials;**

The book comes with a problem-solving manual. Use this manual to determine if you are solving the problems correctly. A molecular model kit is optional and will be useful if you have trouble visualizing compounds in three dimensions. You still need to convey information on the exams in chemical form. Doing the assigned problems will help the most in this regard.

**Suggested Problems**;

Chapter 1: 42 – 44, 46 – 49, 51, 52, 54, 55, 57, 59, 60, 65 – 67, 69 – 72.

Chapter 2: 23 – 25, 27 – 30, 33, 35, 37, 41 – 44, 46, 48.

Chapter 3: 19, 20, 24 – 28, 30 – 33, 36, 40, 41.

Chapter 4: 23, 24, 27, 30 – 34, 36, 38 – 43, 45, 49, 50, 53.

Chapter 5: 28, 30 – 34, 36 – 38, 40, 42, 44, 46.

Chapter 6: 26, 28 – 30, 32 – 34, 37, 39, 40, 43, 47, 49, 50, 55, 58, 59.

Chapter 7: 31 – 33, 36, 38 – 40, 42, 45, 47, 49, 50, 53.

Chapter 8: 20, 22, 23, 25, 27, 28, 30 – 34, 36, 39 – 41, 43, 47.

Chapter 9: 16 – 18, 21 – 27, 29, 31, 34, 36, 37.

Chapter 10: 23 – 26, 28 -30, 32, 33, 35 – 38, 41 – 43.

Chapter 11: 32 – 34, 36, 38 – 40, 43, 46 – 48, 50, 51, 54, 56.