

CHEM 494 Special Topics in Chemistry Synthesis and Materials in Chemistry, Fall 2012

This handout is intended to provide you with some important information about CHEM 494. For complete details and updated course news, please visit the course website.

COURSE DESCRIPTION

Organic chemistry forms the fundamental basis on all life on planet Earth. From the structure of our DNA, to the taste, texture and smell of the food we eat, to the clothes we wear (and the detergent we wash them in!), organic chemistry plays a vital, if often unappreciated role, in our everyday lives. The goal of CHEM 494, is to not only provide an understanding of this subject beyond the traditional sophomore-level sequence, but to examine organic chemistry as it pertains to issues that are relevant and potentially exciting to the students you teach. Particular emphasis will be given to the chemistry of natural products, their origins and their role in the development of new pharmaceutical agents.

INSTRUCTOR

Professor Duncan Wardrop
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WEBSITE

www.chem.uic.edu/CHEM494

OFFICE HOURS

My door is always open. I can also be contacted by email (wardropd@uic.edu),
Phone (312-485-9529).

CLASS SCHEDULE

4.30-7.50 p.m.

CREDIT HOURS

4.0

PREREQUISITE

Sophomore Organic Chemistry such as CHEM 232/234, or comparable undergraduate course. I will post my lecture notes for CHEM 232 and CHEM 234 on the course website.

TEXTBOOKS

Clayden, J.; Greeves, N.; Warren, S.; Wothers, P. **Organic Chemistry**, 2nd Edition, Oxford University Press, USA (ISBN 0-198-503-466) is the core of this lecture course and you should acquire a copy for yourself.

EXAMINATIONS / POINT DISTRIBUTION

In Class Quizzes (6)

(20% of final grade)

Term Paper 1

(20% of final grade)

Due October 1st

Term Paper 2

(20% of final grade)

Due November 11th

Final Term Paper

(40% of final grade)

Due December 6 th

Date	Topic	Reading Assignment	Quiz
9/10	Principles of Organic Chemistry	tba	
9/17	Principles of Organic Chemistry	tba	+
9/24	Principles of Organic Chemistry	tba	
10/1	Principles of Organic Chemistry	tba	+
10/8	<i>Through the Looking Glass</i> Principles & Peculiarities of Stereochemistry	tba	
10/15	<i>Skunks vs. Grapefruit!</i> Chemistry of Taste & Smell	tba	+
10/22	1st Midterm Paper		
10/22	<i>Magic, Murder, Mayhem</i> The History of Natural Products	tba	
10/29	<i>"Strychnine!"</i> The Chemistry of Natural Products	tba	+
11/5	<i>Beetroot Red</i> The Chemistry of Organic Pigments	tba	
11/12	<i>Plato Solid in a Retort</i> Docecahedrane and Beyond	tba	+
11/12	2nd Midterm Paper		
11/19	<i>Sucrose to Splenda</i> The Chemistry of Carbohydrates	tba	
11/26	<i>Drug Development Case Studies</i>	tba	+
12/3	<i>Laboratory Demonstration</i>	tba	
12/6	Final Term Paper		