Chemistry 3720
Introduction to Organic Chemistry II

MWF 11.00-11.50 Cushwa B031

Dr. Peter Norris

Office: 6014 Ward Beecher Hall
Office Hours: MTThF 12.30-1.30 or by appointment
Telephone: (330) 941-1553
Email: pnorris@ysu.edu or dr.peter.norris@gmail.com
Website: http://class.ysu.edu/~pnorris

Textbook: "Organic Chemistry" 8th Ed. by Francis A. Carey and Robert M. Giuliani, McGraw Hill publishers (the 7th and 6th editions are also suitable for Chemistry 3719 and 3720); the study guide is recommended, as are a set of molecular models (e.g. www.darlingmodels.com). The ChemBioOffice suite will be useful also.

Course Objectives: The focus of this course will be to help the student understand the underlying principles of Organic Chemistry. The student will be able to appreciate the relationship between the structure of an organic compound or intermediate and its physical, chemical, and/or spectroscopic properties. Material presented in this course provides the necessary foundation for advanced studies in Organic Chemistry, and includes the basic mechanisms of organic reactions, organic synthesis, bioorganic chemistry, and other very closely related fields that involve organic molecules.

General: Organic Chemistry is the study of compounds formed by **carbon**, of which many millions have been identified so far. The subject forms the basis of biochemistry and genetics, and is the backbone of the pharmaceuticals and petroleum industries. Whether you intend to study chemistry, biology, pharmacy, medicine, engineering, or any other chemically-based subject, a sound understanding of the fundamentals of Organic Chemistry is essential. The material is also relevant to the various standardized tests used for entry to professional schools in the United States (e.g. PCAT, DAT, MCAT, GRE, etc.).

In two semesters we can only hope to cover the basics; however this still amounts to a very large amount of material. Everything that was covered in 3719 is still relevant in 3720, and you will be expected to remember it all. It is very easy to get swamped in this class by not retaining knowledge from Chemistry 3719 and by not studying from the beginning in a consistent manner. Since we will not have time in class to cover every detail contained within the text, it is essential that you get into the habit of studying your notes and the text at night, and then working as many problems as possible to see if you understand the material.

The lecture and laboratory portions of the Organic Chemistry sequence coincide as much as possible since the material discussed in lecture is the result of past experimental work. You will certainly find yourself using the lecture text to work out problems from the lab, and hopefully this will help you see that lab and lecture are closely interconnected. Remember also that you must pass the lab to pass Chemistry 3720 overall.

If you feel you might struggle with Organic Chemistry, for example if you got a C in 3719, you are advised to sign up for the recitation class, Chemistry 3719R, in which the instructor (Norris) will answer questions and work problems related to the lecture material. Supplemental Instruction help is also available at the Center for Student Progress in the Kilcawley Student Center.

Assessment: There will be three 50 minute term exams (see the schedule below for dates) worth 100 points each and a 200 point comprehensive final. The lab component, Chemistry 3720L, is worth 100 points, for a total of 600 points for Chemistry 3720/3720L. You must receive **at least 60/100** in lab in order to pass Chemistry 3720 overall. The **approximate** grading scale below will be used **with adjustments made as needed depending upon overall class performance and relative difficulty of exams:**		
Exam Schedule:	Exam 1: **Fri 2/18/11** (100 pts)	Exam 2: **Fri 3/11/11** (100 pts)
	Exam 3: **Fri 4/15/11** (100 pts)	Final: **Mon 5/9/11** (200 pts)
Grading:	**A** 600-540 pts **B** 539-480 pts **C** 479-360 pts **D** 359-300 pts **F** <300 pts	

Online Resources: The Norris website (http://class.ysu.edu/~pnorris) contains a wealth of information related to Chemistry 3719 and 3720 including copies of syllabi, old exams, class notes, and links to useful websites for Organic Chemistry students. A link to the ChemBioOffice software suite, which is required for Chemistry 3719 and 3720, is provided on the 3720 page. Also, a link to practice problems available through the McGraw-Hill website that complement the text book is provided, as well as a link to an Android/iPhone app for Chemistry 3720-based quiz questions for further practice.

Honors Credit: Available in both Chemistry 3719 and 3720, Honors projects typically involve the use of the ChemBioOffice software with which interested students tackle course material in more depth. Tasks are set early in the first semester then students work at their own pace over the course of the term and submit a final report for assessment. In recent years students have presented their results at the YSU QUEST event.

Request for "Incomplete": A request for a grade of "Incomplete" (I) in the course will be considered only when more than 60% of the assignments have been completed as scheduled. An "I" will be submitted only when the cause is deemed justifiable and approved by both the instructor and the department chairperson (see YSU *Bulletin*). All incomplete work must be completed by September 1, 2011 otherwise the grade will be recorded as an F.

Disability Services: In accordance with University procedures, if you have a documented disability and require accommodations to obtain equal access in this course please contact me privately to discuss your specific needs. You must be registered with CSP/Disability Services and provide a letter of accommodation to verify your eligibility. CSP/Disability Services: 330-941-1372; http://www.ysu.edu/csp/disabilityservices

Academic Misconduct: You are referred to the YSU Student Code of Conduct (found on the YSU website at: http://www.ysu.edu/thecode.pdf) for an account of the typical consequences associated with any academic misconduct. Any attempts at cheating in Chemistry 3720/3720R/3720L will be dealt with severely. If you are caught cheating, for example for copying a lab report, for looking at someone else's paper during an exam, or for using a cellular phone during an exam or quiz, ***you will at least be given an F grade for the 3720/3720L course***. During exams there will be several assistants present to help monitor proceedings. Also, please bring with you a means of photographic identification; this will be checked at the end of the exam. Since the professor grades all of the exam papers any examples of copying will be discovered and dealt with; random pages of completed tests will be photocopied. ***Do not jeopardize your future by cheating***.

Spring 2011

Chemistry 3720R – Introduction to Organic Chemistry II - Recitation

W 12:00-12:50 WB 6030; or W 1:00-1:50 WB 6029; or W 2:00-2:50 WB 6029

Instructor: Dr. Peter Norris
Office: 6014 Ward Beecher
Email: **pnorris@ysu.edu**
Website: http://www.as.ysu.edu/~pnorris/public_html

Textbook: "Organic Chemistry" 8th Ed. By F.A. Carey
The accompanying study guide is highly recommended, as are a set of molecular models. (www.darlingmodels.com)

General

Organic Chemistry is the study of the compounds formed by **carbon**, of which many millions have been identified so far. The subject forms the basis of **biochemistry** and **genetics**, and is the backbone of industries like **pharmaceuticals**, **oil**, **dyes** and cosmetics. Whether you intend to study chemistry, biology, pharmacy, medicine or engineering, a sound understanding of the fundamentals of Organic Chemistry is essential, and of course the material is relevant for the various standardized tests used for entry to professional schools (e.g. PCAT, DAT, MCAT, GRE, etc.).

In two semesters we can only hope to cover the basics; however this still amounts to a very large amount of material. Indeed, everything that was covered in 3719 is relevant in 3720 so it is very easy to get swamped in this class by not studying from the beginning in a consistent manner. Since we will not have time in class to cover every detail contained within the text, it is essential that you get into the habit of studying your notes and the text at night, and then working the suggested problems to see if you understand the material. **KEEP UP!**

The lecture and laboratory portions of the Organic Chemistry sequence coincide as much as possible since everything discussed in lecture is the result of past experimental work. You will certainly find yourself using the lecture text to work out problems from the lab, and this will help you see that lab and lecture are closely interconnected.

Quizzes and Grading

There will be twelve (12) quizzes in Chemistry 3720R, beginning in the second week of the semester, each of which will be worth 10 points. At the end of the semester we will drop your two lowest scores and then calculate your grade based on the approximate scale given below. Adjustments will be made as needed based on overall class performance and difficulty of the quizzes given. The Professor (Norris) is responsible for setting the final 3720R grades.

A 100-90 pts
B 89-80 pts
C 79-70 pts
D 69-60 pts
F <60 pts

Quiz Format

The quizzes will cover material seen in the previous 3720 lectures and **will not** cover material from the lecture that is given on the same day that you are taking the quiz. Since there are 15 weeks with Wednesday recitation meetings you will have a quiz each week ***except*** the first (1/19), the week after spring break (3/23), and the last week of classes (5/4).

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