# Syllabus - Organic Chemistry II

#### Course Information

Chemistry 222 - Organic Chemistry II for Chemistry Majors

Instructor: Dr. Chad Eichman
Office: 203 Flanner Hall
Email: ceichman@luc.edu
Phone: 773.508.3357

## **Weekly Schedule**

Lecture: Monday, Wednesday, Friday 2:45-3:35 PM in Life Science Building 142 Discussion: Tuesday 11:30-12:20 PM in Cuneo 302 OR 1:00-1:50 PM in Cuneo 109 Laboratory: Tuesday OR Thursday 2:30-5:15 PM in Life Science Building 115

#### **Office Hours**

Monday 11:00 AM – 12:00 PM Monday 1:00 – 2:00 PM

To schedule an alternative appointment, please email me.

#### **Email**

You must use your Loyola email address for all communication during this course. Emails from outside sources are often blocked automatically.

#### **Course Description**

"A lecture, discussion and laboratory course for chemistry majors continuing from 221 covering nomenclature, properties, reactions, syntheses, and spectroscopy of further classes of aliphatic and aromatic compounds, carbohydrates and other polyfunctional compounds.

Outcome: Students will be able to assign IUPAC names, spectroscopically identify, prepare, and propose reactions for these groups."

#### **Textbook and Additional Course Materials**

Textbook: Organic Chemistry (8<sup>th</sup> Edition)

Authors: L. G. **Wade** Jr. Publisher: Prentice Hall ISBN-10: 0-321-76841-8

Study Guide: MasteringChemistry (optional)

Molecular Model Kit: Molecular Visions Organic Model Kit (#3) or Preferred Kit (optional)

Lab Materials: Making the Connections<sup>3</sup> By Anne B. Padias (ISBN: 978-0-7380-7436-8)

Permanently-Bound Composition Notebook

Website: sakai.luc.edu

## Grading

| 5 Quizzes (40 points)        | 200  | 13.3% |
|------------------------------|------|-------|
| 3 Midterm Exams (200 points) | 600  | 40%   |
| 1 Final Exam (325 points)    | 325  | 21.7% |
| BACON (75 points)            | 75   | 5%    |
| Laboratory Work              | 300  | 20%   |
| Total                        | 1500 | 100%  |

#### Quizzes

There are **six** quizzes offered during the semester during the Discussion Section on the dates listed below. The quizzes will be worth 40 points each. *The lowest scored quiz will be dropped*. There are NO MAKEUP quizzes. If you miss one quiz, it will be dropped and the 5 remaining quizzes will be counted.

Quiz Dates: January 24, February 7, February 28, March 14, April 4, and April 11.

#### Midterm Exams

There are **three** midterm exams during the semester on the dates listed below. The midterm exams cover only lecture topics and will be held on Wednesdays during the Lecture Section. EACH EXAM COUNTS.

Midterm Exam Dates: February 15, March 22, and April 19.

### Final Exam

The final exam will take place **4:15-6:15 PM on Friday, May 5** in a LSB 142. *The final exam is cumulative*. All topics discussed during lecture over the semester are on the final.

<u>IMPORTANT:</u> I must be made aware of any exam conflicts by **Friday**, **February 10**. I will arrange an alternative exam time ONLY if notified before this date.

BACON: Biology and Chemistry Online Notes and Tutorials

5% of your course grade can be very easily earned by completing 'BACON' tutorials, a handy resource created by students and faculty at UCLA. BACON is an online tutorial designed to help connect the wonders of organic chemistry to medicine, other aspects of real life, and even pop culture.

You will have 13 BACON tutorials available this term.

Each time you complete a BACON tutorial, you will also complete a brief multiple choice post-BACON quiz (the quiz will be built into the tutorials). We will drop your 2 lowest post-BACON quiz scores, and then your remaining 11 post-BACON quiz scores will be averaged together and weighted to 5% of your final course grade.

Sign-up instructions are provided on the last page of this syllabus.

### **Laboratory Work**

The laboratory work will be graded as shown in the Lab Syllabus. The lab portion is worth 300 points, equaling 20% of your final grade.

#### **Final Grades**

A guideline for grades is shown below. At minimum, you will receive the grade indicated, however, if the class average is below ~75%, there will be a curved grading system.

| A = 94–100% | C+ = 75-77% |
|-------------|-------------|
| A- = 89-93% | C = 66-74%  |
| B+ = 86–88% | C- = 63-65% |
| B = 81–85%  | D = 62-51%  |
| B- = 78-80% | F = 50-0%   |

#### **Excused Absences for Exams**

Missed exams will be handled on a case-by-case basis. In general, if you miss an exam because of an illness, death in the family, or any other extenuating circumstance, you must provide written evidence (i.e.- note from doctor, etc.). Once approved, an alternative exam date and time will be assigned. If you miss the final exam with no prior notice, you will receive a zero on the exam and a course letter grade will be assigned.

## Lecture, Discussion Section, and Reading

The class lectures will be the *most critical source* of information for this course. Because of this fact, please attempt to hold questions to a minimum during the lectures. If you miss a lecture, please find notes from another student in class.

The discussion section will develop your problem solving skills through working problems and taking quizzes. This time will also be dedicated to answering questions and clarifying any topic covered in lecture. The discussion section is OPTIONAL when there is not a quiz. However, quizzes will be distributed once all questions have been answered and *no one will be admitted into the room once the quiz has begun*.

Suggested reading assignments will be made throughout the semester. Do not expect to learn all of the course material through the textbook. As stated before, lectures are the best source of instruction for the course and reading assignments will serve to complement the lectures.

#### **Problem Sets**

There will be multiple problem sets throughout the semester to help you master the course material. The problems will include questions from the Wade textbook as well as additional problems pertaining to the current topics. These can be found on Sakai (sakai.luc.edu/) as the semester proceeds. We will use these problems as a basis for the Discussion Section. The problem sets will NOT be graded and are there to help you prepare for the quizzes and exams.

## **Class Etiquette**

Come to class on time. No talking. No electronic devices. No eating.

Students with multiple violations of classroom etiquette will be subject to point deductions throughout the semester.

## **Academic Integrity**

All students in this course are expected to have read and to abide by the demanding standard of personal honesty, drafted by the College of Arts & Sciences, that can be viewed at: http://www.luc.edu/cas/pdfs/CAS Academic Integrity Statement December 07.pdf

Anything you submit that is incorporated as part of your grade in this course (quiz, exam, lab report, etc.) must represent your own work. Any students caught cheating will, at the very minimum, receive a grade of "zero" for the item that was submitted and this grade cannot be dropped. If the cheating occurred during a course exam, the incident will be reported to the Chemistry Department Chair and the Office of the CAS Dean. Depending on the seriousness of the incident, additional sanctions may be imposed.

## **Dropping and Withdrawal**

Be aware of the following dates in the semester:

January 23: Last day to withdraw without a "W" grade

January 30: Last day to withdraw with a 100% Bursar credit

February 13: Last day to withdraw with a 50% Bursar credit

February 20: Last day to withdraw with a 20% Bursar credit

March 27: Last day to withdraw with a "W" grade, thereafter a "WF" will be assigned

## **Changes to Syllabus**

There may be changes to the syllabus during the semester. You are responsible for all syllabus changes made in class whether or not you attend.

### **Tutoring**

The Center for Tutoring & Academic Excellence provides Loyola University students the opportunity to engage in Collaborative Learning conversations that will increase retention of course material, improve study habits, assist in achieving higher grades, and encounter new friends. For more information concerning our free tutoring services visit: www.luc.edu/tutoring/

#### **Disabilities**

Students with a university-documented disability should contact me immediately. If your disability requires that quizzes and exams be taken outside of the scheduled time or place, please consult: <a href="https://www.luc.edu/sswd/">www.luc.edu/sswd/</a>. Services for Students with Disabilities (SSWD) serves students with disabilities by creating and fostering an accessible learning environment.

#### Wellness

If there are events in your personal life that directly affects your performance in this course and others, please consult me or contact the Wellness Center (<a href="http://www.luc.edu/wellness/">http://www.luc.edu/wellness/</a>) or the Dean of Students Office (<a href="http://www.luc.edu/studentdevelopment/departments/deanofstudents/">http://www.luc.edu/studentdevelopment/departments/deanofstudents/</a>). These resources are included in your tuition and may be an invaluable resource during the completion of your degree.

## **Course Topics**

Chapter 14: Ethers, Epoxides and Thioethers

Chapter 15: Conjugated Systems, Orbital Symmetry, and Ultraviolet Spectroscopy

Chapter 16: Aromatic Compounds

Chapter 17: Reactions of Aromatic Compounds

Chapter 18: Ketones and Aldehydes

Chapter 19: Amines

Chapter 20: Carboxylic Acids

Chapter 21: Carboxylic Acid Derivatives

Chapter 22: Condensations and Alpha Substitutions of Carbonyl Compounds

Chapter 23: Carbohydrates and Nucleic Acids Chapter 24: Amino Acids, Peptides, and Proteins

Chapter 25: Lipids Chapter 26: Polymers

#### Course/Instructor Evaluation – IDEA

Loyola has recently switched to the IDEA program for instructor and course evaluations. At the end of the semester, you will complete an online evaluation of this course based on criteria set by IDEA and by the instructor. For this course, the main objectives are as follows:

- 1) Gaining factual knowledge (terminology, classifications, methods, trends)
- 2) Learning fundamental principles, generalizations, or theories
- 3) Gaining a broader understanding and appreciation of intellectual/cultural activity

Keep these objectives in mind throughout the course.

## BACON: Biology and Chemistry Online Notes and Tutorials

To Sign up:

- 1. Visit <u>learnbacon.com</u> and click 'Sign Up' to create your account. If you already have a BACON account, you can sign in and then follow instruction #2.
- 2. Follow the instructions and then register for the appropriate course. The course PIN is: 222CE17\$

The BACON system is simple and automated. After you sign up, you will receive emails when tutorials become available, in addition to reminders if you have not completed a tutorial as a deadline approaches.

If you encounter any problems related to BACON during the quarter, please email support@learnbacon.com for help.

#### BACON has been made available to you at no charge!

# **SPRING 2017 CALENDAR**

| Week | Monday  | Tuesday                    | Wednesday              | Thursday               | Friday                           |
|------|---|----------------------------|------------------------|------------------------|----------------------------------|
| 1    | 1/16<br>MLK Day                               | 1/17                       | 1/18                   | 1/19                   | 1/20                             |
| 2    | 1/23<br>Last day to<br>drop<br>without a "W"  | 1/24<br><b>QUIZ 1</b>      | 1/25                   | 1/26                   | 1/27                             |
| 3    | 1/30  | 1/31                       | 2/1                    | 2/2                    | 2/3                              |
| 4    | 2/6   | 2/7<br><b>QUIZ 2</b>       | 2/8                    | 2/9                    | 2/10                             |
| 5    | 2/13  | 2/14<br>Midterm Review/Q&A | MIDTERM 1              | 2/16                   | 2/17                             |
| 6    | 2/20  | 2/21                       | 2/22                   | 2/23                   | 2/24                             |
| 7    | 2/27  | 2/28<br><b>QUIZ 3</b>      | 3/1                    | 3/2                    | 3/3                              |
| 8    | 3/6<br>Spring<br>Break                        | 3/7<br>Spring<br>Break     | 3/8<br>Spring<br>Break | 3/9<br>Spring<br>Break | 3/10<br>Spring<br>Break          |
| 9    | 3/13  | 3/14<br><b>QUIZ 4</b>      | 3/15                   | 3/16                   | 3/17                             |
| 10   | 3/20  | 3/21<br>Midterm Review/Q&A | MIDTERM 2              | 3/23                   | 3/24<br>Mid-semester<br>Alert    |
| 11   | 3/27<br>Last day to<br>withdraw<br>without WF | 3/28                       | 3/29                   | 3/30                   | 3/31                             |
| 12   | 4/3   | 4/4<br><b>QUIZ</b> 5       | 4/5                    | 4/6                    | 4/7                              |
| 13   | 4/10  | 4/11<br><b>QUIZ 6</b>      | 4/12                   | 4/13                   | 4/14<br>Easter Holiday           |
| 14   | 4/17<br>Easter Holiday                        | 4/18<br>Midterm Review/Q&A | 4/19<br>MIDTERM 3      | 4/20                   | 4/21                             |
| 15   | 4/24  | 4/25                       | 4/26                   | 4/27                   | 4/28<br>Last Day of<br>Classes!! |
| 16   | 5/1   | 5/2                        | 5/3                    | 5/4                    | 5/5<br>FINAL<br>EXAM             |