### **ORGANIC CHEMISTRY 223 - Fall 2019**

Dr. Tatiana Esipova, Ph.D. Cuneo Hall, 109 e-mail: tesipova@luc.edu

 LECTURE:
 TuTh
 2:30-3:45 PM
 Cuneo Hall 109
 CHEM 223-008-3698

 DISCUSSION A:
 Wed
 12:35-1:25 PM
 Cuneo Hall 317
 CHEM 223-009-3699

 DISCUSSION B:
 Wed
 1:40-2:30 PM
 Dumbach Hall 119
 CHEM 223-010-3700

**OFFICE HOURS:** Tuesday & Thursday 4:00-5.00 PM (right after lecture)

or e-mail me to schedule an appointment

## **COURSE MATERIALS**

Required Text: Organic Chemistry, Klein, 3rd edition, hard copy or eText

Required Key: Student Study Guide and Solutions Manual for Organic Chemistry, Klein 3rd

Required Online: WileyPlus online (can be purchased separately)

Prerequisites: CHEM 102 (Gen Chem B) & CHEM 112 (Gen Chem B Lab), or CHEM 106.

Required: Your favorite organic molecular model kit from wherever. Here are just a few of options:

Duluth Labs MM-005 Student Set, \*or\* Darling Molecular Modeling Kit, \*or\* Prentice Hall

Molecular Model Set

Extra Resources Organic Chemistry as a 2<sup>nd</sup> Language I (1<sup>st</sup> semester topics), David R. Klein

Organic Chemistry as a 2<sup>nd</sup> Language II (2<sup>nd</sup> semester topics), David R. Klein Pushing Electrons by Daniel Weeks a workbook for extra help with mechanisms

Course Website sakai.luc.edu

## **COURSE DESCRIPTION**

For non-chemistry majors, CHEM 223 is a lecture and discussion course covering nomenclature, properties, reactions & synthesis, stereochemistry, and mechanisms plus IR and mass spectrometry of organic molecules including alkanes, alkyl halides, alkenes, alkyne, alcohols, and ethers.

Outcome: Identify various classes of organic compounds, assign and understand IUPAC names, predict reaction products <u>and</u> mechanisms, supply starting materials and reagents for synthetic conversions, interpret as well as predict spectra (MS, IR) for organic molecules.

#### **IDEA OBJECTIVES**

At the end of the semester every student will be asked to complete an evaluation of this course via IDEA – an online program for instructor and course evaluation. The evaluation criteria for this course are as follows:

- 1. Gaining a basic understanding of the subject (e.g. factual knowledge, methods, principles, generalizations, theories)
- 2. Learning to apply course material (to improve thinking, problem solving and decisions)
- 3. Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)

#### **EXAMS AND GRADING**

The midterm and final letter grades will be given based on the points scored in the course. Final grade will be determined from one of the following options whichever is higher:

Option 1:		Option 2 (Lower mid-term exam score is a drop)		
Quizzes	10%	Quizzes	10%	
Mid-term Exam 1	20%	Mid-term Exam	20%	
Mid-term Exam 2	20%	Mid-term Exam	20%	
Mid-term Exam 3	20%	Final Exam	50%	
Final Exam	30%			

### **Quizzes**

There are <u>seven</u> quizzes offered during the semester on the dates listed below. <u>Two lowest score quizzes will be dropped</u>. There are NO MAKEUP quizzes. If you miss a quiz, it will be dropped and the remaining quizzes will be counted.

Q1: 9/10; Q2: 9/24; Q3: 10/15; Q4: 10/29; Q5: 11/12; Q6: 11/19; Q7: 11/28;

#### Mid-term Exams

There are three mid-term exams (50 min) during the semester on the dates listed below. The exams will be held during the Lectures. There are NO MAKEUP mid-term exams. If you miss one exam, option 2 will be used automatically to determine your grade. A second missed mid-term exam will result in score zero for the missed exam. Exams will be graded and returned as quickly as possible, usually by the following class period. All grading questions, points of clarification, and grading errors must be brought to the instructor's attention no later than one week after the graded exam is returned.

Mid-term Exam dates: September 26, October 31, December 3.

# **Final Exam**

The final exam (2 hours) will take place on **Saturday**, **December 14 at 4:15–6:15 PM in Cuneo Hall 109**. *The final exam is cumulative*. All topics discussed during lecture over the semester are on the final. There are NO MAKEUP final exams.

IMPORTANT: Alternate exam dates are ONLY arranged for extenuating circumstances (see below).

#### The Exams procedure

Calculators, phones, headphones, tablets and any electronic devices ARE NOT PERMITTED. <u>Three items are allowed</u>: (1) working pens, (2) model kit, and (3) your Loyola ID visible on your desk to be checked during the exam.

All purses, bags, jackets, etc must be left at front of the room. Once the exam is distributed, if you exit the room for any reason before time is up, your exam is complete and will be collected.

When you are finished with your exam, please bring your completed exam to the front, and leave the room quietly without disturbing the other students.

Exams will be graded and returned as quickly as possible, usually by the following class period. All grading questions, points of clarification, and grading errors must be brought to the instructor's attention no later than one week after the graded exam is returned.

#### **Final Grades**

A guideline for grades is shown below. A curve for each individual exam may be applied based on the specific average and standard deviation, and will be provided upon return of the exam, along with exam grade distribution statistics.

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

#### **SYLLABUS**

The current syllabus is posted on Sakai and is subject to change (dated at the top) during the semester. <u>You</u> are responsible for all changes announced whether or not you are in attendance.

## **DISCUSSION**

The discussion section will be devoted to working through problems and answering questions about the homework problems and lecture/text material. *Attendance and participation are expected.* 

### **HOMEWORK**

Students have to expect to devote at least 12 HOURS OUTSIDE OF CLASS TIME PER WEEK to studying for organic chemistry. Try not to do homework with the solutions manual out. Homework problems will be recommended for each chapter but not collected, so you must be disciplined about working problems and keeping up with the pace of the lecture. Experience has demonstrated a direct correlation of success in organic with consistently working the assigned problems in the book and writing out the answers.

## **SAKAI MATERIALS**

All handouts provided in class will be mirrored on Sakai. Multiple problem sets 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 guizzes and exams.

# **INTELLECTUAL PROPERTY**

All lectures, videos, notes, PowerPoints and other instructional materials in this course are the intellectual property of the Instructor or Wiley, and are so marked on Sakai and elsewhere. As a result, they may not be distributed or shared in any manner, either on paper or in virtual form, without written permission. In lecture and discussion, no photographs or recordings of any kind are allowed without the expressed written permission of the instructor.

# **ACADEMIC INTEGRITY**

Academic cheating is a serious act that violates academic integrity. Academic dishonesty includes, but is not limited to using notes or books during exams, looking at another student's test during the exam period, or talking during an exam. Any student caught cheating on an assignment in any way will receive "zero" for that assignment, and this grade cannot be dropped. The incident will be reported to the Chemistry Department Chair and the Office of the Dean. Additional sanctions including expulsion from the University may be imposed. All students in this course are expected to have read and to abide by the appropriate standard of personal

honesty and integrity, drafted by the College of Arts & Sciences that can be viewed online at https://www.luc.edu/cas/advising/academicintegritystatement/

## SUPPLEMENTAL INSTRUCTION (SI) AND TUTORING

There are Supplemental Instruction (SI) study sessions available for this course. SI sessions are led by an SI leader, who is a student that has recently excelled in the course. Session attendance is open to all and is voluntary, but extremely beneficial for those who attend weekly. Times and locations for the SI session can be found here: <a href="www.luc.edu/tutoring">www.luc.edu/tutoring</a>. Students who attend these interactive sessions find themselves working with peers as they compare notes, demonstrate and discuss pertinent problems and concepts, and share study and test-taking strategies. Research shows students whom regularly attend sessions have higher grades at the end-of-the-semester and more deeply understand course concepts than those who do not. Students are asked to attend SI sessions with their Loyola ID, lecture notes, and textbook.

The Tutoring Center offers free small group tutoring and lab (drop-in) tutoring for Loyola students. The groups meet once a week through the end of the semester and are led by a student who has successfully completed study in the course material. To learn more or request tutoring services, visit the Tutoring Center online at <a href="https://www.luc.edu/tutoring">www.luc.edu/tutoring</a>. The Student ACS (American Chemical Society) affiliate also offers tutoring for free ever week in Flanner Hall.

### **DISABILITIES**

CAS has accommodations for students with disabilities (SSWD), including a testing center in the Sullivan Center. For more information see http://www.luc.edu/sswd/.

### **COURSE REPEAT RULE**

Course Repeat Rule: Effective with the Fall 2017 semester, students are allowed <u>only three attempts</u> to pass Chemistry courses with a C- or better grade. The three attempts include withdrawals (W). After the second attempt, the student must secure approval for a third attempt. Students must come to the Chemistry Department, fill out a permission to register form or print it from the Department of Chemistry & Biochemistry website:http://www.luc.edu/chemistry/forms/ and personally meet and obtain a signature from either the Undergraduate Program Director, Assistant Chairperson, or Chairperson in Chemistry. A copy of this form is then taken to your Academic Advisor in Sullivan to secure final permission for the attempt.

# **ABSENCE POLYCY**

As stated above, there are no early nor make-up exams in this course. Normally, if you miss an exam you will receive a score of zero on that exam.

There are five exceptions to this rule, which apply only in very limited circumstances, as per University Regulations.

- (a) Absence due to medical emergency. This exemption will be granted only under the most extraordinary circumstances. The student must be able to demonstrate beyond doubt that it was a medical emergency. The student must supply the instructor with a doctor's verification of the emergency. If a student has a medical emergency, they must see a doctor immediately or go to a hospital emergency room that day. Colds, headaches, sore-throats, etc. do not constitute medical emergencies.
- (b) Death of a member in the immediate family, with appropriate documentation.
- (c) Court appearance that cannot be rescheduled, with appropriate documentation.
- (d) Absence while representing Loyola University in an official capacity (academic, athletic, etc.) with appropriate documentation.
- (e) Religious obligation requiring the student to miss class, with appropriate documentation.

If you must miss an exam for one of the reasons specified in University regulations, please let me know as soon as practical, and submit supporting and verifiable documentation. In such cases your final exam will be weighted more to compensate for the missed exam. It is in your interest to not miss an exam for any reason. For appropriate final exam scheduling issues, students must e-mail a petition to Lester Manzano, Assistant Dean for Student Academic Affairs, CAS Dean's Office (<a href="mailto:lmanzan@luc.edu">lmanzan@luc.edu</a>).

Other exams or a heavy workload during your exam day are not valid reasons for missing your exam. Missing, stolen, or lost textbooks or class notes are not a sufficient reason to delay taking the exam at the scheduled time. Vacation travel plans or a desire to end your semester early are not valid reasons for missing an exam.

# **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 (http://www.luc.edu/wellness/) or the Dean of Students Office (http://www.luc.edu/dos/). These resources are included in your tuition and may be an invaluable resource during the completion of your degree.

## DROPPING AND WITHDROWAL

September 3: Last day to withdraw without a "W" grade

September 8: Last day to withdraw with a 100% Bursar credit September 22: Last day to withdraw with a 50% Bursar credit September 29: Last day to withdraw with a 20% Bursar credit

November 1: Last day to withdraw with a "W" grade, thereafter a "WF" will be assigned

week	Monday	Tuesday	Wednesday	Thursday	Friday	
1	8/26	8/27 Lecture 1	8/28 Discussion 1A Discussion 1B	8/29 Lecture 2	8/30	
2	9/2 Labor Day	9/3 Lecture 3	9/4 Discussion 2A Discussion 2B	9/5 Lecture 4	9/6	
3	9/9	9/10 <b>Lecture 5; Q1</b>	9/11 Discussion 3A; Discussion 3B;	9/12 Lecture 6	9/13	
4	9/16	9/17 <b>Lecture 7</b>	9/18 Discussion 4A; Discussion 4B;	9/19 <b>Lecture 8</b>	9/20	
5	9/23	9/24 Lecture 9; Q2	9/25 Discussion 5A Discussion 5B	9/26 Midterm 1	9/27	
6	9/30	10/1 <b>Lecture 10</b>	10/2 Discussion 6A Discussion 6B	10/3 Lecture 11	10/4	
7	10/7 Fall Break	10/8 Fall Break	10/9 Discussion 7A; Discussion 7B;	10/10 <b>Lecture 12</b>	10/11	
8	10/14	10/15 <b>Lecture 13; Q3</b>	10/16 Discussion 8A; Discussion 8B	10/17 <b>Lecture 14</b>	10/18	
9	10/21	10/22 Lecture 15	10/23 Discussion 9A Discussion 9B	10/24 Lecture 16	10/25	
10	10/28	10/29 <b>Lecture 17; Q4</b>	10/30 Discussion 10A; Discussion 10B;	10/31 <b>Midterm 2</b>	11/1	
11	11/4	11/5 <b>Lecture 18</b>	11/6 Discussion 11A; Discussion 11B;	11/7 Lecture 19	11/8	
12	11/11	11/12 <b>Lecture 20; Q5</b>	11/13 Discussion 12A; Discussion 12B;	11/14 <b>Lecture 21</b>	11/15	
13	11/18	11/19 Lecture; Q6	11/20 Thanksgiving	11/21 Thanksgiving	11/22 Thanksgiving	
14	11/25	11/26 Lecture 23	11/27 Discussion 13A Discussion 13B	11/28 Lecture 24; Q7	11/29	
15	12/2	12/3 Midterm 3	12/4 Discussion 14A Discussion 14B	12/5 <b>Lecture 25</b>	12/6	
16	12/9	12/10	12/11	12/12	12/13	Saturo 12/14 Final

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