SYLLABUS – CHEM 224 – Organic Chemistry B – 2nd Semester – MWF am Lecture Spring 2020 - LOYOLA UNIVERSITY CHICAGO (LUC)

Lecture: #1104 Section: 001 10:25 – 11:15 a.m. Flanner Auditorium MWF Discussion: #1105 Section: 002 Monday 11:30 am - 12:20 pm Mundelein 514 #1106 Section: 003 Monday 12:35 pm - 01:25 pm Mundelein 514 #1107 Section: 004 Monday 01:40 pm - 02:30 pm Mundelein 514

Lecturer:

Dr. C. Szpunar

Office: Flanner Hall 200B

Contact: best in person, 773-508-3128, cszpuna@luc.edu

Emergency Message via Chemistry Dept. Office: 773-508-3100, fax: 773-508-3086

Office Hours:

Tu: 11 am – 1 pm

Thur: 10:15 am - 11:15 am (1st Thurs of the month), 10:15 am - 12:00 pm (all other Thursdays)

Fri: 11:30 am - 1:00 pm

(before class, ONLY IF lecturer is prepared for class AND student schedule conflicts w/regular office hours)

N.B.: Answer keys will be posted in the glass case outside Flanner 200B. No photographing pls!

Required: (See bookstore for most up-to-date offerings as publisher deals directly with bookstore.)

1. Organic Chemistry, Klein, 3rd ed., Wiley, 2017

2. Student Study Guide and Solutions Manual, Klein, 3rd ed. Wiley, 2017

Option 1: ISBN 978-1-119-38071-9

- 1. Soft, unbound, printed 3-hole punch text
- 2. Paperback solutions manual/study guide
- 3. Wiley Plus plus Orion the online homework/practice tool **Course ID: 725492** Option 2: **ISBN 978-1-119-43349-1**
- 1. Soft, unbound, printed 3-hole punch text
- 2. Etext solutions manual/study guide
- 3. Wiley Plus plus Orion the online homework/practice tool

Suggested / Recommended Materials:

- 1. Molecular modeling kit, Darling, Duluth, or equivalent
- 2. WileyPlus online homework/practice tool

Optional Materials (found helpful by some students, do not purchase immediately);

1. Organic Chemistry as a Second Language, II, Klein (2006), Wiley (ISBN 978-0-471-73808-4)

Barron's Orgo Cards: Organic Chemistry Review, Wang, Razani, Lee, Wu, and Berkowitz (ISBN 0-7641-7503-3) *or* Organic Chemistry Study Cards, R Van De Graaff, K Van De Graaff, and Prince, Morton Publishing, 2003 (ISBN 0-89582-577-5) *or* equivalent

Grading (approx. weighting below) with approximate curved-grade guidelines:

>90% A, 90-88% a-, 88-86% b+, 86-70% B, 70-68% b-, 68-66% c+, 66-55% C, 55-50% c-, 50-45% D, <45% F

□ EXAMS – 2 – dates announced (subject to change, although unlikely) – NO MAKE UPS
 □ 45%

- UNEXCUSED ABSENCES merit a zero score.
- EXCUSED ABSENCES are handled on a case-by-case basis; grade weighting may be adjusted, depending on the circumstance(s); however, an excused absence MUST BE CORROBORATED and DOCUMENTED, e.g., accompanied by a note from the doctor, dentist, hospital rep, or funeral director; by a court summons, plane ticket stub, hospital release form, obituary, or other. With proper documentation, religious observance, representing the university, or personal emergency constitutes an Excused Absence.
- J QUIZZES TBD <u>UNANNOUNCED</u> (during lecture, discussion period, as take-home)

20%

35%

JJ Homework - per chapter/topic; feel free to work any/all problems to apply and master concepts.

JJ Optional Short Report (as detailed below, one option ONLY) *** BONUS (maximum of 3 - 5%)

Typically, Organic Chemistry is not efficiently self-taught. Overnight cramming will probably not produce success! The student should quickly read the chapter/segment to be covered BEFORE lecture to improve lecture comprehension. After lecture, careful detailed reading of the chapter/segment and focused working of the relevant problems are appropriate, necessary, essential, and expected. In addition to student's participation in lecture, discussion, reading, and homework, joining and contributing to a study group is strongly encouraged.

If anticipating a passing grade of **C**, the <u>minimal time per week</u> devoted to Organic Chemistry is estimated at 4 hr for lecture and discussion, 4-10 hr for reading, and 4-10 hr for homework.

Chemistry and Biochemistry Department Caution (effective Aug. 4, 2016, adj Aug. 27, 2019):

A student who opts to withdraw from CHEM 224 lecture after midterm may be permitted to remain in CHEM 226 – the co-required laboratory.

If a student plans to continue with the laboratory portion of the sequence, that student must continue to attend all of the lectures until the week of the official drop date, to gain as much background knowledge as possible in preparation for each laboratory assignment and in order to work safely in the laboratory amongst the other students. If a student is considering withdrawing from lecture, but wishes to remain in the lab, the student may seek assistance from the Department of Chemistry and Biochemistry Office in the week prior to the deadline for withdrawing, beginning Monday at 9:00 am through Friday at 4:00 pm.

Chemistry and Biochemistry Department Course Repeat Rule (effective Aug. 24, 2017):

Effective with the Fall 2017 semester, students are allowed only THREE attempts 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 obtain a signature from the Chemistry Department. A copy of this form must be approved by the student's Academic Advisor to secure final permission for the attempt.

Accomodations (SSWD/SAC):

Any student requesting accommodation(s) for extra exam time, different test venue, and/or other course considerations should present their required SSWD/SSA letter to the Chair of the Chemistry and Biochemistry Department in the first or second week of the term, but NOT later than 10 days before a scheduled exam.

Please note that when requesting extra exam time, the student MUST NOT have scheduled another class directly BEFORE and directly AFTER this course, which would preclude him/her from taking the scheduled exam AT THE TIME OF THE GIVEN EXAM, i.e., the SSWD/SSA exam time must overlap the official exam time to be fair to ALL students. The student should note the posted SSWD/SSA office schedule and must schedule each accommodated exam at least one week prior to any exam where such accommodation is requested.

Lecture Outline for Klein Ed. 3 (tentative, subject to change) - Spring 2020

<u>Week</u>	_Date_ C	Ch-Lecture	Topic ***EVENT	** *
1	Jan 13	14-1	Review – IR Spectroscopy and MS	-
	Jan 15	14-2	1 17	
	Jan 17	<u> 15-1</u>	NMR Spectroscopy	
2	Jan 20	***	********Holiday – Martin Luther King Jr. Day*******	
	Jan 22	15-2	The state of the s	
	Jan 24	15-3		
3	Jan 27	16-1	Conjugated Systems	
	Jan 29	16-2		
	<u>Jan 31</u>	16-3		
4	Feb 3	17-1	Aromatic Compounds	
	Feb 5	17-2	1	
	Feb 7	<u> 17-3</u>		
5	Feb 10	18-1	Aromatic Reactions	
	Feb 12	18-2		
	Feb 14	<u> 18-3</u>		
6	Feb 17	19-1	Aldehydes and Ketones	
	Feb 19	***	***** Wednesday **** EXAM I (Chapters 14-18	8)
	Feb 21	<u> 19-2</u>		~ y.
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7	Feb 24	19-3		
	Feb 26	19-4	****** Ash Wednesday *****	f
	<u>Feb 28</u>	<u> 19-5</u>		
8	Mar 2-7	***	******* Monday-Saturday ****** MIDTERM Spring BREAK ****	*
9	Mar 9	20-1	Carboxylic Acid and Derivatives	
Ū	Mar 11	20-2	Odiboxyllo Acid and Dematives	
	Mar 13	20-3		
10	Mar 16	20-4		
	Mar 18	21-1	Alpha Carbon Enols and Enolates	
	Mar 20	21-2	The sale of the sa	
11	Mar 23	21-3	***** Monday ***** (last day to withdraw with a W) ********	
	Mar 25	21-4	monday (last day to withdraw with a vv)	
	Mar 27	22-1	Amines	
		_ 		
12	Mar 30	22-2		
	Apr 1	***	***** Wednesday **** EXAM II (Chapters 18-2	11
	Apr 3	22-3	EXAM II (Onapters 10-2	'')
	MDI 3	22-5		
13	Apr 6	23	Organometallics	
	Apr 8	24-1	Carbohydrates	
	Apr 10 - A		******** Good Friday – Easter Monday ******* EASTER BR	?FAK
			27.072.707	
14	Apr 15	24-2	*** optional BONUS report due by noon *	**
	Apr 17	<u> 24-3</u>	, , , , , , , , , , , , , , , , , , , ,	
15	Apr 20	24-4		
	Apr 22	25	Amino Acids, Peptides, and Proteins	
	<u>Apr 24</u>	<u> 26</u>	Lipids	