CHEM 273L Syllabus

Laboratory for Organic Chemistry 2

Summer 2018

Time/Location: MWF 1:30-5:20 PM, Bilger Addition 202/206/214/217

Instructor: Dr. Jake Zimmerman

Office: Bilger 321A

Office Hours: MTWRF 12-1 PM

Goals: The lab experiments in this course are designed to illustrate the practical implementation of the theories and concepts discussed in the CHEM 273 lecture course. The laboratory experiments and exercises will enhance and deepen your understanding of the lecture materials. Student learning objectives/outcomes for each experiment can be located in the lab manual.

***Required Texts*:**

- *Chemistry 273L Organic Laboratory Procedures* (the Lab Manual). 2018 Edition
- Smith, *Organic Chemistry*. 5th ed. (TEXT)

Required equipment: Safety glasses, two bound lab notebooks, and appropriate laboratory attire as specified in the Lab Manual under "Important Lab Safety Rules, pg. 2."

Requirements: Completion of CHEM 272 with a passing grade.

***Preparedness*:** The student must thoroughly read the procedure prior to lab as there will be a pre-lab quiz prior to each lab.

***Lab Reports*:** Please refer to the Lab Manual pages 6-8. Lab reports are due within a week of completing the experimental work. Your TA will specify the location where the lab reports are to be submitted. Late lab reports will receive a penalty of 15%/ day late (or part thereof). Lab reports shall be hand written in a bound Composition style book. You should have two books so that one can be in the hand of the TA for grading and one book to write your pre-lab and lab report in for the week's experiment.

Your lab manual contains instructions on how to prepare a lab report. The purpose of the lab report is to teach you to be observant and to learn how to communicate your observations to others. It also gives you an opportunity to write about the scientific background and to have your writing reviewed by someone knowledgeable so that you can catch early any misconceptions you may have. For these reasons it is essential that you write the lab report in your own words. Do not paraphrase the lab manual or something you found on the web (see also the section on Academic Dishonesty below)!

Missing Lab: Should you be absent from more than two experiments, for ANY reason, you will not be receiving a passing course grade. There will be no make-up labs under ANY circumstance. EXCUSED ABSENCES require a doctor's note, court's notice or similar. I decide what I accept as a valid excuse for an absence and my decisions are final. Examples of what I will not accept: "Car /moped broke down", "I had to drive my mom/dad, little brother, girlfriend (etc.) to the doctor", "I had an interview for a job".

Safety: Please be aware that the lab experiments you will complete require the use of toxic substances. Thus, prudent attention to safety practices should be followed at all times. Please make your instructor aware of any medical conditions that might affect your ability to safely complete these experiments.

Grading: Be aware that you need a grade of "C, not C-" in CHEM 272 to move on to CHEM 273 and in CHEM 272L to move on to CHEM 273L.

Grading Scale

A	85.0 – 100%
B	75.0 – 84.9%
C	65.0 – 74.9%
D	55.0 – 64.9%
Worse	0 – 54.9

Academic Misconduct: Submission of work not your own as work of your own constitutes academic dishonesty. This can take the form of copying somebody else's lab report, copying verbatim or only slightly paraphrased content from sources such as books or the internet without indicating the source. If you get caught in academic dishonesty, you should count on receiving a grade of "F" for the course and you will be reported to judicial affairs for further sanctions.

Schedule:

Lab Meeting	Date	Experiment	Reading: 273L Lab Manual
1	M, July 2	Orientation: General Information, Lab safety, Check-In	1-15
	W, July 4	No lab, Independence Day	
2	F, July 6	IR	Handout/19-28
3	M, July 9	^{13}C NMR	Handout/19-28
4	W, July 11	^{1}H NMR	Handout/19-28
5	F, July 13	Spectroscopy	19-28
6	M, July 16	Spectroscopy Exam	19-28
7	W, July 18	Ester	29-36
8	F, July 20	Grignard	37-44
9	M, July 23	Friedel-Crafts	45-50
10	W, July 25	Reduction	55-68
11	F, July 27	Diels-Alder	69-74
12	M, July 30	Wittig/Chemilum. Checkout	75-83