CHEM 273L (Laboratory Syllabus)

Organic Chemistry 2

Fall term, Aug 26 – Dec 20, 2019

Prerequisite: Chem 272L

Instructor: Dr. Jeff Romine Office: 321A Bilger Hall Office hours: W,R,F 11-12:00 Email: rominej@hawaii.edu

79233 Section 6	M 1:30 to 5:20	BILA 206	Duk Hwan Kim	dukkim@hawaii.edu
83086 Section 12	T 9:00 to 12:50	BILA 206	Duk Hwan Kim	dukkim@hawaii.edu
79234 Section 16	T 12:30 to 4:20	BILA 202	Cody Dickinson	cfd4@hawaii.edu
81518 Section 26	W 12:30 to 4:20	BILA 206	Cody Dickinson	cfd4@hawaii.edu

TA

Chemistry 273L Organic Laboratory Procedures

Lab Manual and Supplement for Students.

Course Description:

CHEM 273L is the laboratory extension of Organic II (CHEM 273). The experiments are intended as practical applications of the material taught in the lectures, and will give students 'hands-on' experience in organic chemistry.

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."

Preparedness: Student must carefully read the experimental procedure prior to lab and be prepared to take a pre-lab quiz at the start of each session.

Lab Reports: See the top paragraph of pg 3 and pages 6-8 in the Lab Manual. 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 15% per day deduction. They are to be neatly hand-written in a bound notebook.

Notebooks: You are to have two bound notebooks. One is to be handed to your TA for grading and one is for you to write your pre-lab and lab report in for the next experiment. Consult your Lab Manual for instructions.

Absence: You are permitted only two absences due to illness or other, but you must notify your TA and Lab partner. A third absence requires a doctor's note, court's notice or equivalent in order to receive a passing grade.

Safety: Lab experiments require handling chemicals, some of which are toxic. Attention to safety precautions is mandatory at all times. Inform your TA of any medical conditions that might affect your ability to safely conduct experiments.

Tentative Grading: Your grade is determined from a combination of quizzes, lab reports, experimentals written into your notebooks, and TA evaluations. A percentage will be calculated and applied to the following grading scale:

A 85 – 100% B 75 – 84% C 65 – 74% D 55 – 64% F < 63%

Academic Misconduct: See syllabus for CHEM 273.

Schedule:

Note: this is combined listing of four sections. See the daily calendar below for specifics.

Aug 26 - 27 No labs

Sept 2 - 4 Check-In, Labs 1- 5 (Receive unknown)

Sept 9 – 11 Labs 1 – 5 (Unknown Structure pg 17 – 25).

Sept 16 – 18 Labs 1 – 5 Unknowns pg 17-25)

Sept 23 – 25 Labs 1 – 5 Unknowns pg 17-25)

Sept 30 – Oct 2 Complete Labs 1 – 5

Oct 7 – 9 Lab 6 (Safety and Esterification pg 27-33)

Oct 14 – 16 Lab 7 (Grignard Rxn pg 35-42)

Oct 21 - 23 Lab 8 (Friedel-Crafts pg 43-52)

Oct 28 - 30 Lab 9 (Reduction pg 53 – 65)

Nov 4 - 6 Lab 10 (Diels-Alder pg 67 -72)

Now 11 - 13 Lab 11 (Wittig pg 73 -81 and check out)

Nov 18 -21 No labs

Nov 25 - 27 No labs

Dec 2 - 4 No labs

Daily Calendar

Monday	Tuesday	Wednesday
26-Aug	27-Aug	28-Aug
No Labs	No Labs	No Labs
2-Sep	3-Sep	4-Sep
Holiday	Check-In	Check-In
9-Sep	10-Sep	11-Sep

Check-In & Unknowns	Unknowns	Unknowns
16-Sep	17-Sep	18-Sep
Unknowns	Unknowns	Unknowns
23-Sep	24-Sep	25-Sep
Unknowns	Unknowns	Unknowns
30-Sep	1-Oct	2-Oct
Unknowns	Unknowns	Unknowns
7-Oct Esterification	8-Oct Esterification	9-Oct Esterification
14-Oct	15-Oct	16-Oct
Grignard	Grignard	Grignard
21-Oct Friedel-Crafts	22-Oct Friedel-Crafts	23-Oct Friedel-Crafts
28-Oct	29-Oct	30-Oct
Reduction	Reduction	Reduction
4-Nov	5-Nov	6-Nov
Diels-Alder	Diels-Alder	Diels-Alder
11-Nov	12-Nov	13-Nov
Holiday	Wittig	Wittig
18-Nov	19-Nov	20-Nov
Wittig	No Lab	No Lab
25-Nov	26-Nov	27-Nov
No Lab	No labs	No labs
2-Dec	3-Dec	4-Dec
No labs	No labs	No labs