

# CHEM 273L (Laboratory Syllabus)

## Organic Chemistry 2

Summer term, July 1st - Aug 9<sup>th</sup>, 2019

Prerequisite: Chem 272L

Instructor: Dr. Jeff Romine

Office: 321A Bilger Hall

Office hours: T,W,T 12-1:00

Email: [rominej@hawaii.edu](mailto:rominej@hawaii.edu)

				<u>TA</u>	
701	MW	1:30 to 5:30	BILA 202	Aneka Patterson	anekap@hawaii.edu
702	MW	1:30 to 5:30	BILA 206	Anna Ung	annaung@hawaii.edu
705	TR	1:30 to 5:30	BILA 202	Jacky Lung	jackyl@hawaii.edu
706	TR	1:30 to 5:30	BILA 206	Zach Miyamoto	zekm@hawaii.edu

### 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 when late. 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 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.

**Grading:** Your grade is determined from a combination of quizzes, lab reports, experimentals written into your notebook, and a 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 for all four sections listed above. Your TA will specify.

**July 1 - 2** Check-In, Orientation, Lab safety: Begin Labs 1 – 5 (Unknown Structure pg 17 – 25)

**July 3 - 4** No lab, Independence Day

**July 8 – 9** Continue on Labs 1 – 5.

**July 10 – 11** Complete Labs 1 – 5.

**July 15 – 16** Start Lab 6 (Esterification pg 27-33)

**July 17 – 18** Complete Lab 6; Start lab 7 (Grignard pg 35-42)

**July 22 – 23** Complete lab 7; Start lab 8 (Friedel-Crafts pg 43-52)

**July 24 – 25** Complete lab 8; Start lab 9 (Reduction pg 53 – 65)

**July 29 – 30** Complete lab 9; Start lab 10 (Diels-Alder pg 67 -72)

**July 31 - Aug 1** Complete lab 10; Start lab 11 (Wittig/Chemiluminescence pg 73 -81)

**Aug 5 - 6** Complete lab 11.

**Aug 7 - 8** Clean up and Checkout