

Chemistry Laboratory 2125, Spring 2015

INSTRUCTOR: Dr. Hemant Sharma; Office: PSCI 411D, hsharma@utep.edu
Office Hours: M, W 9:00 –10:00 and by appointment (747-7565)
LABORATORY: M 3:30-6:20 (22750) CCSB 1.0506; M 3:30-6:20 (22684) CCSB 1.0508; W 3:30-6:20 (24431) CCSB 1.0506; W 3:30- 6:20 PM (24432) CCSB 1.0508

TEXT: Experimental Organic Chemistry, (A Small -Scale Approach) By Charles F. Wilcox and Mary F. Wilcox

GRADING:

The grades for the laboratory will be made up of:

1/3 Attendance 1/3 Reports 1/3 Quizzes

The quizzes will focus only on the chemistry of the experiments. Each quiz is designed to motivate you to understand the chemistry you are doing.

Neatly typed Lab Reports are due the following week at the beginning of the lab.

No credit will be given for reports on days you miss the lab. Late lab reports will not be accepted.

Attendance to the pre-laboratory lecture is mandatory. If you skip more than two labs, you will not get the passing grade.

We shall work on multi-step organic synthesis. Convergent synthesis of hexaphenylbenzene, Chapter 41. This semester long exercise is meant to simulate a typical synthetic laboratory experience. Convergent synthesis of hexaphenylbenzene, Chapter 41. This semester long exercise is meant to stimulate a typical synthetic laboratory experience.

GOOGLES MUST BE WORN IN THE LAB AT ALL TIMES.

Grades will follow the following scheme:

90-100: A
80-<90: B
70-<80: C
60-<70: D
<60: F

<u>Date</u>	<u>Experiment / Exercise</u>	<u>Chapter</u>	<u>Quiz</u>
2 nd Week	Safety Lecture & Check In	01	
3 rd week	Benzaldehyde	6	1
4 th Week	(E)-Stilbene	28	2
5 th Week	(E)-Stilbine continued	28	-
6 th Week	Stilbine dibromide	28	3

7 th Week	SPRING BREAK		
8 th Week	Diphenylacetylene	28	4
9 th Week	Benzoin	48	5
10 th Week	Diphenylacetylene/ Benzil	28,48	6
11 th Week	Tetraphenylcyclopentadienone	34	7
12 th Week	Hexaphenylbenzene	41	8
13 th Week	NMR Spectroscopy	41	9
14 th Week	Catch Up & Check out		

You are required to follow all the safety rules and procedures in the laboratory.

Safety: Since Safety is so important, it will be among the lead topics of your syllabus:

- 1) Goggles: You are required to follow all the safety rules and procedures in the laboratory. **GOGGLES MUST BE WORN IN THE LAB AT ALL TIMES.** As soon as you enter the lab, you should have your safety goggles on, regardless of whether any laboratory activity is underway. You cannot remove your safety goggles until you leave the lab. Students who refuse to comply with safety goggle rules will be asked to leave the lab, and in the event they refuse to leave, will be escorted out by University police.
- 2) Hot Glassware: Hot glassware looks the same as cold glassware. Use care when working with a reaction apparatus that is being heated or with the glassware that may be attached to or removed from the apparatus as hot glass cannot be distinguished from cold glass
- 3) Broken glassware. If glassware breaks in the lab, use extreme care in handling it. If you need assistance, ask your TA. Broken glassware should be placed in the broken glassware container.
- 4) Chemical waste disposal. Make sure you seek guidance from your TA in disposal of chemical waste. Some waste containers are only meant for certain kinds of waste. Mixing the wrong chemical waste can produce a violent chemical reaction and/or fire.
- 5) Injuries: All injuries must be reported to your TA.

The Material Safety Data Sheets (MSDS) for all of these substances are available on line on [Environmental Health & Safety web page](#) of the UTEP.