

CHEMISTRY 252L ORGANIC CHEMISTRY II LABORATORY

Winter, 2013-2014 Room: Moench F-108

INSTRUCTOR: Mark Brandt, Ph.D. E-mail: brandt@rose-hulman.edu
Office: Moench FL109 Tel: Ext. 8406
Website: <http://www.rose-hulman.edu/~brandt/OrganicLab/>
Website: Moodle.rose-hulman.edu

Attire: Safety goggles can be purchased with your textbook in the school bookstore. Bring your safety goggle voucher to the first lab session to receive your goggles. You **must** have safety goggles to participate in laboratory. **You may not start lab** without appropriate “personal protective equipment” which includes: **pants, shirt that covers your shoulders and abdomen, shoes that cover your entire foot (heel to toe), and safety goggles.** Protective gloves will be available free of charge to students.

Bound notebooks can be purchased in the school bookstore. If you are unsure about which notebook to purchase, be sure to ask!

Beginning Week 1, a **pre-lab quiz on Moodle must be taken and passed before you begin lab.**

Laboratory Schedule

Week	Experiment	Report Title/Comments/Due Date
1	Check-in/Chromatography	Carvone Isolation/ Pair report /WEEK 3
2	Fermentation and distillation	Biosynthesis of Ethanol from Molasses/ Pair report /WEEK 4
3	<i>NO LAB</i>	—
4	Synthesis of citronellol	Synthesis of citronellyl tosylate/ Pair report /WEEK 7
5	Synthesis of citronellyl tosylate	Synthesis of citronellyl tosylate/ Pair report /WEEK 7
6	Characterization of citronellyl tosylate	Synthesis of citronellyl tosylate/ Pair report /WEEK 7
7	Structure determination of an unknown compound	Unknown Identification/ Pair report /WEEK 8
8	Electrophilic aromatic iodination of vanillin	Greener Electrophilic Aromatic Iodination of Vanillin/ Pair report /WEEK 9
9-10	Check-out/Lab practical	Core Competency Checklist

Grading: Your laboratory grade will be determined based upon your attitude and participation in the laboratory, and upon laboratory related assignments.

Pre-lab quizzes	10%
Laboratory reports	70%
Laboratory practices	10%
Laboratory practical	10%

Participation, Attitude and Safety in the Laboratory: All safety rules must be followed at all times. **Failure to comply will result in immediate expulsion from the lab.** In some cases, a grade penalty may be accrued for failure to follow safety rules. Specific safety issues will be addressed in detail the day of lab. **Be sure you are aware of hazardous waste disposal before you begin your experiment. All accidents and injuries, no matter how minor, must be immediately reported to the instructor.**

Cleanliness and safe practices are required in the lab. Ask your instructor if you are unsure about how to do something or if you do not understand the reason for a procedure. Think about the chemistry that is happening in each step of an experiment. Anticipate outcomes with special attention to safety issues. Be aware of what is happening around you. ***Thorough and efficient operation in the lab and reading and thinking through the lab procedure before coming to lab is expected professional behavior.***

Arriving late to lab means that you may have missed some vital procedural and safety information. ***If you are more than twenty minutes late to lab without having discussed this with your instructor prior to the lab day, you will be excused from the laboratory session, and will receive a grade of zero for that lab. Make up laboratories will not be granted.***

Laboratory Notebooks: Learning to keep an accurate and detailed record of results is extremely important to all engineers and scientists. ***Your notebook is a permanent record of your experiments and your data. Your lab notebook will be your only source of the lab protocol while in the lab.*** Notebook entries should be written clearly, concisely, and neatly. The following guidelines for recording entries in your lab notebook will be graded for competency when scanned copies of your lab notebook entries are submitted as part of your lab reports:

- a) You must use a ***bound notebook*** (composition notebooks are most practical). ***Do not tear out any pages of your notebook.*** The purpose of having a notebook is so that your records represent a ***complete*** log of your work.
- b) The first several pages of a notebook should be reserved for a ***table of contents.***
- c) All entries in your notebook should be made in ***ink.*** Any mistakes should be crossed out with a single horizontal line and initialed. ***Do not use whiteout.***
- d) ***Each experiment should start on a new page.*** Your entry should include your name and your title, the date, a title for the experiment, and a reference for the procedure.
- e) Each page should be numbered sequentially in the upper outside corner.
- f) Any data or notes written on separate pieces of paper should be transferred to your notebook as soon as possible.
- g) ***Sign each entry after you have completed the experiment.*** This signifies that the data reported came from the person responsible for the notebook.
- h) ***Have your instructor initial your lab entry before leaving the lab.***

Laboratory Reports: Laboratory reports/assignments/write-ups will be discussed on the day of lab and a due date will follow the assignment (usually the following lab period, *i.e.* one week). Information regarding laboratory reports, other assignments, and grading rubrics can be found on Moodle and on the course main webpage: <http://www.rose-hulman.edu/~brandt/OrganicLab/>. As with all assignments, *copying the work of another without proper attribution is a form of Academic Misconduct. All matters of academic misconduct will be handled according to the Rules & Discipline section of the Rose-Hulman Student Handbook.*

Reports should be submitted by placing them in the trays provided in the laboratory. Reports should be submitted on time; late reports will be subject to a 10% late penalty per day late, and it is likely that the feedback on your performance (grading) will be delayed as well.

Disability Accommodation: If you require disability accommodations, contact The Learning Center (contact by phone: (812) 877-8876, Campus mail: CM 82, and Email: learningcenter@rose-hulman.edu) to make initial arrangements and then contact the instructor.