

CH 336

Organic Chemistry Laboratory II

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Office Hours: TBA

Textbooks: Setzer & Setzer, "The Organic Chemistry Laboratory Experience"; Fessenden, Fessenden, & Feist, "Organic Laboratory Techniques", 3rd Ed.

Grading: There are 2200 total points possible, assigned on the following basis:

1200 points - Experimental write-ups. These are the points you receive from the written part of your experiment; how well you convince me that you understand the experiment and the chemistry involved. See below for details. All laboratory reports are due one week following the completion of the experiment. Late papers will be graded down according to the following scheme: -10% per day late. We will accept no lab reports more than 10 days late. We will accept NO EXCUSES for late laboratory reports.

800 points - Experimental results (yields, purity, etc.). These are the points from your products that you turn in.

100 points – Pre-laboratory exercises, laboratory techniques, lab preparation, attendance, punctuality, etc. These points are based upon the observations of the instructor as to how you conduct yourself in the laboratory (Are you using your notebook in the laboratory? Did you come to the laboratory on time and prepared to do the experiment? Are you keeping your lab bench tidy? Are you cleaning up the balance area?). In the past, we have observed the following scheme for assigning "technique" points: Each pre-lab exercise **turned in at the beginning of the laboratory period** is worth 20 points; in addition, +5 points for each "good technique" notation, -5 points for each bad technique notation. **Attendance in the laboratory is mandatory!** Each unexcused absence will cost you 30 points. Each tardinesses = -10 points. If you have an unavoidable absence, CONTACT THE INSTRUCTOR AS SOON AS POSSIBLE, so we can make arrangements for making up the experiment.

100 points – Safety. These are points based on general laboratory safety practices (see below). Are you handling noxious chemicals in the fume hood? Are you cleaning up spills on the bench or on the balances? Are you wearing safety glasses? Is your glassware securely clamped? In the past, we have observed the following scheme: Begin with 100 points at the beginning of the semester; -5 points for each "reminder" for wearing safety glasses, -25 points for dangerous behavior or conduct.

Grades will be assigned according to the following breakdown: 1980-2200, A; 1760-1979, B; 1540-1759, C; 1320-1539, D; <1320, F. This breakdown is non-negotiable. Note that a good grade in the laboratory (i.e., A or B) will require adequate performance in each and every experiment. You will

find it easy to get a good final score and enjoy working in Organic Lab if you spend a reasonable time preparing for each experiment and researching and writing up your reports. If for some reason (bad day, dropped product on floor, wrong phase of the moon,...) your experiment did not work out, it may be possible for you to come in during one of the other scheduled laboratory periods to repeat the experiment. Be sure to check in advance, however. Note that this does not mean that one can keep repeating an experiment *ad nauseum* until enough product is obtained to turn in---this would, of course, constitute bad laboratory technique. Also, it does not mean that it is permissible to skip your normally scheduled laboratory session (see above).

Complaint Procedure: If you have difficulties or complaints related to this course, your first action usually should be to discuss them with your instructor. If such a discussion would be uncomfortable for you or fails to resolve your difficulties, you should contact Professor James Baird, Chair of the Chemistry Department. His telephone number is 824-2416. If you still are unsatisfied, you should discuss the matter with Dr. Debra Moriarity, Associate Dean of the College of Science. Dean Moriarity's phone number is 824-6605.

Special Needs Students: If you have special needs for this class that require a modification of seating, testing, or other class procedures you must discuss them fully with the instructor during the first week of class.

Schedule:

<i>Week</i>	<i>Experiment</i>
1	Introduction, check in - No experiment. Read S&S, pp iii-xxiv; FF&F, pp 1-22. Turn in Safety Practices sheet (S&S, pp ix-x), Safety Questions (S&S, pp xi-xii), Academic Misconduct Agreement (S&S, p xvii).
2	<i>Synthesis of 1,4-Di-<i>t</i>-butyl-2,5-dimethoxybenzene.</i> (S&S, Experiment 14; pre-lab exercise, pp 67-68) 100 points for report; 100 points for product.
3-4	<i>The Fischer Esterification.</i> (S&S, Experiment 16; pre lab exercise, p 79) 200 points for report; 100 points for product.
5-7	<i>Synthesis of Insect Pheromones.</i> (S&S, Experiment 21; pre-lab exercise, p 105) 400 points for report; 200 points for products.
8-9	<i>Synthesis of Dibenzalacetone.</i> (S&S, Experiment 22; pre lab exercise, p 109) 200 points for report; 100 points for product.
10	<i>Isolation of Caffeine from Coffee.</i> (S&S, Experiment 25; pre-lab exercise, p 117) 200 points for report; 100 points for product.
11-12	<i>Isolation of Casein and Lactose from Milk.</i> (S&S, Experiment 28; pre-lab exercise, p 135) 100 points for report; 200 points for products.
13	No experiment; clean up & check out.
