Syllabus—Organic Chemistry Lab (CHE-251)—Fall 2009

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Labs: CHE-251-006, Wed., 1:30—5:20 pm, Nobel Hall 301,
CHE-251-007, Thurs., 1:30—5:20 pm, Nobel Hall 301.

Course Description

This course is the laboratory portion of Organic Chemistry II (CHE-251). Common laboratory techniques, fundamental reactions, reaction mechanisms, stereochemistry, spectroscopic techniques, and introductory biochemistry topics are covered.

Goal

Enhance your understanding/appreciation of organic chemistry by actually performing laboratory exercises. Acquire the knowledge and wisdom necessary for successfully pursuing careers in science, pharmacy, medicine, dentistry, science-related law, and other fields.

Lab Materials

(1) *Techniques in the Organic Laboratory*; Pavia et al.; Brooks/Cole: Belmont, CA; 2002.
(2) *CHE-251 Lab Manual*— contains experiment procedures. (3) Lab goggles

Course Policies

It is expected that all students will follow the academic integrity policies set by the Gustavus Adolphus College. *Students are required to attend all scheduled lab sessions*.

Grading

You will receive one letter grade A+ thru F for the course (lecture and lab together). Your laboratory points (lab reports) are worth approximately 20% of your grade.

Laboratory Schedule

Sept. 16 and 17: *Check-in, "Extraction of Caffeine from Tea*"
Sept. 23 and 24: *"Electrophilic Aromatic Substitution"*
Sept. 30 and Oct.1: *"Multi-Step Synthesis: the Grignard Reaction, Week 1"*
Oct. 7 and 8: *No lab this week (Nobel Conference).*
Oct. 14 and 15: *"Multi-Step Synthesis: the Grignard Reaction, Week 2"*
Oct. 21 and 22: *"Transfer Hydrogenation, Week 1"*
Oct. 28 and 29: *"Transfer Hydrogenation, Week 2"*
Nov. 4 and 5: *"Transfer Hydrogenation, Week 3"*
Nov. 11 and 12: *"Structure-Activity Relationships: Antibiotics"*
Nov. 18 and 19: *"Dilantin"*
Dec. 2 and 3: *"Azo Dyes"*
Dec. 9 and 10: *Check-out*

TIPS FOR DOING WELL IN LAB—

1) Have a good attitude and a professional demeanor.
2) Read and study the experiment prior to lab.
3) Mentally rehearse the lab procedure the day before.
4) Carefully and safely perform each experiment.
5) Prepare a high quality lab report. Answer all questions.
6) Turn in lab reports when due.
7) Ask questions if you do not understand.