

Syllabus
Organic Chemistry Laboratory
CHE 310L-011/012
Spring, 2005

Time: Section 011; T, 1:40 – 4:40; Section 012; W, 2:00 – 5:00

Place: SC 461

Instructor: William R. Oliver
SC 449
572 – 5711
Oliver@nku.edu

Office Hours: W, 9:00 – 11:30; R, 1:30 – 4:00
Other times as available or by appointment.

Prerequisite: CHE 121, 121L

Co or prerequisite: CHE 310. If you drop lecture (310), you must also drop the lab.

Text: *Experiments in Organic Chemistry*, Jonathan Nimitz
Organic Chemistry Laboratory Supplement (This can be found at
<http://www.nku.edu/~chemistry/courseinfo.htm>)

Schedule

| Week of: | Experiment | Reference* |
|-----------------|--|-----------------------|
| 01/10 | Check in/Melting Point | Pp. 26-27, Supplement |
| 01/17 | Recrystallization | Pp. 22-33, Supplement |
| 01/24 | Unknown – Purification and Identification | Same as 09/01 |
| 01/31 | Fractional Distillation | Pp. 34-44, Supplement |
| 02/07 | Acid-Base Extraction | Pp. 45-61, Supplement |
| 02/14 | Thin-Layer Chromatography | Pp. 63-71, Supplement |
| 02/21 | Column Chromatography | Pp. 72-76, Supplement |
| 02/28 | Isolation of Natural Flavors and Fragrances | Pp. 196-207 |
| 03/07 | Spring Break | |
| 03/14 | Mid-term Exam | |
| 03/21 | Molecular Modeling | Supplement |
| 03/28 | Nucleophilic Substitution | Pp. 120-124 |
| 04/04 | Bromination/Stereochemistry | Pp. 95-101 |
| 04/11 | Dehydrohalogenation | Supplement |
| 04/18 | Carbocation Rearrangement | Pp. 246-252 |
| 04/25 | Final Exam (comprehensive); check out | |

*The page numbers refer to Nimitz; Supplement refers to the web course supplement. *Students must print out the applicable material for each lab and bring it to class. Students should have read Pp. 1-21 of Nimitz before the second lab meeting.*

Equipment: Students are required to have a laboratory research notebook (see accompanying pages) and safety glasses.

Honor Code: Students are expected to conform to the Student Honor Code, which may be found in the Student Handbook or online at the Dean of Students Web page. Academic dishonesty in this class will result in dismissal from class and an F in the course.

Important Dates: Jan 10, First day of class
Jan 29, Last day to drop with no record
Mar 7-12, Spring break
Mar 28, Last day to drop with a grade of W
April 26/27, Final Exam

Exams and Grading

| | |
|----------------------|-----|
| Mid-term exam | 20% |
| Final exam | 20% |
| Laboratory Notebook | 20% |
| Quizzes | 20% |
| Laboratory Technique | 20% |

The quizzes will be given from time to time at the beginning of the lab, in order to test your preparation for that experiment. The grade for lab technique will be the instructor's assessment of your preparation, understanding, efficiency, and safety in carrying out lab procedures. See the attachment for more information about the laboratory notebook.

N.B. All items on this syllabus are subject to change by the instructor. *No cell phones or pagers will ring or be used in the class.*