

**CHEMISTRY 365 SYLLABUS****Spring 2012****Organic Chemistry Laboratory II**

Dr. Craig P. Jasperse

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Classroom: Hagen325 or 208 (prelab), SL307 (lab)

Required Text and Materials:

1) Safety Goggles 2) Lab Manual (in house)

Office: Hagen 407J

Office Hours: Mon 9-11

Tues 1-3

Wed 9-11

Thurs: 1-3

Fri: 9-11

Lab Schedule

Date and Time	Monday 2:30-5:30	Tuesday 9-12	Wednesday 2:30-5:30	Thursday 9-12
Prelab	Hagen 325	Hagen 208	Hagen 325	Hagen 208

Date	
Jan 9-12	Cyalume: Chemiluminescence
Jan 16	Martin Luther King Monday. No Monday Lab
Jan 17-19,23	Grignard Reaction, Part 1
Jan 24-26,30	Grignard Reaction, Part 2
Jan 31, Feb 1,2,6	Alcohol to Ester; Catalysis; Distillation; NMR
Feb 7-9	No Tuesday-Wed-Thurs Lab (To match Monday's MLK day off)
Feb 13-16	Alcohol Unknown (NMR)/Synthesis of Aspirin
Feb 20-23	Wittig Reaction
Feb 27-Mar 1	Aldehydes and Ketones Unknown/Derivative
Mar 5-8	Dibenzalacetone by Aldol Condensation
Mar 12-15	No Lab. Spring Break.
Mar 19-22	Multistep Synthesis Module Week One
Mar 26-29	Multistep Synthesis Module Week Two
Apr 2-5	Multistep Synthesis Module Week Three
April 9	No Monday Lab, Easter Break
Apr 10-12 (T-H), 16 (M)	Amine Unknowns
April 17	No Tuesday Lab, Academic Conference
Apr 18,19,23,24	Carboxylic Acid Unknown and Titration
Apr 25, 26, 30, May 1	Catchup, Cleanup, Checkout

**Keys:** Lab drawer keys can be picked up at the key issuing office, Owens 209 (phone 477-2925). They should be available by Tuesday, January 20. At end of semester, keys need to be returned to Owens 209. Penalties for failure: a) \$25 fine, and b) you won't be able to register again until you return it.

**Grading Policy:**

1. **Attendance:** Laboratory attendance is important! In the event of an absence, you will receive zero points for that experiment. Attending a different session for a given week may be possible upon arrangement.
2. **Individual Lab Scores:** Most experiment will require completion of a lab report, perhaps answers to some questions, and often identification of unknowns. Some of the grade will be based on quality of results, for example successful identification of an unknown, or high yield, or high product purity. Unless notified otherwise lab reports should be completed by the following lab period. For lab reports in which you are required to answer some questions, these will count into the lab report scores.
3. **Write Your Own Lab Report.** While some experiments may be done with a partner, you should keep your own observations and write your report individually, unless told otherwise.
4. Instructor's **evaluation of your laboratory technique and understanding:** This can contribute up to 20% of the total grade.

Tentatively letter grades will be assigned as follows:

- A** (≥90%)  
**B** (≥80%)  
**C** (≥70%)  
**D** (≥60%)

**Safety Notes:** Noncompliance may result in dismissal from lab and a zero for the week!

1. Wear safety goggles in the organic laboratory.
2. Dispose of chemical wastes in appropriate containers.
3. The impact of the chemicals used in some of these experiments on unborn babies is not fully known. If you are pregnant or become so, I advise you to drop organic chemistry laboratory.

**Course Description**

CHEM 365 Organic Chemistry Laboratory II (1 credit)

Purification, synthesis, and identification of organic compounds, and the study of organic reactions.

**Prerequisite:** Chem 355

**Student Learning Outcomes/Course Objectives**

Students should master the laboratory techniques required for various synthetic reactions, and for the characterization, identification, and purification of various organic compounds. The ability to identify unknowns, including via use of spectroscopy, is an important outcome goal.

**Academic Honesty**

Cheating will not be tolerated and will be reported to the Dean of your College and the Vice President for Academic Affairs. It may also be reported to the Student Conduct Committee for further disciplinary action. For a full description of the MSUM Academic Honesty Policy, please see the Student Handbook. (<http://www.mnstate.edu/sthandbook/POLICY/index.htm>)

**Special Accommodations**

Students with disabilities who believe they may need an accommodation in this class are encouraged to contact Greg Toutges, Coordinator of Disability Services at 477-5859 (Voice) or 1-800-627-3529 (MRS/TTY), CMU 114 as soon as possible to ensure that accommodations are implemented in a timely fashion.