

**CHEMISTRY 365 SYLLABUS****Spring 2019****Organic Chemistry Laboratory II**

Classroom: Langseth 307 Dr. Craig P. Jasperse web: <a href="http://www.mnstate.edu/jasperse/">http://www.mnstate.edu/jasperse/</a> Office: Hagen 407J Telephone: 477-2230 e-mail: <a href="mailto:jasperse@mnstate.edu">jasperse@mnstate.edu</a>	Office Hours: M/W/F 9-10:30, 1:00-2:00, Mon 9-10:30, 1:00-2:00 Tues 10:30-12:00, 1:00-2:00 Wed 9-10:30, 1:00-2:00 Thurs: None Fri 9-10:30, 1:00-2:00
---	---

Required Text and Materials:

Room: Langseth 307 (lab)

1) Safety Goggles

2) Lab Manual (print from website, see <http://web.mnstate.edu/jasperse/Chem365/Chem365.html>)

\*note: Avoid printing this from university computers/printers using Firefox.

Lab Schedule: SL307	Thursday, 9-11:50	Thursday, 1:30-4:20
---------------------	-------------------	---------------------

Date	
Jan 17	Cyalume: Chemiluminescence
Jan 24	Grignard Reaction, Part 1
Jan 31	Grignard Reaction, Part 2
Feb 7	Alcohol to Ester; Catalysis; Distillation; NMR
Feb 14	HPLC: High Pressure Liquid Chromatography
Feb 21	Alcohol Unknown (NMR)/Synthesis of Aspirin
Feb 28	Wittig Reaction
Mar 7	No Lab. Spring Break.
Mar 14	Aldehydes and Ketones Unknown/Derivative
Mar 21	Dibenzalacetone by Aldol Condensation
Mar 28	Multistep Synthesis Module Week One
Apr 4	Multistep Synthesis Module Week Two
Apr 11	Multistep Synthesis Module Week Three
Apr 18	No Lab. Easter Break
Apr 25	Amine Unknowns
May 2	Carboxylic Acid Unknown and Titration Catchup, Cleanup, Checkout

**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. Expect this to be more a grade-lowering factor than a grade-elevating factor.

Tentatively letter grades will be assigned as follows. There will be some + and – grades.

A/A-	(≥90%)
B-/B/B+	(≥80%)
C-/C/C+	(≥70%)
D-/D/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>)

**Accessibility:** MSUM is committed to providing equitable access to learning opportunities for all. Students with disabilities who believe they may need an accommodation in this class are encouraged to contact the Disability Resource Center (DRC), Coordinator of Disability Services at (218) 477-4318 (Voice) or 1-800-627-3529 (MRS/TTY), CMU 114 to schedule an appointment for an intake. Additional information is available on the [DRC website](http://www.mnstate.edu/disability/): <http://www.mnstate.edu/disability/>