

Chemistry 325 Syllabus Fall 2016

Instructor	Robin S. Tanke, Ph.D.
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Office:	D141 Science
Office Hours:	M 10 AM, R 11AM, F 9AM or by appointment, drop in

Class Sessions:

Lecture:	T, R, F 10AM	A121
Lab Section 1	T 11 PM – 2PM	C134/A107
Lab Section 2	M 2 PM – 5 PM	C134/A110
Lab Section 3	W 2 PM – 5 PM	C134/A121

Exam Schedule:

- ☞ Exam 1: Friday, September 30, 2016
- ☞ Exam 2: Friday, October 21, 2016
- ☞ Exam 3: Friday, November 11, 2016
- ☞ Exam 4: Friday, December 2, 2016

Final Exam: Friday, December 16th 8:00 – 10:00AM (Exam Group 1)

Learning Outcomes

By the end of this course, students will

- ☺ predict the physical properties and chemical reactivity of simple organic molecules
- ☺ propose products and reasonable mechanisms for chemical reactions based on a fundamental understanding of organic chemistry.
- ☺ propose efficient syntheses of simple organic molecules.
- ☺ use a variety of characterization data to identify organic compounds.
- ☺ safely prepare and characterize organic compounds and appropriately document and present their laboratory work.

Prerequisite: Chem 117, Chem 106 or equivalent

Required Materials:

- The text, available at text rental, is Organic Chemistry, Third Edition by Janice Smith
- You will need a bound laboratory notebook. The pages will need to be numbered; you may buy one with numbered pages or number the pages yourself.

Recommended Materials:

- A laboratory text is available for purchase at the UWSP bookstore Making the Connections, A How-To Guide for Organic Chemistry Lab Techniques, Second Edition (STRONGLY RECOMMENDED) by Anne B. Padias. You may choose another text or websites to complete your prelab assignments.
- Molecular Models (STRONGLY RECOMMENDED) Model kits are available from Indigo (www.indigo.com) for about \$32.00. The bookstore also has model kits available for you to purchase.
- Study Guide and Solutions Manual for Organic Chemistry by Smith and Berk (RECOMMENDED) This manual gives answers to all the problems in your text. A few copies are on reserve at the library.

Grading: The tentative letter grades will be given as follows: 'A' – 705 pts; 'B' – 622 pts; 'C' – 540 pts, 'D' – 488 pts.

General Chemistry Review	30 pts
Homework Assignments (4@ 25 points each)	100 pts
4 Exams (70 points each)	280 pts
Laboratory Grade ¹	185 pts
Final Exam	155 pts

Notes

1. Details of the laboratory grade will be given the first day of lab.

LATE WORK POLICY: I expect work to be turned in at the designated time; however, if work must be late, you will receive a 10% grade reduction for material 1 day to 1 week late. Any work turned in more than 1 week late will not be accepted except under special circumstances.

Student Conduct:

Given the new state policies regarding attendance of students receiving financial aid, attendance will be taken at times through out the semester.

You are required to attend exams and labs at the assigned time. Unexcused absences during these times are unacceptable. Excused absences will be granted under certain conditions; contact me as soon as possible if you need to miss an exam or lab.

Please be respectful of your classmates!

Students are reminded that they are to conduct themselves in accordance with the rules for academic conduct. Academic misconduct is described in Chapter UWSP 14 and is to be followed by all students, staff, and faculty. This document that may be accessed via the University Web site at <http://www.uwsp.edu/dos/Documents/CommunityRights.pdf#page=11>. An excerpt from it follows:

UWSP 14.03 ACADEMIC MISCONDUCT SUBJECT TO DISCIPLINARY ACTION.

Academic misconduct is an act in which a student:

1. Seeks to claim credit for the work or efforts of another without authorization or citation;
2. Uses unauthorized materials or fabricated data in any academic exercise;
3. Forges or falsifies academic documents or records;
4. Intentionally impedes or damages the academic work of others;

5. Engages in conduct aimed at making false representation of a student's academic performance; or
6. Assists other students in any of these acts.

Disabilities: If you have disabilities and need any special accommodations, you should contact the office of Disability Services during the first two weeks of the semester.

Accommodations for Religious Beliefs: Religious beliefs will be accommodated according to UWS 22.03 provided I am notified during the first three weeks of classes.

Robin Tanke Fall Semester 2016

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00			326 Lab 1 B130/A111		
09:00			326 Lab 1 B130		Office Hour
10:00	Office Hour	325 Lec 1 A121	326 Lab 1 B130	325 Lec 1 A121	325 Lec 1 A121
11:00		325 Lab 1 C134/A107	WCC	Office Hour	
12:00		325 Lab 1 C134			
13:00		325 Lab 1 C134		Research	
14:00	325 Lab 2 C134/A110		325 Lab 3 C134/A121	Research	Meeting or Seminar
15:00	325 Lab 2 C134		325 Lab 3 C134	Research	Meeting or Seminar
16:00	325 Lab 2 C134		325 Lab 3 C134	Research	

Chemistry 325 Tentative Schedule Fall 2016

Week #	Topic	Assignment
1 (9/5)	Unit 1: Covalent Bonding and Organic Molecules	Review General Chemistry
2 (9/12)	Unit 2: Acids and Bases	Review Due 9/13
3 (9/19)	Unit 2 continued, Unit 3: Functional Groups	Homework 1 due 9/23
4 (9/26)	Unit 3: IR spectroscopy	Exam 1: Friday, 9/30
5 (10/3)	Unit 4: Alkanes and Conformational analysis	
6 (10/10)	Unit 5: Chirality	Homework 2 due 10/14
7 (10/17)	Unit 6: Reaction Mechanisms	Exam 2: Friday, 10/21
8 (10/24)	Unit 7: NMR Spectroscopy and Mass Spectrometry	
9 (10/31)	Unit 8: Substitution reactions	Homework 3 due 11/4
10 (11/7)	Unit 8 continued, Units 9: Elimination Reactions	Exam 3: Friday, 11/11
11 (11/14)	Unit 9 continued, Unit 10 Alcohols and Ethers	
12 (11/21)	Unit 10 and THANKSGIVING!	Homework 4 due TUESDAY 11/22
13 (11/28)	Unit 11: Alkenes Unit 11	Exam 4: Friday, 12/2
14 (12/5)	Unit 12: Chemical Reactions involving Radicals	
15 (12/12)	Organic Syntheses and Review	
12/16	Final Exam	8:00 – 10:00