

Chemistry 325 Syllabus Fall 2017

Instructor	Robin S. Tanke, Ph.D.
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Office:	D141 Science
Office Hours:	T 11AM- noon, Wed 2-3 PM, F 9-10AM or by appointment, drop in

Class Sessions:

Lecture:	T, R, F 10AM	A121
Lab Section 1	W 8AM-11AM	C134/A111
Lab Section 2	T 2 PM – 5 PM	C134/D214
Lab Section 3	R 2 PM – 5 PM	C134/A111

Exam Schedule:

- ☞ Exam 1: Friday, September 29, 2017
- ☞ Exam 2: Friday, October 27, 2017
- ☞ Exam 3: Friday, November 17, 2017
- ☞ Exam 4: Friday, December 8, 2017

Final Exam: Wednesday, December 20, 2017 12:30 – 2:30PM A121

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, purify 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, Fifth 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, Fifth Edition by Smith and Smith (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 2017

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00	Research		325 Lab 01L1 C134/A111		
09:00			325 Lab 01L1 C134		Office Hour
10:00		325 Lec 01 A121	325 Lab 01L1 C134	325 Lec 01 A121	325 Lec 01 A121
11:00		Office Hour			
12:00			371 Lec 01 A111		
13:00					
14:00		325 Lab 01L2 C134/D214	Office Hour	325 Lab 01L3 C134/A111	Seminar or Meeting
15:00		325 Lab 01L2 C134		325 Lab 01L3 C134	
16:00		325 Lab 01L2 C134		325 Lab 01L3 C134	

Chemistry 325 Tentative Schedule Fall 2017

Week #	Topic	Assignment
1 (9/5)	Unit 1: Covalent Bonding and Organic Molecules	Review General Chemistry
2 (9/11)	Unit 2: Acids and Bases	Review Due 9/12
3 (9/18)	Unit 2 continued, Unit 3: Functional Groups	Homework 1 due 9/22
4 (9/25)	Unit 3: IR spectroscopy	Exam 1: Friday, 9/29
5 (10/2)	Unit 4: Alkanes and Conformational analysis	
6 (10/9)	Unit 5: Chirality	
7 (10/16)	Unit 6: Reaction Mechanisms	Homework 2 due 10/20
8 (10/23)	Unit 7: NMR Spectroscopy and Mass Spectrometry	Exam 2: Friday, 10/27
9 (10/30)	Unit 8: Substitution reactions	
10 (11/6)	Unit 8 continued, Units 9: Elimination Reactions	Homework 3 due 11/10
11 (11/13)	Unit 9 continued, Unit 10 Alcohols and Ethers	Exam 3: Friday, 11/17
12 (11/20)	Unit 10 and THANKSGIVING!	
13 (11/27)	Unit 11: Alkenes Unit 11	Homework 4 due 12/1
14 (12/4)	Unit 12: Chemical Reactions involving Radicals	Exam 4: Friday, 12/8
15 (12/11)	Organic Syntheses and Review	
12/20	Final Exam	12:30- 2:30 PM