Chemistry 326

Syllabus Spring 2017

Instructor	Robin S. Tanke, Ph.D.
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E-mail:	rtanke@uwsp.edu
Office:	D141 Science
Office Hours:	M, F 9-10AM, W noon-1PM or by appointment/drop in

Class Sessions:

Lecture:	M, W, F	11:00 AM	A121
Lab Section 1:	M	2:00 – 5:00 PM	A110/C134
Lab Section 2:	T	2:00 – 5:00 PM	A201/C134
Lab Section 3:	W	2:00 - 5:00 PM	A110/C134

Exam Schedule:

Exam 1: Friday, February 17, 2017
Exam 2: Friday, March 10, 2017
Exam 3: Friday, April 7, 2017

Exam 4: Friday, May 5, 2017

Final Exam: Wednesday, May 17, 2017, 12:30PM-14:30PM

Course Objectives:

- © Students will propose reasonable mechanisms for chemical reactions based on a fundamental understanding of organic chemistry.
- © Students will propose syntheses of simple molecules and include the use of protecting groups as necessary.
- © Students will describe the structure and reactivity of simple bioorganic molecules.
- © Students will demonstrate the ability to read aspects of organic chemistry in scientific journals.
- © Students will safely prepare and characterize organic compounds and appropriately document and present their laboratory work.

Prerequisite: Chem 325 or equivalent

Required Materials:

- The text, available at text rental, is <u>Organic Chemistry</u>, <u>Third Edition</u> 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:

- Molecular Models are often helpful.
- Study Guide/Solutions Manual for Organic Chemistry (Janice Smith, Erin Smith Berk, ISBN-10: **0077296656**) Five copies of the Study Guide will be on reserve in LRC.
- The laboratory text <u>Making the Connections</u>, <u>Second Edition</u> by Padias will be referenced. If you do not have this any other organic laboratory text should be sufficient.

Grading: The tentative letter grades will be given as follows: 'A' -700 points, 'B' -620 points, 'C' -540 points, and 'D' -490 points.

Chem 325 Review	40 pts
4 Exams (70 points each)	280 pts
4 Homework Assignments (25 points each)	100 pts
Written Library Assignment ¹	50 pts
Laboratory Grade ²	140 pts
Final Exam	140 pts

Notes

- 1. Details of this assignment will be given later in the semester.
- 2. 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 hour to 1 week late. Any work turned in more than 1 week late will not be accepted except under special circumstances.

© Success in this course requires keeping up with the readings, assigned problems, and class activities through out the semester. ©

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 is to be followed by all students, staff, and faculty. An excerpt from this follows:

<u>UWSP 14.03 ACADEMIC MISCONDUCT SUBJECT TO DISCIPLINARY ACTION.</u> 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.

Chemistry 326 Tentative Schedule 2017

Monday	Topic	Assignment	
Week #			
1/23	Unit 1: Chemistry of Alkynes	Review Chem325 due 1/27	
1	(Chapter 11)		
1/30	Unit 2: Reduction and Oxidation		
2	(Chapter 12)		
2/6	Unit 2: Continued; Unit 3: Carboxylic Acids (Chapter 19)	Homework 1 due 2/10	
3			
2/13	Unit 3: More Carboxylic Acids	Exam 1: Friday, 2/17	
4			
2/20	Unit 4: Introduction to Carbonyl Chemistry (Chapter 20)		
5			
2/27	Unit 5: More Reactions of Aldehydes and Ketones (Chapter	Homework 2 due 3/3	
6	21)		
3/6	Unit 6: Sugars (Chapter 27)	Exam 2: Friday, 3/10	
7			
3/13	Unit 7: Carboxylic Acid Derivatives (Chapters 22, 28, 29)		
8			
3/20	SPRING BREAK!		
3/27	Unit 8: Reactions of Enols and Enolates	Homework 3 due 3/31	
9	(Chapter 23)		
4/3	Unit 9: More Reactions of Enols and Enolates (Chapter 24)	Exam 3: Friday 4/7	
10			
4/10	Unit 9 Continued		
11			
4/17	Unit 10: Conjugated Systems (Chapter 16)		
12			
4/24	Unit 11: Aromatic Compounds (Chapters 17 and 18)	Homework 4 due 4/28	
13			
5/1	Unit 11 Continued, Unit 12	Exam 4: Friday 5/5	
14			
5/8	Unit 12: Synthetic polymers (Chapter 30)	Literature assignment due	
15		Monday, May 8	
5/15	Final exam Wednesday 5/17	12:30-14:30	
16			

Schedule

Robin Tanke Spring Semester 2017

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	Monday	Tuesday	Wednesday	Thursday	Friday	
08:00		Research		Research		
09:00	Office Hour				Office Hour	
10:00		1 1		1 1		
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11:00	326 Lec 1	WCC	326 Lec 1		326 Lec 1	
	A121		A121		A121	
12:00			Office Hour	298 Lec 1		
				A112		
13:00						
14:00	326 Lab 1	326 Lab 2	326 Lab 3	Research	Meeting or	
	C134	C134	C134		Seminar	
15:00	326 Lab 1	326 Lab 2	326 Lab 3			
	C134	C134	C134			
16:00	326 Lab 1	326 Lab 2	326 Lab 3			
	C134	C134	C134	▼		