

Chemistry 326
Syllabus Spring 2022

My hope is that this semester, we can work together to build relationships and remain healthy as we study the exciting field of organic chemistry. To build relationships, I ask that you talk with each other in lab and when working on in-class activities. To stay healthy, please follow the COVID-19 safety guidelines as directed by the University. Please respect one another's needs by properly wearing your face covering to cover your nose and mouth, sitting every other seat in the classroom, giving people space in lab when working with shared equipment, and using supplies to clean your area before and after use. Finally, if you are sick (have a fever, bad cough, loss of taste or smell, digestive issues), please stay home and recover. I will work with you about completing missed activities.

Instructor	Robin S. Tanke, Ph.D.
Phone:	715-346-4325
E-mail:	rtanke@uwsp.edu
Office:	CBB 447
Office Hours:	M & F 9AM-10AM, W 10AM -11AM, by appointment or drop in.

Class Sessions:

Lecture:	M, W, F	12:00 PM	CBB 105
Lab Section 2:	M	2:00 – 5:00 PM	CBB 420/426
Lab Section 3:	W	2:00 – 5:00 PM	CBB 420/426

Exam Schedule:

- ☞ Exam 1: Friday, February 18, 2022
- ☞ Exam 2: Friday, March 11, 2022
- ☞ Exam 3: Friday, April 8, 2022
- ☞ Exam 4: Friday, May 6, 2022

Final Exam: Tuesday, May 17, 2022 12:30 PM – 2:30 PM

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: A grade of "C-" or better in Chem 325 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; it can be one used last semester. The pages will need to be numbered; you may buy one with numbered pages or number the pages yourself. You also need safety goggles.

Recommended Materials:

- A laboratory text Making the Connections, A How-To Guide for Organic Chemistry Lab Techniques, Second Edition by Anne B. Padias will be referenced. However, you may choose another text or websites to complete your prelab assignments.
- Molecular Models (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' -700 points, 'B' – 620 points, 'C' - 540 points, and 'D' – 490 points.

Chem 325 Review	30 pts
4 Exams (70 points each)	280 pts
4 Homework Assignments (25 points each)	100 pts
Written Library Assignment ¹	5 + 45 = 50 pts
Laboratory Grade ²	150 pts
Final Exam	140 pts

Notes

- Details of this assignment will be given later in the semester.
- Details of the laboratory grade are given in Lab materials.

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 and be aware of everyone needs for personal space!

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:

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 Spring Semester 2022

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00				Research	
09:00	Office Hour				Office Hour
10:00			Office Hour		
11:00		101 Lab 01L3 220			
12:00	326 Lec 01 105	101 Lab 01L3 220	326 Lec 01 105		326 Lec 01 105
13:00		101 Lab 01L3 220			
14:00	326 Lab 01L2 420		326 Lab 01L3 420	106 Lab 01L4 236	
15:00	326 Lab 01L2 420	Curriculum Committee	326 Lab 01L3 420	106 Lab 01L4 236	
16:00	326 Lab 01L2 420	Curriculum Committee	326 Lab 01L3 420	106 Lab 01L4 236	

Chemistry 326 Tentative Schedule 2022

Monday Week #	Topic	Assignment
1/24 1	Unit 1: Chemistry of Alkynes (Chapter 11)	Review Chem325 due 1/28
1/31 2	Unit 2: Reduction and Oxidation (Chapter 12)	
2/7 3	Unit 3: Carboxylic Acids and Spectroscopy Review (Chapter 19)	Homework 1 due 2/11
2/14 4	Unit 4: Introduction to Carbonyl Chemistry (Chapter 20)	Exam 1: Units 1-3 Friday, 2/18
2/21 5	Unit 5: More Reactions of Aldehydes and Ketones (Chapter 21)	
2/28 6	More Unit 5; Unit 6: Sugars (Chapter 27)	Homework 2 due 3/4
3/7 7	Unit 7: Carboxylic Acid Derivatives (Chapters 22)	Exam 2: Units 4-6 Friday, 3/11
3/14 8	Literature Assignment Explained, Unit 8: Fats and Proteins (Parts of Chapters 22 and 29)	
3/19-3/27	SPRING BREAK!	
3/28 9	Unit 9: Reactions of Enols and Enolates (Chapter 23)	Homework 3 due 4/1 and Literature Assignment first steps due
4/4 10	Unit 9 continued; Unit 10: More Reactions of Enols and Enolates (Chapter 24)	Exam 3: Units 7-9 Friday 4/8
4/11 11	Unit 10 continued	
4/18 12	Unit 11: Conjugated Systems (Chapter 16)	
4/25 13	Unit 12: Aromatic Compounds (Chapters 17 and 18)	Homework 4 due 4/29
5/2 14	Unit 13: Synthetic polymers (Chapter 30)	Exam 4: Unit 10-12 Friday 5/6
5/9 15	Review	Literature assignment due Monday May 9, 2022
5/16 16	Final exam 5/17/2022, Tuesday 12:30PM – 2:30 PM	