

**Chemistry 326**  
Syllabus Fall 2022

My hope is that this semester, we can work together to build relationships and remain healthy as we further 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. If you are sick (fever, bad cough, digestive issues), please stay home and recover. I will work with you about completing missed activities.

<b>Instructor</b>	Robin S. Tanke, Ph.D.
<b>Phone:</b>	715-346-4325
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<b>Office:</b>	CBB 447
<b>Office Hours:</b>	Tuesday and Friday 10 AM – 11 AM, Thursday 2 PM – 3 PM by appointment or drop in.

**Class Sessions:**

Lecture:	M, W, F	12:00 PM	CBB 105
Lab Section 1:	R	11:00 – 1:50 PM	CBB 420/426
Lab Section 2:	M	2:00 – 5:00 PM	CBB 420/426

**Exam Schedule:**

- ☞ Exam 1: Friday, September 30, 2022
- ☞ Exam 2: Friday, October 21, 2022
- ☞ Exam 3: Friday, November 11, 2022
- ☞ Exam 4: Friday, December 9, 2022

**Final Exam: Tuesday 12/20/22 2:45- 4:45 CBB 105**

**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) 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 <sup>1</sup>	5 + 45 = 50 pts
Laboratory Grade <sup>2</sup>	150 pts
Final Exam	140 pts

**Notes**

1. **Details of this assignment will be given later in the semester.**
2. **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 throughout the semester. ☺

**Student Conduct:**

Given state policies regarding attendance of students receiving financial aid, attendance will be taken at times throughout 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      Fall Semester 2022

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00					
09:00	375 Lec 01 261		375 Lec 01 261		375 Lec 01 261
10:00		Office Hour			Office Hour
11:00		Research and Outreach		326 Lab 01L1 420/426	
12:00	326 Lec 01 105		326 Lec 01 105	326 Lab 01L1 420/426	326 Lec 01 105
13:00				326 Lab 01L1 420/426	
14:00	326 Lab 01L2 420/426	WCC	375 Lab 01L1 420	Office Hour	Dept. Mtg.
15:00	326 Lab 01L2 420/426	Curriculum Committee	375 Lab 01L1 420		
16:00	326 Lab 01L2 420/426		375 Lab 01L1 420		

**Chemistry 326 Tentative Schedule Fall 2022**

<b>Monday Week #</b>	<b>Topic</b>	<b>Assignment</b>
9/5 1	Unit 1: Chemistry of Alkynes (Chapter 11) Class begins 9/7/22	Review Chem325 due 9/12
9/12 2	Unit 2: Reduction and Oxidation (Chapter 12)	
9/19 3	Unit 3: Carboxylic Acids and Spectroscopy Review (Chapter 19)	Homework 1 due 9/23
9/26 4	Unit 4: Introduction to Carbonyl Chemistry (Chapter 20)	Exam 1: Units 1-3 Friday, 9/30
10/3 5	Unit 5: More Reactions of Aldehydes and Ketones (Chapter 21)	
10/10 6	More Unit 5; Unit 6: Sugars (Chapter 27)	Homework 2 due 10/14
10/17 7	Unit 7: Carboxylic Acid Derivatives (Chapters 22)	Exam 2: Units 4-6 Friday, 10/21
10/24 8	Literature Assignment Explained, Unit 8: Fats and Proteins (Parts of Chapters 22 and 29)	
10/31 9	Unit 9: Reactions of Enols and Enolates (Chapter 23)	Homework 3 due and Literature Assignment first steps due 11/4
11/7 10	Unit 9 continued; Unit 10: More Reactions of Enols and Enolates (Chapter 24)	Exam 3: Units 7-9 Friday 11/11
11/14 11	Unit 10 continued	
11/21 12	Unit 11: Conjugated Systems (Chapter 16) No Class Friday 11/25	
11/28 13	Unit 12: Aromatic Compounds (Chapters 17 and 18)	Homework 4 due 12/2
12/5 14	Unit 12 continued	Exam 4: Unit 10-12 Friday 12/9
12/12 15	Review	Literature assignment due 12/12
12/20 16	<b>Final exam</b> TUESDAY 12/20 2:45 PM – 4:45 PM	Final