

Welcome to Chem 325! The fall 2020 semester is going to be a bit different than a normal semester. Please read through the syllabus carefully to see what changes to expect. If you have any questions or concerns, please don't hesitate to contact me via e-mail ([nbowling@uwsp.edu](mailto:nbowling@uwsp.edu)).

### Quick Overview of the Lecture Course

1. This syllabus only covers your responsibilities for the lecture portion of the course. You also have responsibilities related to the laboratory portion. You can learn about these in the laboratory syllabus provided in a separate Canvas unit by Dr. Tanke ([rtanke@uwsp.edu](mailto:rtanke@uwsp.edu)).
2. All Chem 325 students will be participating in the lecture course led by Dr. Bowling, regardless of which section you are in.
3. You will have a homework assignment of book problems every week for Chem 325. Instead of turning these problems in, you will take an online quiz via Canvas every Friday morning. The homework quiz problems will be very similar, but not identical to, the book problems.
4. In addition to the weekly homework quizzes, you will have an online final exam at the end of the semester. This exam will be cumulative, covering all the course material.

### My Information and Schedule

Dr. Nathan Bowling

Office: CBB 442

Lab: CBB 436

[nbowling@uwsp.edu](mailto:nbowling@uwsp.edu)

Phone: 715-346-3706

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00	<b>Chem 325 Lab 01L1, CBB 420/426</b>	<b>Class Prep Not Available</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Quiz time Tech. help only</b>
09:00	<b>Chem 325 Lab 01L1, CBB 420/426</b>	<b>Class Prep Not Available</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Quiz time Tech. help only</b>
10:00	<b>Chem 325 Lab 01L1, CBB 420/426</b>	<b>Live Zoom Lecture</b>	<b>Available to Zoom by appt</b>	<b>Live Zoom Office hour</b>	<b>Quiz time Tech. help only</b>
11:00	<b>Class Prep Not Available</b>	<b>Chem 220 Lab 01L1, CBB 426</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Chem325 Lab 01L4/02L3 CBB 420</b>
12:00	<b>Live Zoom Lecture</b>	<b>Chem 220 Lab 01L1, CBB 426</b>	<b>Live Zoom Office hour</b>	<b>Available to Zoom by appt</b>	<b>Chem325 Lab 01L4/02L3 CBB 420</b>
13:00	<b>Class Prep Not Available</b>	<b>Chem 220 Lab 01L1, CBB 426</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Chem325 Lab 01L4/02L3 CBB 420</b>
14:00	<b>Chem325 Lab 01L3, CBB 420/426</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Meeting</b>
15:00	<b>Chem325 Lab 01L3, CBB 420/426</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Meeting</b>
16:00	<b>Chem325 Lab 01L3, CBB 420/426</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Available to Zoom by appt</b>	<b>Grading</b>

**Description of the Course**

Chem 325 lecture will be taught entirely online for the fall 2020 semester. There will be live Zoom lectures and office hours (see schedule on previous page) for those interested in a synchronous experience. For those interested in an asynchronous experience, Zoom lectures will be recorded and posted to the Canvas page. Quizzes will be available weekly from 6:30 AM to 11:00 AM on Friday mornings. You will need to find 30 min during that block to take the quiz.

**CHEM 325. Organic Chemistry.** 4 cr. (Two semester course)

**Prereq: Chem 106, 117, or equivalents (grade higher than D is required).**

The structures of the molecules that make up our world are not insignificant. In fact, it is the structure that determines the function and properties of a given molecule. This first semester of organic chemistry will serve as an introduction to organic structure and function beginning with Lewis structures, resonance forms, atomic orbitals and molecular orbitals. Students will learn how different properties, such as boiling point, melting point, and acidity can arise from different organic functional groups. We will study the conformations of linear alkanes, cycloalkanes, and the stereochemistry of organic molecules to better understand the three-dimensionality of organic molecules. Students will learn how to identify molecules using modern instrumentation such as gas chromatography (GC) as well as infrared (IR) and nuclear magnetic resonance (NMR) spectrometers. Finally, students will be shown how organic structure relates to reactivity in substitution, elimination, and addition reactions.

**Required Resources**

**Text:** "Organic Chemistry", Fifth Edition by Smith. McGraw-Hill 2017. (ISBN-13: 978-0-07-802155-8).

Available from text rental.

**Lab Manual:** see Dr. Tanke's laboratory course page for information.

**LabFlow Software:** see Dr. Tanke's laboratory course page for information.

**Highly Recommended** – copies available in library and chapter-by-chapter on Canvas

Student Study Guide/Solutions Manual to accompany Smith Organic Chemistry. Fifth Edition. McGraw-Hill 2016. (ISBN: 978-1259637063). Available on three-hour reserve at the library.

**Semester Schedule:**

Week		Mon.	Tues.	Wed.	Thurs	Fri
#1	Sept. 2 – Sept. 4			Start Quiz Guide #1 (Ch. 1)		Syllabus Quiz and Welcome Assignment
#2	Sept. 7 – Sept. 11	Labor Day	Finish Quiz Guide #1 (Ch. 1)			Quiz #1
#3	Sept. 14 – Sept. 18	Quiz Guide #2 (Ch. 2)				Quiz #2
#4	Sept. 21 – Sept. 25	Quiz Guide #3 (Ch. 3 and start 4)				Quiz #3
#5	Sept. 28 – Oct. 2	Quiz Guide #4 (end of Ch. 4 and start 5)				Quiz #4
#6	Oct. 5 – Oct. 9	Quiz Guide #5 (Ch. 13 and 14)				Quiz #5
#7	Oct. 12 – Oct. 16	Quiz Guide #6 (end of Ch. 5 and Ch.6)				Quiz #6
#8	Oct. 19 – Oct. 23	Quiz Guide #7 (Ch. 7)				Quiz #7
#9	Oct. 26 – Oct. 30	Quiz Guide #8 (Ch. 8)				Quiz #8
#10	Nov. 2 – Nov. 6	Quiz Guide #9 (start Ch. 9)				Quiz #9
#11	Nov. 9 – Nov. 13	Quiz Guide #10 (end Ch. 9 and start Ch. 10)				Quiz #10
#12	Nov. 16 – Nov. 20	Quiz Guide #11 (end Ch. 10)				Quiz #11
#13	Nov. 23 – Nov. 27	Start Quiz Guide #12 (start Ch.11)			Thanksgiving Break	
#14	Nov. 30 – Dec. 4	Finish Quiz Guide #12 (Ch. 11)				Quiz #12
#15	Dec. 7 – Dec. 11	Review for Final Exam				No Quiz
#16	Dec. 14 – Dec. 18	Final Exam Canvas 12:30 – 2:30 PM				

**Grading Breakdown:**

Note that these are the points for determining your Chem 325 lecture grade only. Your lab grade for Chem 325 will be calculated separately. A weighted average of these grades will be used to determine your final grade for Chem 325. Since this is a weighted average, a lecture point and a lab point do not necessarily mean the same thing.

<b>Item</b>	<b>Points</b>
Welcome Assignment	5 pts
Syllabus Quiz	5 pts
Homework Quizzes (12 x 30 pts each)	360 pts
Final exam (100 pts)	100 pts
	470 pts

*Typical Grade Cut-offs for Lecture:* [100-90% = A or A-], [89-80% = B+, B, or B-], [79-70% = C+, C, or C-], [69-60% = D+ or D], [ $< 60%$  = F]. *You must earn a minimum of 60% (282/470 pts) of the lecture exam and quiz points to receive a passing grade in the course, regardless of how you perform in lab.*

**Descriptions of major responsibilities:**

**Weekly Homework Quizzes:** You will be given a quiz guide every week on Canvas. There will be two types of problems on the quiz: 1) Multiple choice/true-false/fill in the blank, and 2) written responses that you will scan and turn in. Weekly quiz problems will be closely related, but not identical, to assigned problems in the quiz guide. You will have 30 min total to answer the multiple choice/true-false/fill in the blank questions, and to answer and upload your scanned answers in a block of time on Friday morning (6:30 AM – 11:00 AM) If a circumstance should arise that prevents you from completing the quiz in that window of time, contact me immediately.

**What is and is not allowed for quizzes:**

**Resources you can use (note you will only have 30 min for the quiz, so you will have limited time to use these resources):**

- 1) Notes
- 2) Textbook
- 3) Websites without chat features

**Resources that are not allowed and would constitute academic misconduct:**

- 1) Communicating with other people during the quiz– Any contact with another person while you are taking the quiz, unless a non-chemistry related emergency, is forbidden. This includes asking your roommate's opinion, messaging with friends and/or classmates, and chatting with online "experts."
- 2) Communicating with other people before or after your quiz before 11 AM - If you have taken the quiz, do not discuss its content with anyone until after the quiz window is over. If you have not yet taken the quiz, do not discuss its content with anyone who has already taken the quiz.

**Looking at other people's work is strictly forbidden**

In addition to multiple choice questions, you will be asked to submit drawings or explanations of your own on Canvas. The scanned work you upload to Canvas is part of the quiz; you are not allowed any assistance/input from other people. Students, under no circumstances, shall turn in work that is partially or entirely influenced by another person (e.g. a classmate, etc.). Everything you turn in must reflect **your understanding** of that topic. Any copied or influenced material, whether words or drawings, will be treated as plagiarism according to Ch. 14 of the student rights and responsibilities handbook (<https://www.uwsp.edu/dos/Documents/UWSP14-Final2019.pdf>), and will result in failing grade in this course.

**Course Learning Objectives**

Students who succeed in the course will be able to:

- ✓ 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

**How to succeed in my organic chemistry course:**

- ✓ Engage in every lecture experience, whether synchronous or asynchronous. Take notes and work practices problems as they are introduced. Ask questions if you have them.
- ✓ Read all of the suggested text carefully, making a concerted effort to *understand* the material. Work through the sample problems as you go.
- ✓ Do all of the suggested problems in a separate notebook designated for this purpose. Show your work and do not look at the book, your notes, or an answer key until after you are done. After checking your answers, re-read the sections with material that gave you the most trouble. If that does not clear things up, schedule a Zoom visit with me.
- ✓ Do not try to memorize your way through this course! Success in organic chemistry requires you to understand a few major concepts and several exceptions and caveats. **You will be tested on your understanding of the material, not your ability to memorize.**
- ✓ Commit at least 10 hours by yourself per week to studying/learning organic chemistry outside of class time.
- ✓ Stop me in lecture if you don't understand something.
- ✓ Come to virtual office hours whenever you need a topic cleared up. If my office hours don't work for you, feel free to schedule an appointment via e-mail or on Canvas.

***Face covering and distancing***

The lecture portion of Chem 325 will be entirely on-line. In the event that we were to have some in-person contact, the following campus guidelines apply:

Face Coverings:

- At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the [Disability and Assistive Technology Center](#) to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

Other Guidance:

- Please monitor your own health each day using [this screening tool](#). If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).
  - As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.
- Maintain a minimum of 6 feet of physical distance from others whenever possible.
- Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.
- Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face.
- Please maintain these same healthy practices outside the classroom.