

Chemistry 212 Organic Chemistry II
Section 01 CRN 10364

Dr. Janet A. Asper	
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Phone : 540-654-1143	Text 540-369-4150 (google voice)
Lecture: 1:00-1:50 pm MWF	Jepson 219
Lab: Tuesday 9:30 AM-12:15PM	Jepson 213
Help Session (AKA office hours) In person: Monday, Friday 9:30-10:30 AM Zoom office hours: Monday 7:30-8:30 PM, Wednesday, Thursday 3:30-4:30 PM, Thursday 9:00-9:30 AM Also available by appointment. Email jasper@umw.edu and Bookings	

Course Goals and Objectives

After completing the course, a student should

- Know the molecular structure, including the stereochemistry, and nomenclature of several classes of organic compounds
- Understand the basic concepts of reaction mechanisms
- Have developed laboratory techniques for the preparation and analysis of organic compounds, including spectroscopic methods

Textbooks and Supplies

- Required:
 - Organic Chemistry 4th Ed. by David Klein (ISBN 978-1-119-65959-4)
 - I strongly encourage you to purchase the loose leave version
 - Wiley Plus
 - Laboratory Techniques in Organic Chemistry 4th edition. Jerry R. Mohrig et.al. ISBN 1-4641-3422-7. Paper copy required for use in the lab. Older editions are fine, you'll just need to use the index a lot.
 - Lab coat
 - Lab goggles
 - Lab notebook with duplicating pages
 - \$20 on your Eagle One card for printing or a working printer
 - Paper printouts of laboratory procedures
 - Ability to convert paper documents to .pdf
- Recommended
 - Model kit

Class Policies**Attendance:**

In lecture, attendance will not be taken and there is no attendance component of the grade. Our "lecture" times will consist of brief lectures, example problems, individual and group activities and question and answer sessions. The lectures will provide structure and focus to the text material and are essential to this course. Exercises (see below) will not always be announced and there will be no make-ups, nor will they be accepted late, so missing class may cost you. Tardiness is a distraction to your classmates, and I discuss "class business" during the first 5 minutes of the class, therefore it is important that you arrive on time. If you are late, enter and get organized quietly. If you need to leave the room during class, please go and return quietly. Attendance is required in the lab. Making up labs is difficult. Missing more than two laboratory sessions will result in a grade of F for the course.

If you need to miss class due to an illness, isolation, or quarantine, please contact me at least 2 hours before class begins.

Electronic devices

All electronic devices should be silenced during class. If you choose to use electronic devices, please do not distract yourself or your classmates with e-mail, chatting, websurfing etc. Laptops, iPods, iPads etc won't be needed in lab. Please make sure they are stored away from your work area, so they are not damaged by reagents or solvents. The Chemistry Department is not liable for damage to electronic devices in the lab. It is a policy of the chemistry department that headphones are not to be worn in the laboratory at any time. During exams, all electronic devices will be turned off and placed at the front of the room, with the exception of approved scientific calculators or medical devices.

Communication

I will make use of Canvas to communicate with you regularly. Make sure that you know how to use Canvas and set up the needed alerts. Please keep your UMW mailboxes empty enough that you can receive any e-mails and keep this line of communication open. You may phone or text with urgent, time sensitive matters.

Course Calendar

See last page of this document, and dynamic calendar on Canvas

Grading

This course will be graded on a straight scale of 1000 points as outlined below. There will be no "curves" in this course.

Assignment category	Points
Exams (4 @ 100 points each, drop lowest)	300
Laboratory	300
Final exam (cumulative)	200
In class and outside of class exercises	100
Wiley Plus	100
Total	1000

Points	Letter grades
900-1000	A-/A
800-899	B-/B/B+
700-799	C-/C/C+
600-699	D
0-599	F

Midsemester grades will be calculated using the estimated grade formula below. Students with an estimated grade of 750 or lower at that time will receive a midsemester grade of U.

$$\text{Estimated grade} = \frac{\text{Points earned to date}}{\text{Possible points earned to date}} \times 1000$$

Exams:

There will be four – 100 point exams. You will have 50 minutes to take each exam. Exams will be given at the beginning of the class period. A review sheet will be posted on Canvas prior to each exam. Due to the building nature of organic chemistry, they will be somewhat cumulative and include material from CHEM 211. You must begin and end the exam on time with the rest of the class. There are no "make up" exams in this course, however the lowest exam grade will be dropped.

If you are missing an exam due to a conflicting University event (athletics, conference presentation, study abroad etc), Dr. Asper will work with the faculty sponsor of that event for you to take the exam during the scheduled time. Please notify Dr. Asper and the faculty sponsor of that conflict by the end of the first week of classes.

Final Exam (200 pts)

The final exam for this course is the First Term Organic Exam from the American Chemical Society. It is a 70 question, 110 minute multiple choice exam, including spectroscopy. The final exam for this course will be held in accordance with the schedule posted by UMW Academic Services. It is University policy that missing a final exam will result in a grade of F for the course. A study guide is available for the ACS exams, and there are several copies of the guide on reserve in the library. The UMW final exam schedule can be found here <https://academics.umw.edu/registrar/students/final-examinations/>

Laboratory (300 pts)

Policies and procedures for the laboratory component of the course are spelled out in the lab syllabus.

In class exercises and out of class exercises (100 pts)

In class exercises may include individual problem sets, quizzes, group activities, and anything else that I think of! They are designed to encourage you to engage with the material, work through the concepts you are struggling with, and help me see where additional instruction is needed. These activities will not always be announced. In class exercise grades will be scaled to 100 points, if necessary. Exercises will be returned one week after they are submitted. There are no make-ups for exercises, nor will they be accepted late.

Outside of class exercises may include take home exercises, Canvas activities, molecular visualization exercises, solving and correcting book problems and anything else that I think of!! They are designed to encourage you to engage with the material in a timely fashion and prepare for class. They may be completed in class or assigned to be completed at home. Exercise grades will be scaled to 100 points, if necessary. Exercises will be returned one week after they are submitted. There are no make-ups for exercises, nor will they be accepted late.

Wiley Plus (100 pts)

Wiley Plus is an online homework platform. We will use it to encourage preparation for class sessions, and keeping up in class. There will be enough Wiley Plus assignments to drop at least 2 low grades.

<https://outlook.office.com/bookwithme/user/371a83c18bda42228ad769aadb68758@umw.edu/meetingtype/uXUqjV1SvUSpKpx5S3PaGg2?anonymous>

Grading

I will make every effort to return your work no later than one week after the assignment has been submitted. If I fall behind, I will prioritize the assignments that have the most feedback and impact on your grades (exams and quizzes). Exam grading and scores will not be discussed until the graded exams have been returned. Exams will always be returned at the end of the class or laboratory session. Grading rubrics for exams, lab reports and graded quizzes will be posted on Canvas. After an exam or any other graded work has been returned, you will have one week to submit any grading questions or disputes IN WRITING. Disputes will be addressed in writing and returned to you within two weeks. The Canvas gradebook is for informational purposes only, to show you the grades on individual assignments. The official gradebook is my excel spreadsheet.

Recommended problems

Solving organic chemistry problems with pencil and paper is essential to learning the material. Your text has excellent problems, and I recommend that you solve ALL OF THE PROBLEMS IN EVERY CHAPTER. I will provide a sequence of the problems in the early chapters of the course. Once you have completed those problems, you are welcome to seek out additional problems in other organic textbooks in the Chem Pod or my office.

Help Sessions (AKA office hours)

UMW requires all full-time faculty to set aside 5 hours per week for students to be able to talk with them about their courses and other questions. I call those hours "Student hours" since they are for you. I encourage you to bring your questions to those sessions. You can make appointments by e-mail, Canvas, [Bookings](#), text or by stopping by. You should be coming to see me a minimum of once every two weeks with questions about what we cover in lecture, book problems, lab reports etc.

Accessibility statement

The Office of Disability Resources has been designated by the university as the primary office to guide, counsel, and assist students with disabilities. Students requesting accommodation for disabilities must discuss their needs with the Director of Disability Services (654-1266) and provide appropriate documentation. In order for me to best meet your needs, I encourage you to send your documentation receive documentation and discuss your needs by Friday January 24, 2025. I will hold any information you share with me in the strictest confidence unless you give me permission to do otherwise. The University's disability policy is outlined at <http://www.umw.edu/disability/>.

Honor Code statement

The honor system, as outlined on the UMW Honor Council Website will be strictly enforced in this course. Students are reminded of their obligation to abide by the code, including reporting observed violations to the Honor Council. The honor pledge will be written on all graded work. Books, notes, cell phones, tablets and other electronic devices are not allowed during exams. I will provide calculators on exams when they are needed. All written work is to be prepared "in your own words". Guidelines for source use must be followed. <http://www.umw.edu/honor/fredericksburg/default.php>

Artificial Intelligence (AI)

I'm still learning about AI and how it can be used in Organic Chemistry. Any writing assignments you are given in this class are using writing as a way to develop your thoughts, learn the material or prepare for lab. Using AI (or other sources) doesn't help you to develop your thoughts, learn the material, or work efficiently in the lab. If you do use AI tools, cite them in your assignment. Using AI tools without proper citation is an honor violation.

Recording Policy

Classroom activities in this course may be recorded by students enrolled in the course for the personal, educational use of that student or for all students presently enrolled in the class only, and may not be further copied, distributed, published, or otherwise used for any other purpose without the express written consent of the course instructor. All students are advised that classroom activities may be taped by students for this purpose. Distribution or sale of class recordings is prohibited without the written permission of the instructor and other students who are recorded. Distribution without permission is a violation of copyright law. This policy is consistent with UMW's Policy on Recording Class and Distribution of Course Materials.

Title IX Statement

University of Mary Washington faculty are committed to supporting students and upholding the University's Policy on Sexual and Gender Based Harassment and Other Forms of Interpersonal Violence. Under Title IX and this Policy, discrimination based upon sex or gender is prohibited. If you experience an incident of sex or gender-based discrimination, we encourage you to report it. While you may talk to me, understand that as a "Responsible Employee" of the University, I MUST report to UMW's Title IX Coordinator what you share. If you wish to speak to someone confidentially, please contact the below confidential resources. They can connect you with support services and help you explore your options. You may also seek assistance from UMW's Title IX Coordinator. Please visit <http://diversity.umw.edu/title-ix/> to view UMW's Policy on Sexual and Gender Based Harassment and Other Forms of Interpersonal Violence and to find further information on support and resources.

Ruth Davison, Ph.D. Title IX Coordinator Lee Hall, Room 401 1301 College Ave. Fredericksburg, VA 22401 Phone: 540-654-5656 E-mail: rdavison@umw.edu Website: http://diversity.umw.edu/title-ix/	Confidential Resources On-Campus Talley Center for Counseling Services Lee Hall 106, 540-654-1053 Student Health Center Lee Hall 112, 540-654-1040 Off-Campus Empowerhouse 24-hr hotline: 540-373-9373 Rappahannock Council Against Sexual Assault (RCASA) 24-hr hotline: 540-371-1666
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Suggestions for success

- You were all successful in CHEM 211, or you wouldn't be here. The material in CHEM 212 is more like what we did at the end of the semester (alkenes, alkynes and radical reactions) than the beginning of 211.

My suggested approach

- For each chapter
 - Go to the Canvas page for the chapter
 - Look at the content outline noting the order of the sections
 - Note that any topic labeled YOU will not be lectured in class. You MUST work through that material on your own.
 - Go through the topic using the book or videos
 - Stop between topics to do the skillbuilders and recommended problems for that topic
 - Check your work using the solutions manual. Clearly make your corrections/additions using another color of ink
 - Bring those problems to me when you come to Ask Dr. A
- Before each day of class
 - Read or watch videos for the listed sections BEFORE class. Although we will have mini-lectures, they are not complete discussions and will not make sense without preparing

- Use the content outline to guide you
 - Read the chapter, taking notes OR watch the videos taking notes
 - When you get to an example, cover the answer or pause the video and try to work the example on your own, then continue, correcting your work
 - Stop and do the skillbuilders and recommended problem for each topic before moving on.
 - Use the solutions manual to check your work. Clearly make your corrections/additions using another color of ink
- Make note of any questions or problems that you struggled with
- During our class meetings
 - Ask questions at the beginning of lecture-use the whiteboard or submit on paper
 - Take notes and participate during “minilecture”
 - Work with your group on any in class exercises
 - Submit your in-class exercises for credit at the end of class.
- After the class meeting (within 24 hours)
 - Review your notes and the work you did on the in class problem set
 - Complete the in class problems, if you did not do so during class
 - Complete and submit the after class assignment
 - Do the end of chapter problems that correspond to what we did in class
 - Work 2 or 3 problems
 - Check them using the solutions manual. If you miss a problem, read the solutions manual, then re-work the problem, in a different color of ink.
 - Write the problem number on a “miss list”. If you still don’t get it, get help from a fellow student or come to office hours
- As the exam approaches
 - Re-work any problems on your miss list
 - Review all of the problems you did in and out of class, and from your textbook
 - Meet with Dr. A to clear up any remaining questions
 - Work the extra problems that I post on Canvas – before I post the key
 - Ask questions about those problems in class and in office hours
 - Check your extra problems against the posted key
- Index cards can help with memorization, if they are kept short and used correctly. Contrary to popular rumor, you cannot do well in this course with just index cards.
- Come to student hours regularly
- Definitely come as soon as you realize that you are not understanding, falling behind or getting confused.