CHEM 211 04 & 05 CRN 80142 & 87140
Organic Chemistry I (with Lab)
Fall 2019

Instructor: Dr. Janet A. Asper
Office: Jepson 435
Phone: 654-1143
Student Hours: Monday 9-10, Thursday 10-11, Friday 9-11 and 2-4
e-mail: jasper@umw.edu

Course Information: Lecture: Jepson 100, MWF 12:00-12:50 pm
Lab Jepson 213: Tuesday. 03: 8:00-10:45 am, 04: 11:00-11:45 am 05: 2:00-4:45 pm

Course Information: Lecture: Jepson 100, MWF 12:00-12:50 pm
Lab Jepson 213:

Textbooks and Supplies

- Required:
  - Klein, D.K; Organic Chemistry Third Edition. John Wiley and Sons Inc, New York. 2017
  - Wiley Plus access
  - Mohrig, J.R.; Hammond, C.N.; Schatz, P.F. Techniques in Organic Chemistry 4th Edition. W.H. Freeman Company, New York. 2014
  - Laboratory notebook, goggles and labcoat, sharpie marker (see lab syllabus for details)
  - $20 for printing on your Eagle One card, or access to a printer

- Recommended:
  - Model kit

Prerequisite: CHEM 112
You must have earned a grade of C or better in CHEM 112 in order to continue in this course. You must further earn a grade of C or better in this course (CHEM 211) in order to proceed to Chem 212.

Course 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

Course Description: This course will focus on the structure and reactivity of the alkanes, alkenes and alkynes. We will develop the key concepts of molecular structure and reaction mechanism, then apply them to a wide variety of organic chemistry problems. The laboratory course will focus on the development of laboratory techniques for the preparation and analysis of organic compounds, including spectroscopic methods. Where appropriate we will consider the connections of organic chemistry with current events and biological sciences.

Classroom Policies

Attendance: In lecture, attendance will not be taken and there is no attendance component of the grade, however my lecture will provide structure and focus to the text material and is 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.

Electronic devices

Cell phones are to be silenced in class. Laptops/iPads must be turned to silence. If you choose to 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.

Communication

I will make use 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.

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

Point breakdown		**Letter grade ranges**
Exams (4 @75 points each)	300 pts	
Final exam	250 pts	900-1000 A-/A
Laboratory	250 pts	800-899 B-/B/B+
Exercises/quizzes	150 pts	700-799 C-/C/C+
Orion	50pts	600-699 D
Total	1000 pts.	0-599 F

Mid-semester grades will be calculated using the estimated grade formula above. Students with a grade of C or lower at that time will receive a grade of U.

Exams: There will be four - 75 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. You must begin and end the exam on time with the rest of the class. If you must miss an exam for a serious reason, you must contact Dr. Asper by phone email before the exam begins, telling her when you will return to campus and what documentation you will be

providing to support the serious reason why you missed the exam. Dr. Asper will decide if you will be be taking a make up exam (different exam, possibly different format) or if the grade will be replaced with the average of the other three exams. This decision will be sent to you by email. Any make up exams must be taken within 24 hours of your return to campus. Failure to abide by these policies will result in a grade of zero.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.

Exam dates and tentative coverage:

- **Exam 1: Chapters 1-3, September 20**
- **Exam 2: Chapters 4-5 October 111**
- **Exam 3: Chapters 6-7 November 8**
- **Exam 4: Chapters 8-9 December 4**

Final Exam: Monday December 9, 2019, 12:00-2:30 pm. 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 course 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 at the ACS exams website. http://shopping.na1.netsuite.com/examsinstitute. There are several copies of the study guide on reserve in the library.

Grading: I will make every effort to return your work no later than one week after the assignment has been submitted. 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 submit any grading questions or disputes IN WRITING. Disputes will be addressed in writing and returned to you within two weeks.

Exercises include in class quizzes, take home exercises, Canvas activities, molecular visualization exercises, individual and group classroom activities, chemical literature exercises 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. These activities will not always be announced. Exercise grades will be scaled to 150 points, if necessary. Exercises will returned one week after they are submitted. There are no make-ups for exercises, nor will they be accepted late.

Orion

Orion is a tool in Wiley Plus which can help you self-assess your mastery of the course material and improve your metacogntion. Please see materials on Canvas. Orion grades will be scaled to 50 points, if necessary.

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. 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.

Student 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, Sapling, Canvas, 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.

Academic Dishonesty: The honor system, as outlined on the UMW Fredericksburg 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

ADA: Students requiring 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 must receive documentation and discuss your needs by Tuesday September 4, 2018. 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/.

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. Also see https://diversity.umw.edu/title-ix/report/ for reporting information.

Tiffany Oldfield	Title IX Coordinator (UMW)	540-654-5656	toldfiel@umw.edu
Myranda Thompson	Title IX Deputy for Students (UMW)	540-654-1184	mthomson@umw.edu
Talley Center	Lee Hall (UMW)	540-654-1053	
Empowerhouse	Off campus	540-373-9373	
RCASA	Off campus	540-371-1666	

Classroom 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.

Suggestions for success

- For most of you, organic chemistry is nothing like any class you have taken before. Although we will utilize many concepts from general chemistry, this class is very different than general chemistry. You will find yourself needing to develop and use new methods to study and learn this material.

- The most important piece of advice I can give to you is to devote enough time to the course. We will be covering one chapter per week in class. Most students will require at least 12 hours per week outside of class to sufficiently grasp the material and receive a grade of B. Take a very honest look at your class and work schedules and personal obligations, and make any necessary adjustments. How you spend your 12 hours is another very important factor. I find organic chemistry to be most like learning a foreign language. To become fluent, there are things you need to memorize and things you need to learn.

<u>Some strategies that I've seen work</u>

- Read (or at least scan) the chapter before class
- Take good notes in class
- Review your notes within 24 hours of lecture. Re-work all reactions and examples covered in class. Use your book to fill in any gaps.
- Work the skill builders as you work on each section.
- Work the end of chapter problems. Work 2 or 3, then check them using the solutions manual. If you miss a problem, read the solutions manual, then re-work the problem. 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 comes closer, re-work all of the problems on the miss list.
- Work through the extra problems that I provide with the exam info BEFORE I POST THE KEY. Come to student hours and ask questions.
- Come to student hours as soon as you realize that you are not understanding, falling behind or getting confused.
- 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.