

CHM 2211, Organic Chemistry II, Spring 2012, Flint 50
MWF: 7th Period (1:55-2:45 PM)

Instructor: Dr. Jason D. Portmess (Dr. J) **Office:** *Flint 255*
Off. Hours/Location: See Dr. J Schedule on Sakai **Email:** Via Sakai Site

Whose "Brilliant" Idea Was It for Me to Take Organic Chemistry, Anyway? Good question! What is the problem with organic chemistry that causes students to view the course with so much anxiety? Maybe you've heard comments from students who have recently finished the course. Something like: "You have to memorize five gazillion reactions, and then they don't even ask you the ones you've had in class on the exams!" Everybody has heard the horror stories of memorizing, and to be honest, there is some truth to it. You *will* have to memorize a lot of organic chemistry, but you shouldn't try to memorize five gazillion reactions - what a waste of time! Instead, you will need to learn some basic properties of atoms and molecules, principles that describe how and why reactions take place, and a number of reaction types that can later be generalized to include the various reactions of organic compounds that you will encounter throughout the course. You'll be expected to learn about and *really understand* the ground rules so that you can apply them in a logical way to completely new kinds of situations, and come up with sensible answers. In the end, you will find this course to be much more manageable if you take time to see the forest, and don't get bogged down with all of the trees. And now for all of the technical stuff...

Course Description: This is the second of two basic courses that describe the chemistry of carbon compounds. Specific topics to be covered include the main functional group interconversions of carbonyl based functional groups (aldehyde, ketone, carboxylic acids and their derivatives), amines, new carbon-carbon bond forming reactions, and the electronics and structure reactivity of aromatic compounds. A solid understanding of the functional group recognition and transformation reactions of alkanes, alkyl halides, alkenes, alkynes, and alcohols are expected. The importance of understanding and writing detailed mechanisms will be emphasized throughout the course.

Text: Brown, Foote, Iverson, Anslyn, *Organic Chemistry*, 6th Edition (highly recommended) and accompanying, *Solutions Manual, Organic Chemistry*, 6th Edition (recommended – **with caution**).

Exams: The dates and times for the three examinations that will be given in class:

Exam 1 – Friday, February 10th

Exam 2 – Wednesday, February 29th

Exam 3 – Friday, April 6th

Exam 4 – Friday, May 4th (12:30-2:30PM)

Exceptions and anticipated scheduling conflicts should be presented to the instructor well in advance.

It is possible for you to earn up to 100 points each for Exams 1-4. All examinations will be cumulative as the course is cumulative but the emphasis on each exam will be on untested "new" material. In addition to the exams, OWL assignments (online homework) will be given during the semester. These assignments will be announced in class or on our Sakai site. The primary design of the OWL assignments is to make sure that you are keeping up with this fast-paced course. The value of the OWL can be as high as a 5% adjustment in your overall final grade but will be worth a minimum of 3.00% for completing 90% of the assignments. If you feel this extra work to be a time, mental or financial burden then you will be happy to know that OWL is extra credit only. There are no-makeups for any OWL assignments but if a valid excuse is provided then Exam #4 can serve as a makeup for a single missed exam only.

Grading: I find in life it is best to exceed expectations rather than relying on the performance of others to dictate outcome. Therefore, in order to earn the grade that you expect, you must perform at a certain level. Final grades will be determined based on the total number of examination points (400) in addition to the final adjustment based on the completed percentage of OWL assignments (a minimum 3.00% increase for 90% completion). The examination points will be determined by using the average of all three progress exams to replace the lowest exam score, the two best remaining exams and the final exam which will be a stand alone exam. **Plus/Flat/Minus grades will also be given and will be determined by the instructor.** Go get it!

Grading Scale

A 89.50-100%

B 77.50-89.49%

C 60.00-77.49%

C-/D 50.00-59.99%

E less than 50.00%

Attendance: No one is here to hold your hand, but success in this course can be highly dependent upon your attendance of lecture. The ability to ask questions and experience firsthand what is being taught is very important to the learning process and almost essential for understanding some of the detailed concepts presented in this course. It is the responsibility of the student to obtain any notes, OWL assignments that are due, etc. that may have been missed during lecture. Always remember, it is your choice whether you decide to attend class or not.

Doing Problems: *"I study all the time, I understand what you are saying in the lecture, and do all of the problems. So how come I got a 48 on the exam?!?"* This type of question is as frustrating for me to answer as it is for you to ask. My best advice to you - work as many problems as you can. Really *honestly* work them - write it out on paper, balance equations, draw arrows. *Don't* turn to the solutions manual immediately! This is a fatal mistake that students make all the time. Maybe this will sound familiar..."Let me just see how they did it.... Hmmm....Yep, that's what I thought the answer would have been. Next question...." Before you know it, you have tricked yourself into believing that you understand the problems, but then the test comes along and you don't know where to begin and a panic attack ensues unlike many of you have not experienced in a classroom setting. This is Organic Chemistry – You are not in Kansas anymore. This is not a scare tactic but reality. In order to be successful in this course, you must be able to apply what you have learned to new situations. The best way to acquire this skill is to work *a lot* of problems. The more problems you attempt, the more you will learn. It's that simple.

"So how many and what problems should I attempt from each chapter?" There are two basic philosophies in practicing anything to acquire great skill (physical or mental). Some people practice things until they get it right and some practice things until they can't get it wrong. Which group do you think are the most successful and in which group do you want to be? Answer these questions and you will know how many and what problems to do but if any problem requires a calculator – FORGET ABOUT IT!

RULE OF THE CLASSROOM:

The use of any non-life sustaining electronic devices (i.e. phones, laptops, game systems, calculators, etc.) are prohibited during lectures/exams without consent of the instructor. Please turn them off prior to the beginning of all lectures/exams. Failure to comply with this rule may result in your dismissal from the classroom.

FINAL NOTES:

1. Help! Help! Help! You need it? You got it!!!

If you did not know how to swim and you were thrown into the deep end of the pool you would scream for help. You wouldn't worry how people would think of you and the fact that you couldn't swim. If you feel like the waves of organic chemistry are beginning to crash around you, come and get help before it is too late. In addition to the office hours in which I will be available there will be additional help provided by graduate teaching assistants (TAs) assigned to this class. There will also be undergraduate teaching assistants who have been through my courses here to help as well and they will be available only to you. Getting help is not a sign of weakness...it is a sign of strength.

2. Dr. J's Office Hours...**These will be announced in class and also posted on our Sakai site!!!** In addition to my schedule of availabilities I will also have a schedule of all of my undergraduate TAs that will be designated to only help my students.

3. Organic Chemistry Learning Center (Flint 258)

Teaching assistants will be basically available Monday through Friday, 9:00 AM – 4:00 PM. A specific schedule of who will be running the sessions will be posted on our Sakai site when they become available. **TAKE ADVANTAGE OF ALL OF THIS FREE HELP!**