CHM 2210 – Organic Chemistry 1 (Section 4140 – 3 credit hours) Spring 2014: MWF 6th (12:50-1:40pm), Flint 50

Instructor:Dr. Tammy A. DavidsonOffice: Sisler 429BOffice Hours:M and W 2:00-3:00 pm, F 10:40-11:30amPhone: 392-9134

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Course Description and Prerequisites: This is the first course in the two-semester organic chemistry sequence. The course will expose the student to the fundamental concepts of organic chemistry including molecular structure and properties, stereochemistry, reaction mechanisms, and the synthesis and reactions of various functional groups including alkyl halides, alkenes, alkynes, and alcohols. The prerequisites for this course are CHM 2046 and CHM 2046L, or the equivalent. **Please note:** A grade of C or better in CHM 2210 is required to go on to CHM 2211.

Text: Required: Brown, Foote, Iverson, and Anslyn, "Organic Chemistry, 6th Edition," Cengage (2012)

Recommended: Brown, Foote, Iverson, and Anslyn, "Student Study Guide and Solutions Manual for Organic Chemistry, 6th Edition," Cengage (2012)

Molecular model kit (Kit #1 suggested): http://www.darlingmodels.com

Sakai Site: http://lss.at.ufl.edu. Login with Gatorlink ID and password. This site will be updated regularly with announcements, lecture notes, practice materials, exam scores, and other information.

TA Office Hours: In addition to my own office hours, teaching assistants will be available in the Organic Chemistry Learning Center in Flint 258, Monday through Friday. The daily schedule will be posted on the Sakai site. Please take advantage of these office hours – we're here to help you learn as much as you can.

Progress Exams: Three progress exams will be given in class on the following dates during the semester:

Progress Exam 1 – Wednesday, February 5 Progress Exam 2 – Friday, February 28 Progress Exam 3 – Wednesday, April 2

Exams will be given <u>only</u> at the scheduled times. There will be no makeup exams given in this course. Students who miss an exam due to extreme, unusual circumstances (serious illness requiring doctor's attention, death in the family, etc.) may request that their final exam score be used to replace the missed progress exam. This option is only available if I am notified within 24 hours of missing the exam and if proper documentation (doctor's excuse, funeral program, etc.) is provided. Please note that inadequate preparation because of other academic or extracurricular obligations is not considered to be a viable excuse for special consideration.

Final Exam: The final exam for this course is scheduled in exam group 1D, on Thursday, May 1st from 3:00-5:00pm in the regular classroom. The final will be cumulative and will cover material from throughout the semester.

Grading Information: Every student has a bad day from time to time. Therefore, this course is designed to allow you to make some mistakes along the way without your grade plummeting. Before final grade are calculated, your average of the three progress exams will be used to substitute for your lowest progress exam score. Please note that any exam that is not attempted will be recorded as a grade of zero. This being said, you should take each exam seriously, and do your best. Grades are calculated based on three progress exam scores, worth 100 points each, plus the final exam, also worth 100 points, for a total of 400 points available in this course.

Final Grade Assignments: The grading scale will be set as follows: $A \ge 90.0\%$, A = 87.0-89.9%, B = 84.0-86.9%, B = 77.0-83.9%, B = 73.0-76.9%, C = 63.0-69.9%, C = 60.0-62.9%, D = 57.0-59.9%, D = 50.0-56.9%, E < 50.0%. There will not be a curve beyond that already included within the grading scale. UF policies for assigning grade points can be found on the Registrar's webpage.

Attendance and Lecture Etiquette: You should plan to arrive at class on time and attend all lectures. Although attendance will not be taken, you'll find it is easier to keep up with the course if you are attending lecture regularly. You'll also find that you will do better if you are actively engaged in the classroom. Please no personal electronics or texting during the lecture – it is distracting for your classmates and disrespectful to your instructor.

Re-Grades: To ensure academic honesty and accuracy in grading, all exam answer sheets will be photocopied after grading and prior to being returned to students. All re-grade requests must be submitted in writing to Dr. Davidson in Sisler 429 and must have a cover sheet (available on the Sakai site) that details your concerns. **Note:** The entire exam will be re-graded to ensure accuracy, and your score may go up or down with the re-grade. All re-grade requests must be made within three days from the date that the exam is returned in class.

Course Schedule: The course will cover chapters 1 through 11, with roughly four lecture days per chapter. The following schedule will be followed as closely as possible.

Dates	Reading	Topics
January 6, 8, 10	Ch. 1	Ch. 1: Covalent Bonding and Shapes of Molecules
January 13, 15, 17	Ch. 1, 2	Ch. 2: Alkanes and Cycloalkanes
January 20	Dr. Martin Luther King, Jr. Day – no classes	
January 22, 24	Ch. 2	
January 27, 29, 31	Ch. 3	Ch. 3: Stereoisomerism and Chirality
February 3	Ch. 3	
February 5	Exam 1 (Wednesday)	Chapters 1-3
February 7	Ch. 4	Ch. 4: Acids and Bases
February 10, 12, 14	Ch. 4, 5	Ch. 5: Alkenes: Bonding, Nomenclature, and
		Properties
February 17, 19, 21	Ch. 5, 6	Ch. 6: Reactions of Alkenes
February 24, 26	Ch. 6	
February 28	Exam 2 (Friday)	Chapters 1-6
March 3-7	Spring Break – no classes	
March 10, 12, 14	Ch. 7	Ch. 7: Alkynes
March 17, 19, 21	Ch. 8	Ch. 8: Haloalkanes, Halogenation, and Radical
		Reactions
March 24, 26, 28	Ch. 9	Ch. 9: Nucleophilic Substitution and 2-Elimination
March 31	Ch. 9	
April 2	Exam 3 (Wednesday)	Chapters 1-9
April 4	Ch. 10	Ch. 10: Alcohols
April 7, 9, 11	Ch. 10	
April 14, 16, 18	Ch. 10, 11	Ch. 11: Ethers, Epoxides, and Sulfides
April 21, 23	Ch. 11	
May 1	Final Exam	3-5pm in Flint 50, Chapters 1-11

Plan for Success, or Who's "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 some things, 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. Note: This course is

cumulative by nature – the ideas and concepts you learn in Chapter 1 will still be important throughout this semester in CHM2210 AND also for CHM2211. Do your best to really understand the fundamentals and it will make your experience with organic chemistry better, and maybe even fun.

So what is the secret? Actually, there is nothing secret about it. You'll need to be ready to work hard and develop a good study plan. At the very least, do something for this class every day (OK, maybe you can skip one day a week), maybe an hour or two each day. Ideally, you should read a little before class, you should go over your notes as soon as possible after class to fill in missing information, and every day you should work problems. Lots and lots of problems. In chapter problems, end of chapter problems, problems you make up for each other. Do as many as you can – really do them – and come ask for help when you are confused. This book has great practice problems and you should use them to your advantage. Answers and explanations for the problems can be found in the Student Study Guide and Solutions Manual. **CAUTION:** Use the solution manual AFTER you have attempted the problems! Referring to it too early can "trick" you into thinking you know how to do the problems. Additional help with the problems can be obtained during office hours and in the CLC in Flint Hall.

Honor Code: The following statements taken from the University of Florida Honor Code apply to all work in this course.

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

On my honor, I have neither given nor received unauthorized aid in doing this assignment.

Special Needs: Any student with a special need for an accommodation in test-taking or note-taking should register with the Disability Resource Center through the Dean of Students Office. The DRC will provide the student with documentation for presentation to the instructor. Anyone anticipating the need for accommodations should speak with the instructor early in the semester.

Good luck, work hard, and ask for help when you need it!!