Organic Chemistry II
Chemistry 3521
Fall 2017

Mondays and Wednesdays 9:30 – 10:45 AM, Room 2310 Ingersoll

Instructor: Prof. Ryan Murelli
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Office Hours: Mondays and Wednesdays 11-1,* 437 Ingersoll Extension

* Sept 27 and October 4th, I will be hosting speakers and will be busy those days. Thus, the preceding Mondays I will be available until 3 pm.

Course Description:

Organic chemistry is a required class for so many related fields of study because it requires a student to: 1) think about structures in 3-dimensions, and 2) analyze data using his/her understanding of basic principles to solve a problem. Think about it: the skills you use to propose a structure for an unknown compound from a set of ^{1}H NMR peaks are the same skills you will use to diagnose a patient with an unknown illness from a set of symptoms.

This course, in conjunction with Chemistry 3511, will provide students with an introduction to organic chemistry concepts. Specifically, this course will cover organic reactions, mechanisms and principles that are relevant to many other sciences and that provide us with a greater understanding of how the natural world works. The prerequisite for this course is Chemistry 51 or Chemistry 3510 or Chemistry 3511 and 3512; Chemistry 3522 is a prerequisite or corequisite.

Course Objectives:

Upon completion of the course, students should be able to:

- Explain and/or apply selected fundamental principles of organic chemistry
- Provide reactants, reaction conditions or reaction products for certain key reactions
- Illustrate the mechanism of certain key reactions

Required Texts and Materials:

1. Brown, William H., Christopher S. Foote, Brent L. Iverson, and Eric V. Anslyn. *Organic Chemistry*. 6th ed. Belmont, CA: Brooks/Cole Cengage Learning, 2009. (Other additions are fine as are other books. Just pay attention to the material we cover in class and make sure that it matches what you are reading)

Recommended Texts and Materials:

1. Molecular Model Set for Organic Chemistry, Prentice Hall

Course Evaluation:
Recitation Attendance: 5%
Quiz Grade: 20% (Average of top 4 quizzes)*
Lecture Exams: 40% (20% each)**
Final Exam: 35%

* ***Missed Quizzes:*** *The reason that I drop a quiz is because I recognize that you all have lives outside of school and most students will miss at least one quiz due to traffic, construction on the Q line, illness… maybe on the Q line, family emergency or crisis, or alien abduction. Scheduling make-ups is not feasible in such a large group while still maintaining fairness to the overall process. Thus, there are NO MAKE-UP QUIZZES FOR ANY REASON with two exceptions:*

1. If you know or suspect that you might miss a quiz in advance for a religious holiday, family commitment, or pretty much any reason besides "I want more time to study", you can schedule to take the quiz in a difference recitation section. In this instance, the responsibility is on you to identify the alternative recitation sections that would work and email them (CC'ing myself and your recitation instructor) asking if they can accommodate you. This must be done 48 hours prior to the first quiz of that series of quizzes, but it is highly recommended that you schedule it ASAP since there is a possibility you may have to ask multiple instructors if they have space for you.

2. If you miss more then one quiz with reasonable excuses, please let me know after you miss the 2nd and if I view them as reasonable I will work with you to make sure that a zero is not and this may involve a makeup quiz.

*** ***Missed MidTerm Exams:*** *No makeups will be given for the midterms. If you miss one of the two midterms with a valid excuse, your grade will be weighted based upon your completed assignments as I see fit based upon the circumstances. Without a valid excuse, you will get a 0. Hopefully no one will miss both midterms.*

*** ***Missed Final Exams:*** *In the event of an excused absence from the final exam, you will need to get permission to take the make-up final exam. Note that this will be conducted the following semester, and thus may impact you taking any course through which Organic II is a pre-requisite .*

Assigning Letter Grades for Exams and for the Course: I do not have a formal curve for the course. Based upon past experiences I anticipate the average course grade to be a C+. I will provide "approximate" letter grade breakdowns after each exam.

Policy for Re-grades: Re-grade requests can be made in one of two ways depending on the type of re-grade necessary.

1. If, after looking through your exam or quiz, you find an egregious error (ie, 100% correct answer marked wrong, adding mistake), please show to your recitation instructor. If they agree with you, ask them to put it in my mailbox with a letter and if I agree I will make the change.

2. Any regrade requests that aren't as concrete (ie, shouldn't I have gotten more points for this?, My friend got 4/5 and I got a 2/5 and we had the same answer!), please fill out a regrade request form. In these instances I will regrade the entire exam and it is possible you might end up with a lower grade if I find other questions that were misgraded in your favor. Regrade request forms can be found on Prof. Horowitz' website and turned into the chem. office: http://userhome.brooklyn.cuny.edu/ghorowitz/index.htm
3. **University Policy on Academic Integrity:** The faculty and administration of Brooklyn College support an environment free from cheating and plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both. The complete text of the CUNY Academic Integrity Policy and the Brooklyn College procedure for implementing that policy can be found at this site: http://www.brooklyn.cuny.edu/bc/policies. If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member MUST report the violation.

Tentative Schedule

Mon. Aug 28	Intro and Mechanism Review	Chapter 4 and 9 Review
Wed. Aug 30	Alcohols	Chapter 10
Wed. Sept 6	Alcohols	Chapter 10
Mon. Sept 11	Ethers, Epoxides and Sulfides	Chapter 11
Quiz #1 – Orgo I and Chapter 10 (Sept 11-15 in recitation)		
Wed. Sept 13	Ethers, Epoxides and Sulfides	Chapter 11
Mon. Sept 18	Aldehydes and Ketones	Chapter 16
Mon. Sept. 25	Aldehydes and Ketones	Chapter 16
Wed. Sept 27	Carboxylic Acids and Derivatives	Chapter 17/18
Quiz #2 – Chapter 11 and 16 (Oct 2-6 in recitation)		
Mon. Oct 2	Carboxylic Acids and Derivatives	Chapter 17/18
Wed. Oct 4	Amino Acids and Peptide Synthesis	Chapter 27.1, 27.5
Wed. Oct 11	Exam 1 Review	
Mon. Oct. 16	**Exam # 1**	**Chapters 10,11, 16-18, 27**
Wed. Oct 18	Enolates and Enamines	Chapter 19
Mon. Oct. 23	Conjugation and Aromaticity	Chapter 19, 21
Wed. Oct. 25	Reactions of Benzene	Chapter 22
Quiz # 3 – Chapter 19, 21 (Oct 30 - Nov 3 in recitation)		
Mon. Oct. 30	Reactions of Benzene	Chapter 22
Wed. Nov 1	Pericyclic Reactions	Chapter 20
Mon. Nov 6	Pericyclic Reactions	Chapter 20
Quiz # 4 – Chapters 20, 22 (Nov 12-17 in recitation)		
Wed. Nov. 8	Amines	Chapter 23
Mon. Nov 13	Amines	Chapter 23
Wed Nov 15	Exam 2 Review	
Mon. Nov. 20	**Exam # 2**	**Chapters 19-23**
Wed. Nov 22	C-C Bond Formation	Chapter 24
Mon. Nov 27	C-C Bond Formation	Chapter 24
Wed. Nov 29	Polymer Chemistry	Chapter 29
Quiz # 5 – Chapters 24, 29 (Dec 4 – 8 in recitation)		

Mon. Dec 4	Carbohydrates	Chapter 25
Wed. Dec 6	Lipids	Chapter 36
Mon. Dec 11	Final Exam Review	
Mon. Dec 20	**FINAL EXAM (Cumulative, Location TBA)**	

Homework – There are no assigned problems. The more homework you do the better off you'll be.

Read the chapter. Re-watch my videos. Do my problem sets (on my website). Do Horowitz's problem sets. Do the book questions (as many as you can). Do old quizzes and exams on my website. Participate in class. Participate in recitation. Find a study group. Work.

Important Dates
Thursday, August 31 - Last day to add a course
Thursday, September 14 - Last day to drop a course without a grade of 'W'
Friday, Nov 10 - Last day to withdraw from a course with a W (non-penalty) grade

Complete list, see:
http://www.brooklyn.cuny.edu/web/about/administration/enrollment/registrar/bulletins/calendar.php