

ORGANIC CHEMISTRY II

Chemistry 3521: Sections M9A, M9B, M9C and M9D

Fall 2015

Monday and Wednesday 9:30 AM to 10:45 AM, Room 2310 Ingersoll Hall

Instructor: Prof. Alexander Greer

Office Hours: 341 New Ingersoll Hall on Monday and Wednesday at 11:00 AM to 12:00 noon; or by appointment. Please take advantage of seeing me in my office hours or by appointment for help on the course material. I encourage you to ask questions. I will be available in office hours for questions about exams, homework, and class notes; e-mail will not be available for these issues. You can reach me by e-mail (agreer@brooklyn.cuny.edu) or by phone (718-951-5000 ext. 2830) for issues separate from exams, homework, and class notes. Please allow 2-4 days for me to respond to emails.

Course Description: This course is the second part of an introduction to organic chemistry and will expose you to fundamental topics in the field. The course is intended to bring to light aspects of the field of organic chemistry. It should provide you with tools that could potentially be used to further your understanding of other scientific areas. The course objective co-exists with an effort to involve students in understanding the chemical processes associated with living and inanimate material. You should have completed Chemistry 3511 and 3512 prior to taking this class. The prerequisite for Chemistry 3521 is Chemistry 3511 and Chemistry 3512 laboratory. The co-requisite for Chemistry 3521 is Chemistry 3522 laboratory. Classes will meet for the full seventeen weeks of the semester. There will be a total of 26 class lectures, which will run for 75 minutes in duration. Examinations will be held on two additional class meetings.

Recommendation: My recommendation in taking the class is to remain current with the material. There is a considerable amount of material that will be covered in the course. Asking questions and seeing me in my office hours for help is very recommended. I will gladly offer advice and assistance to you on this subject. Asking questions of your recitation and laboratory instructors are also recommended.

Grading Summary. The grade is weighted as follows:

Recitation Grade 25% (Quiz grade = 20%, attendance = 5%): 20% of the recitation grade is based on quiz scores which takes the average of the top 4 out of 5 quizzes. All recitations must be attended, 5% of the recitation grade is based on attendance. The recitation instructor keeps the student's records and is responsible for reporting the final grade. Your recitation instructor will provide additional detail on how the recitation grades will be determined.

Quiz 1: The week of Sept 16th to cover Chapters 10 and 11.

Quiz 2: The week of Oct. 5th to cover Chapters 16 and 17.

Quiz 3: The week of Nov. 2nd to cover Chapters 18 and 19.

Quiz 4: The week of Nov. 16th to cover Chapters 20, 21 and 22.

Quiz 5: The week of Dec. 7th to cover Chapters 23, 24, and portions of 25-28.

Lecture Exams 40% (20% each): There will be 2 lecture examinations. The exams questions will be based on the reading assignments and lecture notes. The exam may include any material covered in the textbook and in class.

Final Exam 35%: Students will be responsible for all material covered in class and the assignments of the entire semester. There are no exemptions from the final. The overall final grade is assigned by a course committee.

After the course ends, you can learn about your course grade by visiting the Brooklyn College web site.

The midterm and final exams are composed of about 1/3 questions similar to homework problems, 1/3 questions similar to the notes, and 1/3 questions selected to assess your reasoning skills in organic chemistry.

Missed Quizzes: There are no make-up quizzes for any reason, except for a conflict due to a religious holiday, where you will be allowed a makeup in another recitation section.

Policy for Absence from Exams or Illness During Exams: No make up exams will be given to students who are absent from the lecture examinations. Students who miss one exam with a valid excuse will be assigned a score based on the other lecture exam and the Final exam. The absence must be justified to the recitation instructor as soon as possible. A grade of zero will be given for unexcused absences from the examination. Missing both lecture exams will result in a score of zero. If you become ill during the exam and feel that you are unable to complete it, inform a proctor immediately and indicate on the exam that you are sick and unable to complete it. Your exam will not be graded and you will be considered absent from the exam. If you remain until the end of the exam any claim of illness will no longer be permitted and your exam score will be counted. In the event of absence from the final examination you will need to apply to the Office of Academic Advisement (3207 Boylan) for permission to take the make-up final exam given early the following semester.

Exam Re-grade Policy: A re-grade may be allowed provided you do not use a pencil when taking your exam. Please present questions about the exam to me within one week after I return the exams to you. The entire exam will be re-graded by me and not the grading committee, the latter is made up of recitation instructors and myself. A higher or a lower score can result. I will not discuss any aspect about your exam before you submit it for a re-grade. You will need to make a decision whom you think may be harder in grading your exam, myself or the grading committee. Scores will be changed only if they differ from the original score by 3 percentage points or more.

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.

Item of Note: Turn off all cell phones, pagers, other electronic devices, etc. during class. A 10-point penalty (that is, loss of 10 points on a lecture exam) will result if any of these items are left on during class.

Required Texts:

“Organic Chemistry” 5th, 6th or 7th Edition by W. Brown, C. S. Foote, B. L. Iverson, E. V. Anslyn, Brooks/Cole Cengage Learning. These editions are very similar to each other and any one of them may be used.

Recommended Material:

A Molecular Model Set for Organic Chemistry, Prentice Hall.

Course topics and Reading assignments			
Day	Date	Subject	Reading
1	Mon. Aug. 31	Alcohols	Ch. 10: 10.1-10.4
2	Wed. Sept. 2	Alcohols	10.5-10.8
3	Wed. Sept. 9	Alcohols + Ethers, Epoxides	finish Ch. 10.9, 11.1-11.5
4	Thurs. Sept. 10	Ethers, Epoxides	11.6-11.12
5	Wed. Sept. 16	Aldehydes and Ketones	16.1-16.5
6	Mon. Sept. 21	Aldehydes and Ketones	16.6-16.10
7	Mon. Sept. 28	Carboxylic Acids + Aldehydes and Ketones	finish Ch. 16.11 & 16.12, 17.1-17.4
8	Wed. Sept. 30	Carboxylic Acids	17.5-17.9
9	Mon. Oct. 5	Functional Derivatives of RCOOHs	18.1-18.5
10	Wed. Oct. 7	EXAM #1†	CHAPTERS 10, 11, 16, 17
11	Wed. Oct. 14	Functional Derivatives of RCOOHs	18.6-18.10
12	Mon. Oct. 19	Enolate Anions and Enamines	19.1-19.4
13	Wed. Oct. 21	Enolate Anions and Enamines	19.5-19.7
14	Mon. Oct. 26	Enolate Anions and Enamines	19.8
15	Wed. Oct. 28	Conjugated Systems	20.1-20.3
16	Mon. Nov. 2	Benzene and Aromaticity	21.1-21.3

17	Wed. Nov. 4	Benzene and Aromaticity	21.4-21.5
18	Mon. Nov. 9	Reactions of Aromatic Compds.	22.1-22.2
19	Wed. Nov. 11	Reactions of Aromatic Compds.	22.2-22.3
20	Mon. Nov. 16	Amines	23.1-23.5
21	Wed. Nov. 18	EXAM #2†	CHAPTERS 10, 11, 16-22
22	Mon. Nov. 23	Amines	23.6-23.10
23	Wed. Nov. 25	C-C Bond Formation and Synth.	24.1-24.4
24	Mon. Nov. 30	C-C Bond Formation and Synth.	24.5-24.8
25	Wed. Dec. 2	Lipids, Amino Acid, Nucleic Acids	portions of 25-28
26	Mon. Dec. 7	Lipids, Amino Acid, Nucleic Acids	portions of 25-28
27	Wed. Dec. 9	Polymer Chemistry	29.1-29.3
28	Mon. Dec. 14	Polymer Chemistry	29.4-29.6
	Dec. 15-22††	FINAL EXAM†	CHAPTERS LISTED ABOVE

† The exam can cover any material discussed in these chapters.

Other Dates:

No Classes Scheduled: Sept. 7, 14 and 23, Oct. 12.

Nov. 9: last day to drop with a "W" grade.

Monday Dec. 14 Last Lecture of Class

††Final exam date to be announced

There is no assigned homework. Do as many problems at the end of the chapter as you can do.