Chemistry 251 (Organic Chemistry I) – Spring 2016

(Pre-requisite: Grade of C or Higher in Chemistry 114)

Department of Chemistry & Biochemistry
Queens College – CUNY
65-30 Kissena Blvd., Flushing, NY 11367

Lecture & Recitation – Monday & Wednesday (1:40 – 3:30 pm); Remsen 101
Instructor: Professor Yu Chen, Remsen 206 F
Email: yu.chen1@qc.cuny.edu
Tele: 718-997-4132 (Office)
Office Hours: Tuesday & Thursday 4 pm to 4:50 pm (RE206F)


Ancillary:
3) Online homework from Sapling Learning (details will be announced in the first lecture on Sept. 3rd, 2014).


Accommodations: If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with Dr. Yu Chen immediately.

Examinations: There will be three 100-point mid-term exams, and one 100-point ACS final exam, to be held in class as scheduled below.
*The final exam will be the American Chemical Society Organic exam. The study guide can be purchased for $21 on-line at http://examsinstitute.3dcartstores.com.

Grades: The online homework from Sapling Learning is counted as 10% in the final grade. The lowest grade of the four exams is counted as 15%; and each of the rest three exams is counted as 25% in the final grade.
*(Note: There is no make-up exam.) If a student is ill on a scheduled exam day and cannot take the exam, he/she should provide a medical doctor’s note to Dr. Chen immediately after he/she recovers. Each of the rest three exams he/she takes is counted as 30% in the final grade together with 10% online homework grade.

Grading Scale: ≥ 97 (A+); 90-97 (A); 86-89 (A-); 82-85 (B+); 78-81 (B); 74-77 (B-); 70-73 (C+); 65-69 (C); 60-64 (C-); 50-59 (D); < 50 (F).
General Guidelines: You must attend all the class examinations and laboratory sessions. In case of an emergency that you are unable to attend a class examination or a laboratory session, a legal valid proof of absence must be presented. In the event that you are unable to furnish a valid proof of absence within reasonable time periods, a zero grade will be assigned for the examination. The use of cell phones is strictly NOT permitted during the class and examinations. You must be able to use Blackboard for accessing the course materials. It is strongly recommended that you use Queens College email account for effective communication with the instructor. Any other specific information regarding the course will be provided by the instructor in the first lecture, scheduled on Feb. 1st, 2016.

Schedule of Classes and Examinations:

1. Chapter 1 – Structure and Bonding – 02/01 (2 hrs)
2. Chapter 2 – Polar Covalent Bonds; Acids and Bases – 02/03 (2 hr)
3. Chapter 3 – Organic Compounds: Alkanes and Their Stereochemistry – 02/08 (2 hrs), 02/10 (2 hrs)
4. Chapter 4 – Organic Compounds: Cycloalkanes and Their Stereochemistry – 02/17 (2 hrs), 02/22 (2 hrs)
   Review of Chapters 1 through 4, Problem-Solving – 02/24 (2 hrs)

First Mid-term Examination – Chapters 1 through 4 – 02/29 (2 hrs)

5. Chapter 5 – Stereochemistry at Tetrahedral Centers – 03/02 (2 hrs), 03/07 (2 hrs)
6. Chapter 6 – An Overview of Organic Reactions – 03/09 (2 hrs), 03/14 (1 hr)
7. Chapter 7 – Alkenes: Structure and Reactivity – 03/14 (1 hr), 03/16 (2 hrs)
8. Chapter 8 – Alkenes: Reactions and Synthesis – 03/21 (2 hrs), 03/28 (2 hrs)
   Review of Chapter 5 through 8, Problem-Solving – 03/30 (2 hrs)

Second Mid-Term Examination – Chapters 5 through 8 – 04/04 (2 hrs)

9. Chapter 10 – Organohalides – 04/06 (2 hrs), 04/11 (2 hrs)
10. Chapter 11 – Reactions of Alkyl Halides: Nucleophilic Substitutions and Eliminations – 04/13 (2 hrs), 04/18 (2 hrs)
11. Chapter 17 – Alcohols and Phenols – 04/20 (2hrs), 05/02 (1 hr);
12. Chapter 18 – Ethers and Epoxides; Thiols and Sulfides – 05/02 (1 hr), 05/04 (2 hr)
   Review of Chapters 10, 11, 17 & 18, Problem-Solving – 05/09 (2 hrs)

Third Mid-Term Examination – Chapters 10, 11, 17 and 18 – 05/11 (2 hrs)

Review Session for Final Examination, Problem-Solving – 05/16 (2 hrs)

FINAL EXAMINATION – Chapters 1 through 8 & Chapters 10, 11, 17, 18 – TBA

*: A thirty minute recitation will be held in class after the lecture of each chapter.

FROM: Sapling Learning - Organic Chemistry Question Sets
Sapling's chemistry questions are delivered in a web browser to provide real-time grading, response-specific coaching, improvement of problem-solving skills, and detailed answer explanations. Dynamic answer modules enable one to interact with 3D models and figures, utilize drag-and-drop synthetic routes, and draw chemical structures - including stereochemistry and curved arrows. Altogether, Sapling is cheaper than a tutor, provides more value than a solutions manual, and goes beyond a mere assessment exercise to give a learning experience.

We will be using Sapling Learning for graded homework. To get started:
2. a) If you already have a Sapling Learning account, log in and skip to step 3.
   b) If you have a Facebook account, you can use it to quickly create a SaplingLearning account. Click the blue button with the Facebook symbol on it (just to the left of the username field). The form will auto-fill with information from your Facebook account (you may need to log into Facebook in the popup window first). Choose a password and timezone, accept the site policy agreement, and click "Create my new account". You can then skip to step 3.
   c) Otherwise, click "create account". Supply the requested information and click "Create my new account". Check your email (and spam filter) for a message from Sapling Learning and click on the link provided in that email.
3. Find your course in the list (listed by subject, term, and instructor) and click the link.
4. Select your payment options and follow the remaining instructions.
5. Work on the Sapling Learning training materials. The activities, videos, and information pages will familiarize you with the Sapling Learning user environment and serve as tutorials for efficiently drawing molecules, stereochemistry, etc. within the Sapling Learning answer modules. These training materials are already accessible in your Sapling Learning course.
6. • Once you have registered and enrolled, you can log in at any time to complete or review your homework assignments.
   • During sign up - and throughout the term - if you have any technical problems or grading issues, send an email to support@saplinglearning.com explaining the issue. The Sapling support team is almost always more able (and faster) to resolve issues than your instructor and TAs.
   • To optimize your Sapling Learning experience, please keep your internet browser and Flash player up to date and minimize the use of RAM-intensive programs/websites while using Sapling Learning.