Chem 272 Spring 2014

Organic Chemistry

Course meetings: MWF 8:30 – 9:20 am Phys Sci 217

Instructor: W. Chain chain@hawaii.edu
Bilger 205B 808-956-5795

Office hours MTWRF, 10:30 – 11:30 am, Bilger 205B.

Course Objective: The objective of Chemistry 272 is to introduce students to a series of topics in organic chemistry, including (but not limited to) structure, bonding, functional groups, acid/base theory, reactions, stereochemistry, and spectroscopy.

Course Eligibility: Undergraduates must have passed Chemistry 162 or Chemistry 181 with a grade of C (*not* C–) or higher. *There will be no exceptions to this rule.*

Exams: There will be three midterm exams, one administered approximately every four weeks. These will focus on recent topics. There will also be a comprehensive final exam. The exam schedule is as follows:
Friday, February 7
Friday, March 7
Friday, April 11
Final exam: Friday, May 16, 7:30 am – 9:30 am
There will be no make-up exams for any reason. Instead, an exam score will be manufactured from your final exam score. This score will replace your lowest *normalized* midterm exam score, or serve to replace a zero should you miss an exam for a valid medical excuse – absence from an examination will be excused only if certified by a written statement from a physician. If you cannot provide this statement, a score of zero will be assigned. I will confirm your statements with your physician. Therefore, your final exam can weigh between 38% and 50% of your final grade, whichever is to your advantage. ***Bring your student ID to all exams!***

Problem Sets: You will receive a list of homework problems at the beginning of each topic. The answers to all problems are found in the Solutions Manual. Although the homework will not be collected or graded, ***it is absolutely essential that you do all the problems in order to gain an understanding of the concepts involved. Organic chemistry is not learned by passively reading the textbook.*** There will be graded, in-class pop quizzes derived from your lists of homework problems. **There are no make-up quizzes.**

Online Homework: Follow the instructions included at the end of this document to register for the Sapling online homework system. Each chapter will be accompanied by a homework assignment in this system, and must be completed by the designated deadlines given in class. ***The online homework is not required to pass the course, however I will add six percentage***

points (+6%) to your final course average if you complete all the assignments. In my experience, +6% is more than sufficient to elevate your course grade by an entire letter grade.

Grading Scheme:

Midterm exams (three):	300 points
Final exam:	300 points
Quizzes (10):	200 points

Code of Conduct: Academic honesty policies can be found at the following website: http://studentaffairs.manoa.hawaii.edu/policies/conduct_code/
I have a zero tolerance policy for academic dishonesty. *Any case of academic dishonesty will result in an automatic grade of 'F' in the course and your case will be referred to the Student Conduct Administrator.* ***This document serves as your only warning, and there will be no second chances and no exceptions to this policy.***

Disabilities: The University of Hawaii is an equal opportunity/affirmative action institution, dedicated to teaching all students and reaching all learners. It is our commitment to make our lectures and classrooms accessible to all students. If you have, or think you might have, a disability and have not voluntarily disclosed its nature and the support you need, you are invited to contact the UH KOKUA Program (http://www.hawaii.edu/kokua/ or 808-956-7511), or talk with the instructor in order to get any accommodation you might need to take the course. This information will be kept confidential. Please do this as early in the course as possible.

Textbooks: Clayden, Greeves, and Warren, *Organic Chemistry*, 2nd Edition, Oxford University Press, 2012.

Clayden and Warren, *Solutions Manual to Accompany Organic Chemistry*, Oxford University Press, 2013.

Optional, but highly recommended: Klein, *Organic Chemistry as a Second Language: First Semester Topics*, Wiley, 2011.

These have been placed on reserve at Sinclair Library.

I expect to complete chapters 1–19 of the textbook in Chem 272.

Molecular models: You are strongly encouraged to purchase a molecular model kit such as those available at the UH bookstore. You may also find suitable organic chemistry model kits for sale online (I recommend: Andrus Education – http://www.andruseducation.com – this is the nicest and least expensive kit I have seen offered). A model set is particularly useful for understanding stereochemical problems in organic chemistry.

Website: Exams, sample exams, handouts, and assignments will be posted on Laulima. If you are a registered student in the class and do not have Chem 272 listed as one of your courses when you go to Laulima, follow the instructions on Laulima for adding Chem 272.

Studying: Throughout the semester, we will be discussing a large amount of difficult material in a short amount of time. It is critical that you do not fall behind in your studies. Often, understanding of new material in organic chemistry relies upon mastery of previously discussed ideas. *I urge you to review your class notes immediately after class and clear up ambiguities while the subject is still fresh in your mind. I emphasize to you here and I will repeat this often during the course:* ***do problems, practice, and try to understand the underlying concepts and themes. DO NOT attempt to memorize your way through organic chemistry.***

An important component of your study will be the suggested practice problems in your textbook and in the solutions manual. It is often said that you cannot study organic chemistry without a pencil in your hand. Please make the effort to use these problems in your studies and consult the solutions only after you have worked out your own answers.

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 the arrow formalism. 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.

Instructions for Accessing the Sapling System:

1. Go to http://saplinglearning.com

2a. If you already have a Sapling Learning account, log in then skip to step 3.

2b. If you have Facebook account, you can use it to quickly create a Sapling Learning account. Click "create account" located under the username box, then click "Login with Facebook". 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.

2c. Otherwise, click "create account" located under the username box. 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 school, course, semester and instructor) and click the link.

4. Select a payment option and follow the remaining instructions.

- 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.