

# Chemistry 3B: Chemical Structure and Reactivity, Spring Semester 2015

**GENERAL INFORMATION:** Chemistry 3B represents the second semester of a two-semester survey of organic chemistry. A prerequisite is Chemistry 3A or Chemistry 112 with a passing grade of C– or better in either one. The lecture part of this course can be taken separately from the laboratory. Because of space considerations, many of you will have to do so, and you are strongly advised to consider taking Chemistry 3BL during the summer of 2015. If you are not taking Chemistry 3BL, you are nevertheless entitled to visit (any) GSI office hour (to be posted).

Prof. Steven Petersen (448 Latimer Hall, 642-9146, [pedersen@berkeley.edu](mailto:pedersen@berkeley.edu)) is in charge of Chemistry 3BL, for those of you who are enrolled in it.

**ADMINISTRATION:** The staff coordinator for this course is Mark Jenkinson (213 Lewis Hall, 642-8163, [mjenkinson@berkeley.edu](mailto:mjenkinson@berkeley.edu)), and any questions about administration and course mechanics should be directed to him. Specific questions about add/drops, enrollment, prerequisites, etc. during the first week of classes can be directed to Lucia Briggs (332 Latimer Hall, 643-9939, [luciab@berkeley.edu](mailto:luciab@berkeley.edu)).

## **Lectures:**

Tuesdays and Thursdays, 8:00-9:30 am and 3:30–5:00 pm in 105 Stanley

## **Instructors:**

Richmond Sarpong, Lectures: [rsarpong@berkeley.edu](mailto:rsarpong@berkeley.edu)  
Kyle Owens (Head GSI), [kyleowens@berkeley.edu](mailto:kyleowens@berkeley.edu)

## **Office Hours:**

Richmond Sarpong: Tuesday 9:40-10:40 am (Hildebrand Library Room 100E) and Thursdays, 1:30-2:30 pm (Hildebrand Library Room 100E)  
Kyle Owens: Monday 11:00-12:00 noon and Wednesday 10:00-11:00 am (Room TBA).  
Graduate Student Instructors: Schedules are posted on the course website.

**E-MAILING:** This course has a large enrollment and it is impossible for Professor Sarpong to deal with routine e-mails. If you have procedural and other questions, send an email to or see your GSI or Ms. Lucia Briggs. If you have chemistry questions, come to office hours. Any emergencies relating to exams should be directed to Kyle Owens, [kyleowens@berkeley.edu](mailto:kyleowens@berkeley.edu)

## **Voluntary Review Session:**

Voluntary weekly review sessions will be held each Friday from 4:00-6:00 pm in 1 Pimentel. The review sessions will begin on Friday Jan 23<sup>rd</sup>.

## **Texts:**

- I. *Organic Chemistry* by K. P. C. Vollhardt, N. E. Schore, 7<sup>th</sup> Edition; Freeman, New York (the associated Study Guide and Solutions Manual by N. E. Schore is also required).
- II. Recommended: HGS Maruzen Molecular Structure Kits, W. H. Freeman and Co. (Ned's Berkeley Bookstore).

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III. Recommended: "Virtual Textbook of Organic Chemistry" (free online textbook)  
<http://www.cem.msu.edu/~reusch/vtxtindex.htm>

An eBook version of the text is available for purchase at a significant discount when purchasing the Sapling homework access directly from [saplinglearning.com](http://www.saplinglearning.com). Details will be provided in an announcement on bCourses. If you choose this option, you will also be able to use links to navigate directly from many of the homework problems to the appropriate sections of the text.

**ASSIGNED PROBLEMS:** A collection of relevant problems from the Vollhardt/Schore Workbook (not graded) will be assigned at the beginning of each chapter, but you are advised to work as many exercises as possible in the course text. If you do not understand a problem and/or its solution, see your TA or one of the instructors. Equally important, if you do understand a problem and its solution, you can see your TA or one of the instructors to learn about the logic of problem solving.

**Online Homework:** <http://www.saplinglearning.com>

There will be weekly graded online homework sets corresponding to each week's lectures (posted weekly on Thursday evening). Each assignment will be due prior to the next week's lecture (submitted before 8 am Tuesday). The purpose of this homework is to provide timely practice directly related to each lecture topic. You may work on these problems in small groups, but each person must submit his or her own answers via the Sapling website.

## EXAMINATIONS:

**It is your responsibility to check the exam groups for your other courses to ensure that you are not scheduled for two conflicting or for too many finals on the same day.**

There will be *no make-up examinations*, should you be absent during one of them. If you present Prof. Sarpong with a *documented* medical excuse, he may elect to assess your final grade based solely on your performance in the remainder of the course. Failure to attend the final exam will result in a grade of F, unless there is a legitimate excuse *and your standing in the course is at a passing level*. When these conditions are met, you may receive an incomplete (I) grade.

## More on Incomplete grades:

*Incomplete grades* will be given only when the student has *satisfactorily completed* almost all of the required work, but is unable to complete the course because of circumstances beyond their control. Students who receive a grade of incomplete have to make up the missing work by the first day of instruction of the Spring semester of 2016. It should be emphasized that make-up exams are not offered. Thus, when a final examination is missed, resulting in an I-grade, this grade can be removed only by taking this examination in connection with Chemistry 3B during the Summer 2015 or Fall 2015 sessions.

I. The midterm examinations will be held 7:00 – 9:00 pm on **Monday, March 2<sup>nd</sup>** and **Monday, April 13<sup>th</sup>**. (Room to be announced)

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II. The final examination will be three hours in duration and will be held from 11:30—2:30 pm on **Thursday, May 14<sup>th</sup>**.

Previous exams are available on <https://tbp.berkeley.edu/courses/chem/3B/>

## **Class Web Site:**

<https://bcourses.berkeley.edu/courses> (Chem 3B)

The website will provide postings of the syllabus, handouts, and answer keys to exam level problems and exams after they are graded.

## **Grading:**

The course will be graded on the basis of 1000 points, which are allocated as follows:

1. Two midterm exams, each worth 250 points
2. Final exam, worth 400 points
3. Problems assigned from Sapling, worth 100 points

## **Course Grade:**

Final letter grades in this course will be based upon the total points in the course.

Distribution of letter grades will be approximately along the following lines:

A (15–20%); B (35%); C (40%); D, F (5–10%)

**CHEATING AND PLAGIARISM:** Any cheating in examinations and any other unethical conduct will result in an automatic grade of F, a report to the committee on student conduct, and procedures designed to alert past and future professors about any such incidence. **Don't do it!** *If you have a problem of any sort that impinges on your performance*, see Professor Sarpong, rather than resorting to ill-informed and poorly conceived measures.

**LETTERS OF RECOMMENDATION:** These will be written by your GSIs and, if required or possible, co-signed by your professor. **Make sure that you arrange with your GSI for a letter towards the end of the semester**, as many of your lab instructors will graduate in due course and leave Berkeley.

**Students with Disabilities:** If you need disability-related accommodations in this class, please contact the Disabled Students Program (<http://dsp.berkeley.edu>) to request services. If you already have an accommodation letter from DSP, please check to make sure that the letter is submitted to me through the DSP system (there is no need to email a separate copy). Students with exam accommodations will receive an email with details approximately one week prior to each exam.