

Syllabus CHE 321 Organic Chemistry I Fall 2009

Course Description

Organic Chemistry 1 CHE 321 is an introduction to the structure, reactivity, and properties of organic compounds is presented using modern views of chemical bonding. These fundamental ideas are applied to topics ranging from synthetic chemistry to complex functional structures such as lipid bilayers.

Prerequisites

A grade of C or better in General Chemistry II CHE 132 (or Honors Introductory Chemistry II CHE 142).

Staff and Contact Information

Professors Frank Fowler and Robert Grubbs will give the lectures and write the examinations. The workshops will be coordinated by Dr. Rong Chen and hosted by a TA group of talented chemistry graduate students assisted by a group of enthusiastic undergraduates who did well last year.

All questions about course business should be emailed to the class email account: che321@notes.cc.sunysb.edu

Office Hours

Prof. Fowler – Tuesdays and Thursdays 1-2 pm, Chemistry 769.

Prof. Grubbs – Tuesdays and Thursdays 10-11 am, Chemistry 749.

Dr. Chen – Wednesdays, 2:15-3:15 pm (tentative), Chemistry 523.

The TAs will have office hours in the Chemistry Learning Center (Chemistry 312) throughout the week (Office hours of TAs will be posted early in the semester.) We urge you to use these scheduled times to discuss the techniques and experiments with any CHE 321 staff member.

Required Course Materials:

Textbook - *Organic Chemistry, 9th edition*, by Solomons and Fryhle, available as a package with a Molecular Model Kit in the local bookstores.

“Clicker” – It is a kind of personal response device from eInstruction that will be used for in lecture quizzes. It is also known as CPS (Classroom Response System) pad and available in the university bookstore. More information can be found on the course website.

Lectures

There are two equivalent lectures three times a week:

Lecture 01 - **Monday, Wednesday, Friday, 9:35-10:30 am, Javits 100**

Lecture 02 - **Monday, Wednesday, Friday, 3:25-4:20 pm, Javits 100**

Workshops

There are thirty (30) recitations between Monday 12:50 pm and Tuesday 5:20 pm. Each student is registered for a weekly workshop and must attend the workshop for which he/she has registered.

The workshops have two parts. The first part is an online quiz that can be found on the Blackboard web site for the course. It should be completed before the workshop meets (normally it is due at 5 am on Monday unless otherwise announced). More detailed instruction is posted on Blackboard and the course website.

The second part will be handed out at the recitation. Students will solve these problems in teams of four (4) and present answers on the board. The answers to Parts II of the workshop must be handed in on an individual workshop form that must be downloaded and printed from the course web site in advance. More details will be provided at the first scheduled workshop.

No answer key will be posted.

Schedule (tentative)

Week of	Lecture	Workshop	Exam
Aug. 31 – Sep. 4	Chapter 1	WS1 – Bonding and Structure	
Sep. 7-11	No lecture on Monday, Sep. 7 (Labor Day). Chapters 1-2	No recitations. WS2 – Bonding and Structure (posted on web)	
Sep. 14-18	Chapters 2-3	WS3 – Functional Groups and IR	
Sep. 21-25	Chapters 3-4	WS4 – Acids and Bases	
Sep. 28 – Oct. 2	No lecture on Monday, Sep. 28 (Yom Kippur). Tuesday, Sep. 29, follows Monday schedule. Chapters 4-5	No recitations. WS5 – Nomenclature and Confirmations (posted on web)	Midterm exam 1 on Wednesday, Sep. 30, 8:30-10 pm.
Oct. 5-9	Chapters 5-6	WS6 – Stereochemistry	
Oct. 12-16	Chapter 6 continues.	WS7 – Stereochemistry and Alkyl Halides	
Oct. 19-23	Chapter 7	WS8 – Nucleophilic Substitution and Elimination Reactions	
Oct. 26-30	Chapter 7	WS9 – Alkenes and Alkynes 1	Midterm exam 2 on Thursday, Oct. 29, 8:30-10 pm.
Nov. 2-6	Chapter 8	WS10 – Alkenes and Alkynes 2	
Nov. 9-13	Chapter 9	WS11 – Alkenes and Alkynes 3	
Nov. 16-20	Chapter 10	WS12 – NMR	
Nov. 23-27	No lectures on Wednesday, Nov. 25, and Friday, Nov. 27 (Thanksgiving break). Chapter 10 continues.	WS13 – Radical Reactions	
Nov. 30 – Dec. 4	Chapter 11	WS14 – Alcohols and Ethers	Midterm exam 3 on Wednesday, Dec. 2, 8:30-10 pm.
Dec. 7-11	Chapter 12	WS15 – Alcohols from Carbonyl Compounds	
Dec. 14-18	Final exam on Thursday, Dec. 17, 8-10:30 am.		

Homework Assignments

Regular homework assignments will be made on the web site for each chapter of the book. The answers to the problems in the textbook can be found on the class Blackboard account.

Quizzes

There will be regular daily quizzes in the lecture. We will use **CPS clickers** to record your in class responses. It is your responsibility to acquire a clicker from the bookstore and to **register** it with the company at: <http://www.einstruction.com/>.

Exams

There will be 3 midterm exams and one final exam (the dates are given in the schedule).

Exams will be based on the content of lectures and the textbook chapters, and modeled after the problem sets, workshops, and quizzes. The questions will be a mix of multiple choice and short answers.

You will be allowed to bring to each exam **one** 5" x 8" note card. All of the material on this card must be hand written. No Xeroxed cards will be allowed. The cards will be collected at the end of the exam. Any student who violates this privilege will be charged with academic dishonesty. Model sets will be allowed at the exams. Calculators will not be allowed.

If a student is unable to follow the above procedure of taking all of the exams then an alternate procedure will be used to evaluate a student's knowledge of the course material. **There are no make-up exams for the three midterm exams.** If one of the exams is missed a **zero** will be assigned. Exceptions to this policy will only be granted if the student immediately submits an acceptable excuse. If an excuse is accepted then the performance on the final will be substituted for the missed exam.

All students must take a final exam. If a student misses the final exam and has an acceptable excuse then the student will be allowed to take the make-up final exam. Any student missing the final exam must notify the instructor within 48 hours in order to be eligible for the make-up exam. The make-up final exam is all essay questions and may have oral questions. The make-up exam is primarily used to determine whether or not the student deserves the grade indicated by the three exams. The make-up final cannot be used to raise a student's grade above that indicated by the midterm exams.

Although extraordinary care is taken to assure an error free process, errors may occur. For errors in exam grading, please file the regrade request form which can be obtained from the chemistry main office and email the class email account with the subject "Regrade – Student's Name and Course ID". If you believe there are any errors in your record, email the class email account immediately. It is important that we have a written record of your complaint.

Grades

There are a total of 600 points possible in the course:

- Each midterm exam will be worth 100 points.
- The final exam will be worth 180 points.
- There will be many clicker quizzes. You can earn a total of 60 quiz points towards your final grade.
- There are 15 workshops: each workshop will be worth 5 points. You can earn a total of 60 workshop points.

There will be no make-up quizzes or workshops.

Your grade will be determined from the percent of 600 points you earned using the following scheme.

%	0	40	46	50	62	65	74	80	84	90
Grade	F	D	D+	C	C+	B-	B	B+	A-	A

For example, if you earned 301 points (>50%) your final grade would be a "C".

Problem of the Day

Each day of the week a new synthesis problem will be posted on the course web site. The course calendar page will show a listing of past problems. Solutions to these problems will not be posted, but students are encouraged to post answers using the Blackboard Discussion Board. Doing the Problem of the Day on a regular basis may help you on the exams.

Extra Help

We provide considerable help to all students taking the course. You should attend all three lectures each week and your assigned workshop. You should also take full advantage of the TAs' office hours held in the Chemistry Learning center. Before each exam the TAs will offer special review sessions. If you take advantage of all of these opportunities and if you complete all the reading and homework assignments you should do fine on the exams. If you feel you need additional help there are various independent tutoring services available. You may wish to check out these various services. However, none of these services are endorsed by us and you should never assume that can use a paid tutor as a substitute for hard work.

Course Web Site

The course web site (<http://www.sinc.sunysb.edu/Class/che321ff/>) should be checked on a regular basis. The Problem of the Day, reading and homework assignments, course announcements, lecture notes and various other course materials can be found there. Old exams will be posted. Using the University ID number the student can print individual workshop forms. After each exam the exam results will be posted there, too.

Responsibilities

Each student is responsible for knowing all procedures and course expectations detailed in this document, in other handouts, on the course web site or those announced in lecture. Failure to attend a lecture is not an excuse for not knowing what was presented or announced. If you miss a lecture it is your responsibility to find out what transpired from a fellow student, or from your lecturer.

Academic Integrity

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instance of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>.

Each student must take each exam independently with no assistance from any other student and without the aid of any unauthorized materials or electronic devices. Deviations from this standard will result in a course grade of F and a report to the Academic Judiciary.

Disability Support Services (DSS)

If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services (631) 632-6748 or <http://studentaffairs.stonybrook.edu/dss/>. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: <http://www.stonybrook.edu/ehs/fire/disabilities/asp>.

Critical Incident Management

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, and/or inhibits students' ability to learn.