Chemistry 3410 (CRN 80194, 84489*) Syllabus – Fall Semester 2014

Text: Organic Chemistry, 8th Ed., by John McMurry, and ACS Study Guide
Suggested: Introduction to Spectroscopy, by Pavia, Lapman, and Kriz
Instructors: Dr. Pedro C. Vasquez
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Office: 317 Petit Science Center
Office Hours: MWF 4:10 – 5:00 pm; Tuesdays: 2:00 – 3:00 pm. **No office hours the day of a test or the day after a test.**
Lecture: MWF 3:00 pm – 4:10 pm, Room 102 Library South
Prerequisite: CHEM 2400

CHEM 3411 is a tutorial class to help you with the lecture. You should register. The credits count for your GPA but not towards your degree. Grading is based on your attendance and participation.
Mondays 1:00 -1:50 pm (438 Kell Hall) or Thursdays 2:30 pm – 3:20 pm (438 Kell Hall).
A separate help session (**3410 SI**) is also offered as a tutorial. Registration is not required. Both of these classes are designed to help you be successful in Organic Chemistry. Information TBA.

Grading Scheme: Four exams will be given during the semester; the lowest score of these tests will be dropped; the average of the remaining 3 tests will count **55 %** of your final grade**.** The final exam (**ACS National Exam**) will count **30%** of the final grade**.** You are strongly encouraged to take all tests. Short quizzes count **10%** and homeworks count **5%**.

Letter grades are assigned as follows (based on 1000 points total)

A+ = > 950[a]	A = 900-949	A- = 860-899
B+ = 820-859	B = 780-819	B- = 740-779
C+ = 700-739	C = 660-699	C- = 620-659
D = 540-619	F = <540	

Note: a C- is not a passing grade for a science major.
[a] Without including extra credit. To receive an "A^+" an "A' is required in the final exam.

Important Dates:

8/25	Classes begin
9/1	Labor Day Holiday
10/14	Last day to withdraw with a grade of "**W**"
11/24 -11/28	Thanksgiving break
12/ 8	Last day of classes

Test Schedule

Test 1	Wednesday, September 10
Test 2	Wednesday, October 1
Test 3	Wednesday, October 29
Test 4	Wednesday, December 3
Final Exam:	Monday, December 15th 1:30 – 4:00 pm (**ACS National Exam**)

*The tests for the honor students will not be exactly the same as for the rest of the class.

Keeping Up:
Desire to Learn (**D2L**) is a way to communicate with students. Check this website routinely for information regarding the class.
Supplemental homeworks, answers to supplemental homeworks/quizzes/tests will be posted in **D2L**.
Graded supplemental homeworks will only be available in the instructor's office, during office hours.
Graded quizzes and exams will be available in the classroom for one day only; after this, they will be available in the instructor's office, during office hours.
Only the grades for supplemental homeworks will be posted in D2L.

Course Introduction and Objectives: You will be introduced to the fascinating world of Organic Chemistry. Organic Chemistry touches your life in ways you may not realize. You are made of organic chemicals. The foods you eat, the clothes your wear, the medicines you take in times of illness are all organic chemicals. I hope to instill in you a sense of appreciation of how organic chemistry is the foundation of the life process and how it affects your quality of life. We will explore structure/reactivity relationships as a basis for all of organic. We will use reaction mechanisms (the pathways by which chemical bonds are broken and formed) as an underlying thread to tie together many seemingly different reactions. We will discuss the energetic of chemical reactions which, when coupled to mechanistic theory, will answer the question of why chemical reactions occur. We will learn aspects of modern spectroscopic techniques for structure determination.

Please note:

1. No make-up tests or quizzes will be given.

2. Late homeworks and electronic copy of homeworks will not be accepted.

3. Students need to show their GSU Panther ID card when taking exams and quizzes.

4. The instructor reserves the right to assign seating during exams and quizzes.

5. Hats and hoods that partially cover the face are not allowed during exam and quizzes.

6. All electronic communication devices need to be kept either in purses or book-bags during exams and quizzes; of course, they should be turned off at all times. In addition, usage of electronic equipment during lecture is not allowed.

7. The University requires that faculty members must give an **F** to all those students who are on their rolls but no longer taking the class.
   Students that withdraw themselves by the mid-point will receive a **W** under this policy.

8. ***This course syllabus provides a general plan for the course; deviations may be necessary***.

Notes:

A) If you miss an exam for any reason, that will be dropped automatically. **NO MAKE-UP TESTS WILL BE GIVEN**. A written note from any student who misses an exam explaining why the exam was missed is expected. A student will not be excused from more than one test for any reason. If the student believes that more than one excused absence from a test is justified, the student should seek a hardship withdrawal from the course from the Dean of Students.

B) We will be covering chapters 14-26, sequentially. Some chapters will not be covered entirely. Plan about 2-3 lectures per chapter. Parts of chapter 30 may be covered.

C) You should read ahead of the lecture. Please keep up with the work. **Organic Chemistry requires a daily effort to be successful**. We will emphasize a logical approach to Organic Chemistry. Your ability to think and apply concepts to new problems will determine your success in Organic Chemistry.

Required Approach to Organic Chemistry: Read through the chapter quickly. Reread the chapter with a pencil in hand while you do all in-chapter practice problems.
It is necessary to work all the additional problems (without reference to the answer key) at the end of the chapter after your reading and in-chapter exercises are complete. You may have to rework those that give you trouble prior to the exam until you become completely comfortable with the material. It is only through working problems that you can evaluate your progress and see if you understand the course principles through application of these principles in problem solving. It is important to understand the solutions to these problems. You can learn from the problems just as you learn through your reading of the chapter.

Study Methods: Organic Chemistry emphasizes logical applications of learned factual material. You will be asked to develop your analytical abilities. Think your way through to the solution for a problem rather than trying to simply memorize your way through the course. After 3-4 weeks, those who try to memorize without understanding will run into mental overload. Organic Chemistry is a building process. The facts that you learn on day one will be important in problem solving even in the later chapters.
Recopy your lecture notes soon after class to make sure they are complete. If you have questions use my office hours. When you come to my office, I will expect you to bring your recopied lecture notes and written answers to your problem sets.
Use the on-line work and workbook provided with your text. Solve as many extra problems as you can. The more problems you attempt and work the better you become at the subject of Organic Chemistry.
Make flash cards of pertinent facts for drill work.

Class Preparation and Attendance: Students are expected to attend all lectures. As a courtesy to your fellow students, please arrive on time and do not leave before the lecture is complete. The student is solely responsible for timely completion of all assignments, regardless of any reason or absence.
Reading assignments should be completed prior to lectures. Please do all the in-chapter problems and at least the first half of the end-of-chapter problems. Also work on all related material available in the ACS study guide.

Supplemental Materials:

1. Molecular model kit.
2. CHEM TV CDROM to supplement classroom visualization exercises.
3. Study guide/answer key.
4. A student workbook with copies of old tests is available at **the GSU bookstore.** This workbook, authored by Dr. Pascoe, will be used in the tutorial classes and review sessions.
5. Website online quizzes with feedback included with textbook.

We will be using SAPLING for our online homeworks.

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.

To get started:

1. Go to http://saplinglearning.com and click "US Higher Ed" at the top right
2. a. If you already have a Sapling Learning account, log in and skip to step 3.
   b. If you have 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.

- 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.

Supplemental homeworks will be published by the instructor in D2L. These homeworks have specific deadlines. Only hard copy of homework will be accepted. Late submission of these homework will not be accepted.

Chemistry Department Student Integrity Policy: The Department of Chemistry follows the University policy on academic honesty published in the Faculty Affairs handbook and the On Campus: The Undergraduate Co-Curricular Affairs Handbook.
All tests taken must represent your individual, unaided efforts. To receive or offer information during any examination will be considered cheating. The use of unauthorized supplementary materials during tests also will be considered cheating.
Any suspected offenses may be referred to the Department Chair for appropriate action.