

Chemistry 3410 (CRN 80186, 84170*) Syllabus – Fall Semester 2015

Texts: 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; Thursdays: 2:00 – 3:30 pm; or by appointment. **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.

^aWithout including extra credit. To receive an “A+” an “A” is required in the final exam.

Important Dates:

8/24	Classes begin
9/7	Labor Day Holiday
10/13	Last day to withdraw with a grade of “W”
11/23 -11/27	Thanksgiving break
12/ 7	Last day of classes

Test Schedule

Test 1	Wednesday, September 16
Test 2	Wednesday, October 7
Test 3	Wednesday, October 28
Test 4	Wednesday, December 2
Final Exam:	Monday, December 14 th , 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.

Homeworks, answers to homeworks/quizzes/tests will be posted in **D2L**.

Graded 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 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 you 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 reactions. 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. **Be advised that I make copy of your graded tests before I return them to you.**
8. 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.
9. *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.

Homeworks

- 1 Homeworks will be published by the instructor in D2L.
- 2 Homeworks have specific deadlines
- 3 Only hard copy of homeworks will be accepted
- 4 Late submission of homeworks will not be accepted.
- 5 Homeworks are based on the ACS review book.

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.