

Chemistry 3410 (CRN 13128) Syllabus, Spring Semester 2012

Text: Organic Chemistry, 8th Ed., by John McMurry. Suggested: Introduction to Spectroscopy, by Pavia, Lapman, and Kriz

Instructors: Dr. Pedro C. Vasquez

Phone and e-mail: 404-413-5518, chepcv@gsu.edu

Office: 317 Petit Science Center

Office Hours: MTh: 2:30 - 3:30 pm, WF 2:30 - 4:30 pm. No office hours the day of a test or the day after a test.

Lecture: MWF, 12:00 noon - 1:10 pm, Room 102 LS

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.

Check GoSolar for details.

A separate help session (**3400 SI**) is also offered as a tutorial. Mr. Thai Tran is your SI leader. Registration is not required. Both of these classes are designed to help you be successful in Organic Chemistry. MW 1:15 -2:30 pm, 721 GCB; F 10:30 – 11:45, 300 Sparks Hall.

Grading Scheme: Four exams will be given during the semester; the lowest score of these test 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 OWL homeworks count **5%**.

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

A+ = > 950*	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.

*Without including extra credit

Important Dates:

- 1/9 - Classes begin
- 2/24 - Last day to withdraw with a grade of "W"
- 2/27 - 3/2 Spring Break, no classes
- 4/23 - Last day of classes

Test Schedule*

Test 1 - Wednesday 2/1

Test 2 - Wednesday 2/22

Test 3 - Wednesday 3/28

Test 4 - Wednesday 4/18

Final Exam: Monday 4/30, 10:45 - 1:15 pm (**ACS National Exam**)

*Extra credit homeworks, answers to extra credit homeworks/quizzes and answers to tests 1- 4 will be posted on ULearn.

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. 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 I.D. 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. Cell-phones and pagers 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 all 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 MAKEUP TESTS WILL BE GIVEN.** I expect a written note from any student who misses an exam explaining why the exam was missed. 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 parts of chapter 14 and chapters 15-26, sequentially. Plan about 2 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 available in OWL).

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 OWL for our online homework. This homeworks are worth 5% of the total grade.

The majority of organic problems involve structure drawing, and, depending on the question, stereochemistry, or curved arrows involved in mechanisms must also be drawn. Some questions allow one to rank a given structures/formulas by a property (e.g., acidity) or sort into groups (e.g., ketone vs. aldehyde). Nomenclature questions allow one to type in the name. There are also some multiple choice questions. Altogether, the online problems: 1) allow pretty much any question that is asked on paper to be performed on a computer; 2) enable one to draw their own structures, just as they will need to do on an exam; 3) grade instantly and provide feedback via tutor_like hints, allowing one to keep working with a question to arrive at the correct answer; 4) include detailed answer explanations.

Registering for OWL: CHEM 3410-005

Scenario 1: If you used OWL last semester and purchased a 4_Semester (24_month) Access Code, you still have access. Follow these steps to switch into the second semester course:

1. Go to www.cengage.com/owl and choose your course in the red box.
2. Choose Log in.
3. Choose your textbook. On the next page, choose your school.
4. Click the blue arrow under "User Login Page." Bookmark this login page and use it whenever you visit OWL.
5. Enter your login name and password. If you have forgotten your login information, click Login Help on the login page to have it resent to you.
6. Click Add/Switch Courses in the left navigation menu to switch yourself into the correct course for this semester.

Scenario 2: If you used OWL last semester and purchased a 1_Semester (6_Month) Access Code, your access will expire soon. To extend it, first purchase a new access code.

1. Go to www.cengage.com/owl .
2. Choose your course and then choose Buy an access code. Follow the directions to purchase your code.

(For more detailed directions, see www.cengage.com/owl/gettingstarted_students.html)

After you have your access code, please follow these instructions carefully to re_register.

****It is important to register using your previous login and password.****

**** DO NOT create a new login. ****

3. Go to www.cengage.com/owl and choose your course in the red box.
4. Choose Register.
5. Choose your textbook. On the next page, choose your school. Then choose Student Registration.
6. Choose your course and section.
7. Enter your information in the Self_Registration Form. Enter your Access Code in the Access Code space. Be sure to use the login and password you have been using to access OWL. Click Continue.
8. Confirm that the information shown matches that for the individual listed. (If no match is found and you are sure you had a previous login, go back to the login page for your school and text and click I've forgotten my login and/or password to have the information sent to you.)
9. Click Continue.

Scenario 3: If you are using OWL for the first time for this course, please purchase a new Access Code using one of these three options and use it to register for OWL:

1. Bundled with your textbook: Check the text you purchased for an OWL access code card. An access code should come with all new textbooks.
2. Purchased separately at the bookstore: If you purchased a used textbook, check with the bookstore to see if they have OWL access codes for sale.

3. Purchased online: If you purchased a used textbook or have chosen to use an electronic textbook, go to www.cengage.com/owl, choose your course, and then click Buy an Access Code.

After you have your access code, you will use it to register for OWL and choose a login and password. (For detailed purchase and registration instructions, download the Student Quick Start and Access Code Guide at www.cengage.com/owl/gettingstarted_students.html or watch a video on purchasing OWL access and registering at www.cengage.com/owl/videos/gettingstarted/. If you need assistance during the process, please click Support at www.cengage.com/owl .

For additional information on "Scenario 3" see the following site that was created specifically for GSU Organic students. This will present all the package options that are available to students.
<http://www.cengagebrain.com/micro/gsuorgchem>

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 Chairman for appropriate action.