

Organic Chemistry I Lecture and Drill

Syllabus for the Spring Semester of 2012 (issued 01/06/2012)
CHEM 2210 (3 Semester Hours) & 2210D (0 Semester Hours)

| Course | Class Time/Day | Location | Instructor | Office | Phone |
|------------|--|--------------------------------------|---|---------------------------------------|--|
| CHEM 2210 | Sect 01 - 1:00 - 1:50p.m./MWF Sect 02 - 1:00 - 1:50p.m./MWF | 36-105 37-173 | Dr. Warren J. Ray, Jr. Dr. Maryam Foroozesh | 37-338 37-331 & 37-335 | 520-7383 520-5078 |
| CHEM 2220D | Sect 01 - M 3:00 - 4:50p Sect 02 - T 3:15 - 5:05p Sect 03 - R 2:00 - 3:50p Sect 04 - W 3:00 - 4:50p | 37-269 37-269 37-269 37-273 | Dr. Warren J. Ray, Jr. Dr. Warren J. Ray, Jr. Dr. Jayalakshmi Sridhar Dr. Warren J. Ray, Jr. | 37-338 37-338 37-338 36-301L | 520-7383 520-7383 520-7383 520-5408 |

Office Hours and e-mail addresses:

Dr. Warren J. Ray, Jr.: M, W, 11:00 - 12:00 PM.; T 1:00 - 3:00 PM, (wjray@xula.edu).

Dr. Maryam Foroozesh: M 8- 10:00 AM; W 9-11; (mforooze@xula.edu).

Dr. Jayalakshmi Sridhar: T 1:00 - 2:00 PM; F 11:00 AM - 12:00PM (jsridhar@xula.edu).

These schedules, especially office hours, are subject to last-minute changes as mandatory meetings are scheduled; occasionally faculty schedules also change. Your instructor will notify you of any changes that affect your section, and we will attempt to keep the web site version of this syllabus up to date. If your schedule conflicts with your instructor's office hours, please make an appointment with him/her. Alternatively, you can see another instructor. Also, feel free to consult your instructor using e-mail. The web version of this syllabus will be kept updated at: <http://www.xula.edu/chemistry/documents/syllabi/C2210.pdf>

Organic Tutoring Center: Peer tutors are available at no charge in the Organic Tutoring Center located at the end of the hall by the Organic Chemistry labs on the 3rd floor of the NCF Annex. If you encounter problems with tutors or the center, please contact Dr. DiMaggio.

Course Description:

Introduction to the structural theories, physical and chemical behavior, synthesis, reaction mechanisms, and identification of compounds composed primarily of carbon and hydrogen. Students who complete the course will become familiar with the large body of information

required before the chemistry of living systems (biochemistry and molecular biology) can be studied. The critical thinking skills needed to apply this information to a wide variety of problems, both professional and societal, are strongly developed. Prerequisites: C or better in CHEM 1020/1020D.

Required Materials:

Text: David Klein; *Organic Chemistry*, 1st edition; John Wiley & Sons, New York, 2011. Other recent Organic Chemistry books may be acceptable, but you will be missing out if you do not have the Klein book; a few copies of Klein are on reserve in the library. The accompanying Study Guide is optional. The text, the required student manual (see below), and other materials should be available from the Xavier bookstore.

Student Manual: Sevenair, John P., et. al.; *Organic Chemistry Student Manual*, 6th edition; Xavier University of Louisiana, New Orleans, 2011. Additional practice hour exams and finals with keys to the second of the two sample drill tests, the second of two sample hour exams, and the sample final in the *Organic Chemistry Student Manual* are given on the Chemistry Department web site. The index to these materials is: [http://www.xula.edu/chemistry/crs-
orgleclab.php](http://www.xula.edu/chemistry/crs-orgleclab.php)

Model set: You will need a set of molecular models suitable for Organic Chemistry. The Darling Models (www.darlingmodels.com) are good; order Kit 3. It should be available in the bookstore. The set required for General Chemistry at Xavier is only marginally useful for this course. If you have a different set, show it to your instructor and he/she will let you know if it is OK.

Vocabulary cards: *English I Vocabulary Cards*, Set No. 1. They should be available in the bookstore.

A blank copy of the *Organic Chemistry Student Manual*, keys to some of the tests in the Student Manual, some old hour exams and final exams, and other materials can be found on the Xavier web site. See [http://www.xula.edu/chemistry/crs-
orgleclab.php](http://www.xula.edu/chemistry/crs-orgleclab.php)

Supplemental Materials

In addition to the Study Guide mentioned in the previous section, you may also want to consult a textbook by another author occasionally. In some cases, you may find that you can understand the discussion of a topic in another textbook better. The following are some current or recent texts that you may wish to consult. Many of them have been through several editions, any one of which will do. Almost all of them are titled *Organic Chemistry*, so they are listed here by the authors' names only: Solomons, Jones, Bruice, Smith, Wade, McMurry, Loudon, Carey, Schmid, Fox and Whitesell, Fessenden and Fessenden, and Ege. A number of these organic chemistry texts are available in the Xavier library. In many cases, these authors and others have also written

shorter textbooks for one-semester courses. The shorter texts may help you begin to understand certain topics, but their coverage of most topics is not as complete as you need for this course. (If the book is much thinner than Klein, beware.) Many students find Kline's *Organic Chemistry as a Second Language* to be a useful book (ISBN 978-0-470-12929-6).

Course Objectives

These are set out in a general way in the "Course Description" section above. More specific objectives for each topic covered can be found in the *Organic Chemistry Student Manual* at the beginning of each section.

Course Requirements

The University requires that attendance be taken in all classes. **Attendance will be taken in lecture by card reader only.** This class is no longer covered by the university's FE policy. This does **NOT** mean that class attendance is optional. It means that you are responsible for your own actions. There is often a direct correlation between a student's class attendance and his/her grade.

There will be nine drill tests (the lowest dropped), twelve vocabulary quizzes, two review tests, a final exam, and some other exercises. **All exams, tests, and quizzes are taken without the aid of books, notes, or other study materials;** except that the instructors may allow the use of molecular models or calculators (see below). You must arrive on time for each test. Students who arrive after any other student has left will not be allowed to take the test. For final exams and hour exams you may not leave the room without your instructor's permission once the exam has been handed out, and this permission will be granted only in case of emergency. See also the statement in the next section regarding cheating.

Under ordinary circumstances, **no makeup exams are given.** You must take drill tests with your drill section. If you miss one drill test, your grade for that test is zero, and it will drop as your lowest grade. If you miss any additional drill tests because of a documented emergency you may make up the test in another section with the permission of the instructors of both sections. There may be a penalty if the section is taught by a drill instructor different from your own. Your grade may be adjusted based on the class average of the test taken. A drill test not taken because of a documented emergency may be prorated. *All of these adjustments are made at your drill instructor's discretion.* No makeup exams of any kind will be given after the exams have been handed back; no makeup exams will be given during office hours. If you miss a second or higher drill test the emergency must be serious, and it must be documented.

Cell phones, beepers, and other electronic communication devices **MUST** be turned off (or to "vibrate") and removed from your desktop during all class periods. The use or possession of any unapproved electronic device during a quiz or test is strictly prohibited, and will be considered cheating.

The University Catalog (2010-2012, p. 37) states: “In the College of Arts and Sciences, in order for a student to repeat a course more than once, there must be written permission of the student’s departmental advisor or chair and the chair of the department in which the course is offered.”

Examination and Grading Procedures

During exams and drill tests, only pencils, erasers, and pens will be allowed on desktops and laptops. If a test includes numerical problems, **non-programmable calculators ONLY** may also be used. Cell phones with calculators and any other calculators with communications capability are forbidden. Cell phones must be turned off (not on vibrate) and put away; Molecular models may be used if your instructor allows it. All other items must be put on the floor or away from the student’s desk. The wearing of caps is not permitted in class. **For multiple choice tests, the answer given on the Scantron sheet is the one that counts– NO EXCEPTIONS.**

Each of the nine drill tests is worth 50 points; the lowest drill grade will be dropped. The review tests are worth 100 points each. **The final exam is worth 200 points and is cumulative and comprehensive over the semester.** Vocabulary quizzes are worth 5 points. There will be 100 additional points available from various other activities: (70 points from exercises given in lecture, 10 points from exercises given in drill, and 20 points from the Free Radical lecture quiz given on the last day of lecture. The lowest drill test grade will be dropped.

The grading scale will be no stricter than the following:

| Points | Grade |
|----------------|--------------|
| 90% and higher | A |
| 80-89% | B |
| 70-79% | C |
| 60-69% | D |
| 59% or lower | F |

This scale may be adjusted. Some instructors give harder drill quizzes than others, and the scales in these sections are adjusted to accommodate that fact. **Do not, however, count on there being a curve.**

Academic Integrity

The following is quoted from the Xavier University Faculty Handbook:

“If a student's test, examination paper, laboratory report, term paper, or other written assignment gives evidence of not being completely his/her own work, he/she may be given an F for the course. A student who communicates with anyone during the course of an examination or test, unless with the permission of the instructor, may be immediately dismissed from the room and given an F. Such communication includes attempt to read from another's paper. If a student is found to have brought study materials into the examination room without the instructor's permission, it may be assumed that he/she intended to use such materials unlawfully, and he/she may be penalized accordingly.”

Cheating is absolutely not tolerated. In cases where cheating on any activity has clearly been demonstrated, the student will receive an F for the course.

Students may only record (video, audio, photograph, etc.) a lecture with permission from the instructor, at the discretion of the instructor. This recording may only be used by the student, and may not be posted anywhere on the internet or otherwise shared or distributed.

In the event of evacuation students will be informed of class expectations by email and/or the Blackboard website. It is the student's responsibility to check this website and his/her Xavier email account for information.

Schedules

The following pages give an overview of the lecture and drill schedules. The first ten vocabulary quizzes cover 40 cards each and the last two cover 50 cards each, as listed below.

| | | | |
|-----------|--------------|--------------|---------------|
| 1: 1-40 | 4: 121-160 | 7: 241 - 280 | 10: 361 - 400 |
| 2: 41-80 | 5: 161-200 | 8: 281 - 320 | 11: 401 - 450 |
| 3: 81-120 | 6: 201 - 240 | 9: 321 - 360 | 12: 451 - 500 |

Final Exam Schedule: All students taking Chemistry 2210 will take the final exam at the same time, **Saturday, May 5, 2012 at 1:30 p.m.** The drill sections have no finals of their own.

Lecture Schedule

| Monday | Wednesday | Friday |
|--------------------------------------|--------------------------------------|-----------------------------------|
| Jan 9 Ch 1 | Jan 11 Ch 1 | Jan 13 Ch 1 |
| Jan 16 M. L. King Holiday | Jan 18 Ch 1 | Jan 20 Ch 2, 15 |
| Jan 23 Ch 2, 15 | Jan 25 Ch 2, 15 | Jan 27 Ch 2, 3 |
| Jan 30 Ch 2, 3 | Feb 1 Ch 2, 3 | Feb 3 Ch 2,3 |
| Feb 6 Nomenclature | Feb 8 Nomenclature | Feb 10 Nomenclature |
| Feb 13 Ch 4 | Feb 15 Ch 4 | Feb 17 Ch 4 |
| Feb 20 Mardi Gras Holidays | Feb 22 Mardi Gras Holidays | Feb 24 First Hour Exam |
| Feb 27 Ch 4 | Feb 29 Ch 5 | Mar 2 Ch 5 |
| Mar 5 Ch 5 | Mar 7 Ch 5 | Mar 9 Ch 6, 7 |
| Mar 12 Ch 6, 7 | Mar 14 Ch 6, 7 | Mar 16 Ch 6, 7 |
| Mar 19 Ch 8 | Mar 21 Ch 8 | Mar 23 Ch 8 |
| Mar 26 Ch 8 | Mar 28 Ch 8 | Mar 30 Second Hour Exam |
| Apr 2 Spring Break | Apr 4 Spring Break | Apr 6 Spring Break |
| Apr 9 Ch 9, 10 | Apr 11 Ch 9, 10 | Apr 13 Ch 9, 10 |
| Apr 16 Ch 9, 10 | Apr 18 Ch 9, 10 | Apr 20 Ch 9, 10 |

| | | |
|------------------|---|------------------|
| Apr 23 Ch 11 | Apr 25 Ch 11 | Apr 27 Ch 11* |
| Apr 30 Review | FINAL EXAMINATION SATURDAY MAY 5, 2012 - 1:30 P.M. | |

Drill Schedule

| Monday | Tuesday | Wednesday | Thursday |
|--|---|---|---------------------------------------|
| Jan 9 Orientation, Work Session, | Jan 10 Orientation, Work Session, | Jan 11 Orientation, Work Session | Jan 12 Orientation Work Session |
| Jan 16 M. L. King Holiday | Jan 17 Work Session, V1 | Jan 18 Work Session, V1 | Jan 19 Work Session, V1 |
| Jan 23 Ch 1, V1 | Jan 24 Ch 1, V2 | Jan 25 Ch 1, V2 | Jan 26 Ch 1, V2 |
| Jan 30 Chs 2, 15, V2 | Feb 31 Chs 2, 15, V3 | Feb 1 Chs 2, 15, V3 | Feb 2 Chs 2, 15, V3 |
| Feb 6 Ch 2, 3, V3 | Feb 7 Ch 2, 3, V4 | Feb 8 Ch 2, 3, V4 | Feb 9 Ch 2, 3, V4 |
| Feb 13 Exam Review, V4 | Feb 14 Exam Review, V5 | Feb 15 Exam Review, V5 | Feb 16 Work Session, V5 |
| Feb 20 Mardi Gras Holidays | Feb 21 Mardi Gras Holidays | Feb 22 Mardi Gras Holidays | Feb 23 Exam Review |
| Feb 27 Nomenclature, V5 | Feb 28 Nomenclature | Feb 29 Nomenclature | Mar 1 Nomenclature |
| Mar 5 Ch 4, V6 | Mar 6 Ch 4, V6 | Mar 7 Ch 4, V6 | Mar 8 Ch 4, V6 |
| Mar 12 Ch 5, V7 | Mar 13 Ch 5, V7 | Mar 14 Ch 5, V7 | Mar 15 Ch 5, V7 |
| Mar 19 Ch 6,7, V8 | Mar 20 Ch 6,7, V8 | Mar 21 Ch 6,7, V8 | Mar 22 Ch 6,7, V8 |
| Mar 26 Exam Review, V9 | Mar 27 Exam Review, V9 | Mar 28 Exam Review, V9 | Mar 29 Exam Review, V9 |
| Apr 2 Spring Break | Apr 3 Spring Break | Apr 4 Spring Break | Apr 5 Spring Break |
| Apr 9 Ch 8, V10 | Apr 10 Ch 8, V10 | Apr 11 Ch 8, V10 | Apr 12 Ch 8, V10 |
| Apr 16 Special Exercise, V11 | Apr 17 Special Exercise, V11 | Apr 18 Special Exercise, V11 | Apr 19 Special Exercise, V11 |
| Apr 23 Ch 9, 10, V12 | Apr 24 Ch 9, 10, V12 | Apr 25 Ch 9, 10, V12 | Apr 26 Ch 9, 10, V12 |
| Apr 30 Final Exam Review | May 1 Quiet Day | Final Exam Saturday, May 5, 2012 | |