

Syllabus
Chemistry 2321-002
Spring 2008

Instructor:

Dr. Jimmy R. Rogers
Office hours: 2:00-4:00 Monday-Thursday
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Required Materials: *Organic Chemistry*, Sixth Edition, John McMurry
Study Guide and Solutions Manual for McMurry's Organic Chemistry.
Molecular Model Set.

Course Prerequisites: All students enrolled in this course must have successfully completed both CHEM 1441 (General Chemistry I) and CHEM 1442 (General Chemistry II).

Tentative Schedule: The following represents a tentative schedule of lecture and examination material for this semester. *The exact dates of the four major exams will be announced in class*

Date	Lecture Material
January 15, 17	Chapter 1, "Structure and Bonding." Chapter 2, "Polar Covalent Bonds; Acids and Bases."
January 22, 24	Chapter 3, "Organic Compounds: Alkanes and Cycloalkanes."
January 29, 31	Chapter 4, "Stereochemistry of Alkanes and Cycloalkanes."
February 5, 7	Exam 1 on Chapters 1-4. Chapter 5, "An Overview of Organic Reactions."
February 12, 14	Chapter 6, "Alkenes: Structure and Reactivity."
February 19, 21	Chapter 7, "Alkenes: Reactions and Synthesis."
February 26, 28	Finish Chapter 7.
March 4, 6	Exam 2 over Chapters 5-7. Chapter 8, "Alkynes: An Introduction to Organic Synthesis."
March 11, 13	Chapter 9, "Stereochemistry."
March 17-21	<i>Spring Break. Classes do not meet.</i>
March 25, 27	Finish Chapter 9.
March 28	<i>Last day to drop a class. Please review UTA's Drop Policy below.</i>
April 1, 3	Exam 3 over Chapters 8-9. Begin Chapter 10, "Alkyl Halides."
April 8, 10	Chapter 11, "Reactions of Alkyl Halides: Nucleophilic Substitutions and Eliminations."
April 15, 17	Finish Chapter 11.
April 22, 24	Exam 4 over Chapters 10-11. Begin Chapter 17, "Alcohols and Phenols."
April 29, May 1	Finish Chapter 17. Chapter 18, "Ethers and Epoxides; Thiols and Sulfides."
May 6, 11:00-1:30	Comprehensive Final Examination

Dropping the Course:

New Drop Policy: As a result of recent legislation passed by the Texas Legislature, any student who enrolls in a public institution of higher education as a first-time freshman in Fall 2007 or later will be limited to six dropped courses during the course of their academic career. This applies to UTA course work and course work completed at other Texas public institutions.

In addition, a student can only attempt the same course two times. On the third attempt, the student will be charged the equivalent of out-of-state tuition for the course.

If you need to drop the course, please see your major advisor. If you are an undeclared major and you need to drop the course, please see an advisor at the University Advising Center on the second floor of Davis Hall.

Paperwork: When dropping the course, you are responsible for seeing that all of the proper paperwork is completed and submitted to the appropriate university officials. If this paperwork is not completed, you will receive a letter grade corresponding to your earned grade, including zeros for all missed work.

If you are dropped from this class for non-payment of tuition, you may secure an Enrollment Loan through the Bursar's Office. You will not be allowed to continue attending class until your Enrollment Loan has been applied to any outstanding tuition or fees.

Grading:

4 one-hour exams	75%
Comprehensive Final Exam	25%

Four exams plus a Comprehensive Final Exam will be given. These exams will cover the reading, lecture material, and assigned problems. *Due to the nature of Organic Chemistry, each exam is comprehensive.*

Grade assignments:	<u>Average</u>	<u>Letter Grade</u>
	≥ 85.00%	A
	≥ 75.00%	B
	≥ 65.00%	C
	≥ 55.00%	D
	< 55.00%	F

Make-up Policy: *No make-up exams will be given, and any missed exams will result in a grade of zero. However, the final exam score will replace the lowest one-hour exam score if it is to the student's benefit.*

Homework: *Working through problems is the best way to learn the material in this course.* Each student is expected to work the homework sets from the textbook listed below. This homework will not be collected or graded, but in order to prepare for exams, be sure to work all of these problems.

Chapter 1	1-45
Chapter 2	1-32, 34-37, 39-48, 56, 57, 61
Chapter 3	1-27, 33-36, 39-55, 59
Chapter 4	1-5, 7-19, 21, 22, 24-38, 42, 43, 46, 51-53
Chapter 5	1-11, 13-17, 26-30, 34, 37-40
Chapter 6	1-31, 33-36, 39-49, 51-53
Chapter 7	1-17, 20, 21, 23-36, 38, 40-46, 50, 52
Chapter 8	1-43
Chapter 9	1-36, 38, 40-60, 63, 65-68, 80-83
Chapter 25	Read Section 25.2. Work these problems: 2-5, 36, 37
Chapter 10	1-37, 42
Chapter 11	1-32, 34-41, 45-50, 54, 56, 64, 65
Chapter 17	1-16, 26-35, 37, 38, 40, 41, 46, 47, 50, 55, 57
Chapter 18	1-15, 17, 18, 24-31

Examination Needs: You must bring the following to each examination:

UTA Student ID Card

Scantron 882-E Answer Form

No. 2 pencils with eraser

Note: Unless otherwise specified, the use of calculators will not be allowed during exams.

Students are not allowed to have access to cell phones or digital pagers during any exam.

Attendance:

Faithful attendance is mandatory (excessive absences will lower the final grade), but attendance alone is not sufficient. Active participation is essential for success. Participation includes advance preparation of reading assignments, coming to class prepared with molecular models, and involvement with classroom discussions. Questions are always welcomed; I will be happy to re-explain concepts. Successful participation in the classroom will frequently stimulate continuing discussion outside the classroom, both with fellow students and with the instructor. These ongoing interactions will prove valuable, and they are to be encouraged. An important point is that class time is limited, and I will not have time to cover all of the material given as reading assignments. You are responsible for all of the material covered in the lectures, the assigned text, and the problems.

Class Communication: E-mail is the prime means for communication. Therefore, the University has the right to send communications to students via e-mail and the right to expect that those communications will be received and read in a timely fashion. The Office of Information Technology (OIT) will assign all students an official University e-mail address. It is to this official address that the University will send e-mail communications. Students are expected to check their official e-mail account on a frequent and consistent basis to stay current with University communications. The University recommends checking e-mail daily; in recognition that certain communications may be time-critical.

Cell Phones: Please silence all cell phones prior to class.

Course Goals: Upon completing the course, the student should be able to:

- 1) Correctly name organic compounds using IUPAC nomenclature, or, given an IUPAC name, depict the molecular structure.
- 2) Accurately represent the structure of any organic compound, both on paper and also in three dimensional space using models or drawings.
- 3) Account for the physical properties and chemical reactivity of any organic compound on the basis of molecular structure.
- 4) Predict the outcome of an organic reaction, given the identities of the reactants.
- 5) Recognize important substances and chemical processes which have practical applications in household, laboratory, industry, and medicine.
- 6) Use the theoretical concepts of reactive intermediates, molecular orbitals, hybridization, resonance, tautomerism, and polarity in discussing the structure and reactivity of organic compounds.

Chemistry Assistance:

Supplemental Instruction: Supplemental Instruction (SI) sessions will be held at times and locations to be announced in class.

Science Education and Career Center: The Science Education and Career Center, located in Room 105 of the Life Science Building, provides a variety of materials for assisting Chemistry students, including old Chemistry 2321 exams.

Chemistry Clinic: The Chemistry Clinic, located in Room 219 Science Hall, will be staffed with tutors available to answer your questions related to lecture and homework. Hours of the Chemistry Clinic will be announced in class. This service is free for students enrolled in Chemistry 2321.

SOAR Cost Share Tutoring: SOAR (Students Obtaining Academic Readiness) is located in 132 Hammond Hall and offers free academic support for qualifying students and low-cost services for all students, including Cost Share Tutoring.

Strategies for Succeeding in Chemistry 2321:

1. Attend *every* lecture.
2. Prior to class, read the chapter which will be covered in lecture.
3. Review your lecture notes after each class. Correct obvious errors and note topics which require further study or clarification.
4. Work all of the suggested homework problems. Do not look in the solutions manual until you have given your best effort to solve the problem on your own.
5. Use practice tests available from the Science Learning Center.
6. Spend the necessary amount of time studying chemistry. The rule of thumb for succeeding in Chemistry is three hours of study for every hour of lecture. This means that at a minimum you should plan to study Chemistry nine hours each week.
7. Don't procrastinate. These concepts take time to sink in, and you may have to practice these exercises over a period of many days in order master the necessary skills.
8. Form a study group. This is your first avenue for getting help. Be able to communicate with each other on short notice, not just before class.

Grade Replacement Policy and Taking the Course Pass/Fail

Students enrolling in this course with the intention of replacing a previous grade earned in the same course must declare their intention to do so with the registrar *no later than Census Date* (January 30, 2008). Please consult the Undergraduate Catalog (pages 30-31 in the 2007-2008 edition) for the university policy regarding grade replacement.

If P or F is a grade option in this class and you intend to take this class for a pass/fail grade instead of a letter grade, you *must* inform the instructor, through the necessary paperwork, of your intentions *before* the census date (January 30, 2008). Please consult the Undergraduate Catalog (page 31 in the 2007-2008 edition) for the university policy regarding taking a course pass/fail.

Academic Dishonesty:

All students are expected to pursue their scholastic careers with honesty and integrity, and the Department of Chemistry and Biochemistry will not tolerate academic dishonesty in any form. "Scholastic dishonesty includes but is not limited to cheating, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Part One, Chapter VI, Section 3, subsection 3.2, Subdivision 3.22)

Examples of academic dishonesty includes:

- exchanging answers or information during a test or quiz
- looking at another student's paper during a test or quiz
- bringing notes in any form into the test or quiz, including written notes (crib sheets), digitally stored information (including formulas, constants, alpha-numeric material or text), or notes stored in any other medium
- looking at a book or other source during the quiz or test

During tests or quizzes, students are not allowed to use any hand-held calculators or computers which possess the capability of storing alpha-numeric or textual material. If the instructor allows the use of calculators on a particular test, then students may only use scientific calculators which are non-programmable. In addition, students are not allowed to have access to digital pagers during any test or quiz. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced.

Americans with Disabilities Act

The University of Texas at Arlington is committed to the spirit and letter of federal equal opportunity legislation. The Americans with Disabilities Act (ADA) provides those with disabilities with the same opportunities as all citizens.

If you require an accommodation based on disability, I would like to meet with you in the privacy of my office, during the first week of the semester, to make sure you are appropriately accommodated.

Bomb Threats:

In the event of a bomb threat to a specific facility, University Police will evaluate the threat. If required, exams may be moved to an alternate location, but **exams will not be postponed**. UT-Arlington will prosecute those phoning in bomb threats to the fullest extent of the law.