# Organic Chemistry I -- Lecture

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CHEM-2323

Fall 2011

08/22/2011 - 12/11/2011

# Course Information

#### Section 001

Lecture MW 12:00PM - 1:20PM CYP1 1118 Madan Mohan mohan@austincc.edu (512) 223.2114

# Section 101

Lecture MW 12:00PM - 1:20PM CYP1 1118 Madan Mohan mohan@austincc.edu (512) 223.2114

# Office Hours

T Th
 12:00PM - 2:00PM
 CYP Bldg. # 2201; Room # 12

# **COURSE SUBJECTS**

# **COURSE DESCRIPTION**

An introduction to the chemistry of carbon compounds. An integration of aromatic and aliphatic compounds treating the principal classes of each. Emphasis on molecular structure theory, stereochemistry, structure and reactivity, and reaction mechanisms.

# **COURSE RATIONALE**

This course covers the fundamental facts, laws, principles, theories and concepts of chemistry necessary for further work in science or science-related subjects.

# **COURSE REQUIREMENTS**

Prerequisites: CHEM 1312 or equivalent.Corequisistes: CHEM 2323 and CHEM 2123 must be taken simultaneously

# **REQUIRED TEXTS/MATERIALS**

Lecture: "Organic Chemistry", 10th ed., Solomons and Fryhle is the departmental text. You are free to use a current or older version of this text, or another book altogether. Do not attempt this course without a text.

#### **INSTRUCTIONAL METHODOLOGY**

This course consists of a lecture section only.

# **READINGS**

HOMEWORK: HOMEWORK IS DOING ALL THE PROBLEMS GIVEN AT THE END OF EACH CHAPTER. HOMEWORK IS ALSO READING THE CHAPTERS BEFORE AND AFTER THE CLASS. IF YOU DON'T UNDERSTAND ASK! IN CLASS OR COME TO MY OFFICE EITHER BY APPOINTMENT OR DURING OFFICE HOURS. TEST QUESTIONS WILL COME FROM THE HOMEWORK AS WELL AS LECTURE NOTES, SO IT IS SUGGESTED YOU WORK THE PROBLEMS.

# STUDENT LEARNING OUTCOMES/LEARNING OBJECTIVES

#### **COMMON COURSE OBJECTIVES**

Common course objectives are attached (for lecture only). They can also be found at:

http://www2.austin.cc.tx.us/chem/curriculum/index.htm

# COURSE EVALUATION/GRADING SCHEME

<u>HOMEWORK</u>: HOMEWORK IS DOING ALL THE PROBLEMS GIVEN AT THE END OF EACH CHAPTER. HOMEWORK IS ALSO READING THE CHAPTERS BEFORE AND AFTER THE CLASS. IF YOU DON'T UNDERSTAND ASK! IN CLASS OR COME TO MY OFFICE EITHER BY APPOINTMENT OR DURING OFFICE HOURS. TEST QUESTIONS WILL COME FROM THE HOMEWORK AS WELL AS LECTURE NOTES, SO IT IS SUGGESTED YOU WORK THE PROBLEMS.

**EXAMS:**There will be four regular exams. All exams will be given in the testing center during the *tentative* dates shown below. Grades may be curved at the discretion of the instructor. Make-up exams may be given with prior notice and/or under special circumstances (e.g., hospitalization or incarceration). There will be a 10-point penalty on exams given, for whatever reason, after the set exam dates. A comprehensive final is mandatory and 200 points worth.

THE GRADING SCALE FOR EXAMS IS: A = 90.0% - 100%; B = 80.0% - 89.0%; C = 70.0% - 79.0%; 0 = 60.0% - 69.0%; F = <60.0%

# **COURSE POLICIES**

ATTENDANCE: THERE IS A HIGH CORRELATION BETWEEN ATTENDING CLASS AND MAKING GOOD GRADES. ATTENDANCE WILL BE TAKEN EVERY DAY AND THOSE WHO HAVE MISSED 3 (THREE) TIMES WILL BE DROPPED. UP UNTIL TWO ABSENCES ALL EXCUSES ARE VALID AND AFTER THREE TIMES NO EXCUSES ARE VALID. THEREFORE, DO NOT TELL ME THAT YOU WILL MISS OR WHY YOU MISSED ASSUME YOU HAVE GOOD SENSE AND I WOULD RATHER NOT KNOW THE DETAILS, SINCE I HAVE A LOT OF STUDENTS. CHRONIC LATENESS IS A DISRUPTION OF MY CLASS AND AN ABUSE OF MY PATIENCE AND, LIKE EXCESSIVE ABSENCES, WILL AFFECT THE GRADE.

MAKE-UP EXAMS: ONLY THOSE STUDENTS WHO'S PROFESSOR ANNOUNCED THEIR EXAMS BEFORE THIS CLASS' ANNOUNCEMENT ARE ELIGIBLE FOR MAKE-UP EXAM. IF YOU REGISTERED FOR A CLASS

THAT CONFLICTS WITH THIS CLASS' EXAM SCHEDULE YOU ARE STRONGLY URGED TO USE "ADDS AND DROPS" TO REGISTER FOR A SECTION THAT DOES NOT CONFLICT WITH THIS CLASS SCHEDULE OR MAKE ARRANGEMENTS TO MISS THAT CLASS ON CONFLICTING DATES. STUDENTS WHO QUALIFY FOR MAKE-UP EXAMS MUST BRING THE CONFLICT TO THE ATTENTION OF THE PROFESSOR BEFORE THE EXAM.

<u>WITHDRAWAN POLICY</u>: ALL REQUESTS FOR WITHDRAWAL BY THE COLLEGE SET DEADLINE (NOVEMBER 17, 2011) WILL BE HONORED WITH AN ASSIGNMENT OF W (NO PENALTY). WITHDRAWAL AFTER THIS DEADLINE IS FOR NON-ACADEMIC REASONS ONLY AND RQUESTS FOR "W" WILL ONLY BE HONORED IF THE STUDENT:

- 1. HAS A GRADE OF C OR BETTER AT THE TIME OF REQUEST, AND
- 2. HAS MET WITH THE PROFESSORS PRIOR TO THE REQUEST FOR WITHDRAWAL TO DISCUSS THE NON-ACADEMIC PROBLEM.

It is the responsibility of each student to ensure that his or her name is removed from the roll should he or she decides to withdraw from the class. The instructor does, however, reserve the right to drop a student should he or she feel it is necessary. If a student decides to withdraw, he or she should also verify that the withdrawal is submitted <u>before</u> the Final Withdrawal Date. The student is also strongly encouraged to retain their copy of the withdrawal form for their records.

Students who enroll for the third or subsequent time in a course taken since Fall, 2002, may be charged a higher tuition rate, for that course.

State law permits students to withdraw from no more than six courses during their entire undergraduate career at Texas public colleges or universities. With certain exceptions, all course withdrawals automatically count towards this limit. Details regarding this policy can be found in the ACC college catalog.

INCOMPLETE GRADES (I): REQUEST FOR INCOMPLETE GRADES WILL BE CONSIDERED ON AN INDIVIDUAL BASIS, AND ARE GIVEN ONLY IN EXTREME OR UNUSUAL CIRCUMSTANCES.

An instructor may award a grade of "I" (Incomplete) if a student was unable to complete all of the objectives for the passing grade in a course. An incomplete grade cannot be carried beyond the established date in the following semester. The completion date is determined by the instructor but may not be later than the final deadline for withdrawal in the subsequent semester.

#### **Statement on Scholastic Dishonesty**

"Acts prohibited by the college for which discipline may be administered include scholastic dishonesty, including but not limited to, cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to, tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations; and homework."

A student attending ACC assumes responsibility for conduct compatible with the mission of the college as an educational institution. Students have the responsibility to submit coursework that is the result of their own thought, research, or self-expression. Students must follow all instructions given by faculty or designated college representatives when taking examinations, placement assessments, tests, quizzes, and evaluations. Actions constituting scholastic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, collusion, and falsifying documents. Penalties for scholastic dishonesty will depend upon the nature of the violation and may range from lowering a grade on one assignment to an "F" in the course and/or expulsion from the college. See the Student Standards of Conduct and Disciplinary Process and other policies at <a href="http://www.austincc.edu/current/needtoknow">http://www.austincc.edu/current/needtoknow</a>

# **Student Rights and Responsibilities**

Students at the college have the rights accorded by the U.S. Constitution to freedom of speech, peaceful assembly, petition, and association. These rights carry with them the responsibility to accord the same rights to others in the

college community and not to interfere with or disrupt the educational process. Opportunity for students to examine and question pertinent data and assumptions of a given discipline, guided by the evidence of scholarly research, is appropriate in a learning environment. This concept is accompanied by an equally demanding concept of responsibility on the part of the student. As willing partners in learning, students must comply with college rules and procedures.

#### Statement on Students with Disabilities

"Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office of Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do these three weeks before the start of the semester."

"Students who are requesting accommodation must provide the instructor with a letter of accommodation from the Office of Students with Disabilities (OSD) at the beginning of the semester. Accommodations can only be made after the instructor receives the letter of accommodation from OSD."

Each ACC campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic or other accommodations must request them through the Office for Students with Disabilities (OSD). Students are encouraged to request accommodations when they register for courses or at least three weeks before the start of the semester, otherwise the provision of accommodations may be delayed.

Students who have received approval for accommodations from OSD for this course must provide the instructor with the 'Notice of Approved Accommodations' from OSD before accommodations will be provided. Arrangements for academic accommodations can only be made after the instructor receives the 'Notice of Approved Accommodations' from the student.

Students with approved accommodations are encouraged to submit the 'Notice of Approved Accommodations' to the instructor at the beginning of the semester because a reasonable amount of time may be needed to prepare and arrange for the accommodations.

Additional information about the Office for Students with Disabilities is available at <a href="http://www.austincc.edu/support/osd/">http://www.austincc.edu/support/osd/</a>

## Safety Statement

Austin Community College is committed to providing a safe and healthy environment for study and work. You are expected to learn and comply with ACC environmental, health and safety procedures and agree to follow ACC safety policies. Additional information on these can be found at <a href="http://www.austincc.edu/ehs">http://www.austincc.edu/ehs</a>. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the Emergency Procedures poster and Campus Safety Plan map in each classroom. Additional information about emergency procedures and how to sign up for ACC Emergency Alerts to be notified in the event of a serious emergency can be found at <a href="http://www.austincc.edu/emergency/">http://www.austincc.edu/emergency/</a>.

Please note, you are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

#### **Statement on Academic Freedom**

"Institutions of higher education are conducted for the common good. The common good depends upon a search for truth and upon free expression. In this course the professor and students shall strive to protect free inquiry and the open exchange of facts, ideas, and opinions. Students are free to take exception to views offered in this course and to reserve judgment about debatable issues. Grades will not be affected by personal Views. With this freedom comes the responsibility of civility and a respect for a diversity of ideas and opinions. This means that students must take turns speaking, listen to others speak without interruption, and refrain from name-calling or other personal attacks."

# **Student Discipline Policy**

"Students at the College have the rights accorded to all persons under the Constitution to freedom of speech, peaceful assembly, petition, and association. These rights carry withthem the responsibility for each individual to accord the same rights to others in the College community and not to interfere with or disrupt the educational process. As willing partners in learning, it is expected that students will comply with College rules and procedures. ACC students are recognized as responsible persons who neither lose the rights nor escape the responsibilities of citizenship. Enrollment in the College indicates acceptance of the rules set forth in this policy, administered through the office of the Campus Dean of Student Services. Due process, through an investigation and appeal process, is assured to any student involved in disciplinary action."

#### **COURSE OUTLINE/CALENDAR**

Chapter 1: The Basics: Bonding and Molecular Structure

Chapter 2: Families of Carbon Compounds: Functional Groups and intermolecular Forces

Chapter 3: An Introduction to Organic Reactions and Their Mechanisms: Acids and Bases

\*Exam 1 (Sept. 12-19)

Chapter 4: Nomenclature and Conformations of Alkanes and Cycloalkanes

Chapter 5: Stereochemistry

\*Exam 2 (Oct. 5-12)

Chapter 6: Ionic Reactions: Nucleophilic Substitution and Elimination Reactions of Alkyl Halides

Chapter 7: Alkenes and Alkynes I: Properties and Synthesis, Elimination Reactions of Alkyl Halides

\*Exam 3 (Oct. 26-Nov. 2)

Chapter 8: Alkenes and Alkynes II Addition Reactions

Chapter 10: Radical Reactions

\*Exam 4 (Nov. 9-16)

Chapter 13: Conjugated unsaturated System

Chapter 14: Aromatic Compounds

Chapter 15: Reactions of Aromatic Compounds

Comprehensive Final (Dec. 1-7)

Exam dates are determine when the stated chapters are completed.

# **Use of ACC email**

All College e-mail communication to students will be sent solely to the student's ACCmail account, with the expectation that such communications will be read in a timely fashion. ACC will send important information and will notify you of any college related emergencies using this account. Students should only expect to receive email communication from their instructor using this account. Likewise, students should use their ACCmail account when communicating with instructors and staff. Instructions for activating an ACCmail account can be found at http://www.austincc.edu/accmail/index.php.

# **Testing Center Policy**

<u>Under certain circumstances, an instructor may have students take an examination in a testing center.</u>

Students using the Academic Testing Center must govern themselves according to the Student Guide for Use of ACC Testing Centers and should read the entire guide before going to take the exam. To request an exam, one must have:

- ACC Photo ID
- Course Abbreviation (e.g., ENGL)
- Course Number (e.g.,1301)
- Course Synonym (e.g., 10123)
- Course Section (e.g., 005)
- Instructor's Name

Do NOT bring cell phones to the Testing Center. Having your cell phone in the testing room, regardless of whether it is on or off, will revoke your testing privileges for the remainder of the semester. ACC Testing Center policies can be found athttp://www.austincc.edu/testctr/

#### **Student And Instructional Services**

ACC strives to provide exemplary support to its students and offers a broad variety of opportunities and services. Information on these services and support systems is available at: <a href="http://www.austincc.edu/s4/">http://www.austincc.edu/s4/</a>

Links to many student services and other information can be found at: http://www.austincc.edu/current/

ACC Learning Labs provide free tutoring services to all ACC students currently enrolled in the course to be tutored. The tutor schedule for each Learning Lab may be found at: http://www.autincc.edu/tutor/students/tutoring.php

For help setting up your ACCeID, ACC Gmail, or ACC Blackboard, see a Learning Lab Technician at any ACC Learning Lab.