CHEM 2321-002 – Organic Chemistry II
Spring 2017

Instructor:
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Section Information: CHEM 2321-002 meets Tuesday/Thursday 11:00 am – 12:20 pm in SH 100

Description of Course Content: The first part of a comprehensive survey of the chemistry of carbon compounds: their structure, properties, bonding, stereochemistry, reactions, and reaction mechanisms. Prerequisite: CHEM 1442 with a grade of C or better.

Required Textbooks and Other Course Materials:

Organic Chemistry, Second Edition, by David Klein
Student Study Guide & Solutions Manual, Second Edition, by David Klein
Molecular Model Set (recommended)
Course Lecture Notes (available at the UT-Arlington Bookstore)

Tentative Lecture Schedule: The following represents a ***tentative*** schedule of lectures and examination material for this semester. The exact dates of the four midterm exams will be announced in class. All due date of homework assignments are available directly on its website. You will be responsible for checking them and completing them by the due dates. ***As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.*** **Note that the Final Exam is scheduled for Wednesday, May 10 from 5:30 to 8:00 PM. Make sure to save this date because no make-up final exam will be given.**

Week of:	***Lecture Material***
January 17-20	Chapter 1, "A Review of General Chemistry."
January 23-27	Chapter 2, "Molecular Representations."
Jan. 30 – Feb. 3	Chapter 3, "Acids and Bases."
February 6-10	Chapter 4, "Alkanes and Cycloalkanes."
February 13-17	***Exam 1 (Tuesday, February 14), Chapters 1-4.*** Chapter 5, "Stereoisomerism."
February 20-24	Chapter 6, "Chemical Reactivity and Mechanisms."
Feb. 27 – Mar. 3	Chapter 7, "Substitution Reactions."
March 6-10	Chapter 8, "Alkenes: Structure and Preparation via Elimination Reactions."
March 13-17	*Spring Break: Classes Do Not Meet*
March 20-24	Finish Chapter 8. ***Exam 2 (Thursday, March 23), Chapters 5-8.***
March 27-31	Chapter 9, "Addition Reactions of Alkenes. Chapter 10, "Alkynes."
March 31	*Last Day to Drop Classes: submit requests to advisor prior to 4:00 PM.*
April 3-7	Chapter 11, "Radical Reactions."
April 10-14	***Exam 3 (Tuesday, April 11), Chapters 9-11.*** Chapter 12, "Synthesis."
April 17-21	Chapter 13, "Alcohols and Phenols."
April 24-28	Finish Chapter 13. ***Exam 4 (Thursday, April 27), Chapters 12-13.***
May 1-5	Chapter 14, "Ethers and Epoxides; Thiols and Sulfides."
May 10	**Comprehensive Departmental Final Examination, 5:30-8:00 PM.** Room locations for the final exam will be announced in class shortly before the end of the semester.

Important Dates

January 17	First Day of Classes
February 1	Census Date
March 13-17	Spring Vacation
March 31	Last Day to Drop Classes: submit requests to advisor prior to 4:00 PM.
May 5	Last Day of Classes
May 10	Final Exam from 5:30 PM to 8:00 PM.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend *at least* an additional 9 hours per week of their own time in course-related activities, including reading required material, completing assignments, preparing for exams, etc. *Students with a weak background in General Chemistry may find that they need to spend much more than 9 hours per week in study.*

Grading:	Mid-term exam average	60%	
	Online Homework	10%	
	Class participation/Attendance/Quizzes/Clickers	5%	
	Comprehensive Final Exam	25%	Wednesday, May 7, 5:30-8:00 PM

Four mid-term exams plus a Comprehensive Final Exam will be given. These exams will cover the reading, lecture material, and assigned problems. Each exam may include some multiple choice and some short answer (write-out) questions. Exams will not be curved, and no individual extra-credit assignments will be given. *Due to the nature of Organic Chemistry, each exam is comprehensive.*

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 mid-term exam score if it is to the student's benefit.*

Grade assignments:

Average	Letter Grade
≥ 88.00%	A
≥ 75.00%	B
≥ 65.00%	C
≥ 55.00%	D
< 55.00%	F

Exam Dates: (Please note that Exam Dates are tentative. Any changes to Exam Dates will be announced in class.)

Exam 1 (Chapters 1-4)	Tuesday, February 14
Exam 2 (Chapters 5-8)	Thursday, March 23
Exam 3 (Chapters 9-11)	Tuesday, April 11
Exam 4 (Chapters 12-13)	Thursday, April 27
Final Exam (Chapters 1-14)	Wednesday, May 10, 5:30-8:00 PM

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

UTA Student ID Card
No. 2 pencils with eraser
Scientific Calculator (only non-graphing calculators are allowed; you may not use a graphing calculator)
Students are not allowed to have access to cell phones or digital pagers during any exam.

WileyPlus Online Homework. This semester, we will use WileyPlus online homework as 10% of your overall grade in the course. Information on how to register for the WileyPlus online homework will be posted on Blackboard. There will be an assignment for each chapter covered this semester, and the lowest grade will be dropped. If you miss the due date, you may still complete the homework, but a 50% penalty will be applied. If you need help with the WileyPlus homework, please visit the Chemistry Clinic in SH 318. All of the due dates for the homework assignments are directly available on the online homework site. You are responsible for checking them and completing them by the due dates.

Additional Homework: *Working through problems is the best way to learn the material in this course.* In addition to the assigned homework problems on WileyPlus, which will count toward 10% of your grade, each student is expected to work homework problems found in the textbook. Although these problems will not be collected or graded, you are responsible for working them out. Be advised that just doing the simple drill problems is not adequate preparation; you should do the longer problem-solving type of questions as this really addresses whether you adequately understand the material.

Other Requirements:

1) Read this syllabus carefully. You are responsible for knowing all of the course policies listed in this syllabus.
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 homework problems. Do **not** look at the answers until you have given your **best** effort to solve the problem on your own. **Practice the problems that you find difficult until you are able to solve them without consulting the answers. This is the one of the most effective strategies that you can use to prepare for exams.**

5) 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.

Drop Policy: Students may drop or swap (i.e., add and drop concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. ***After the late registration period, students must see their academic advisor to drop a class or withdraw.*** Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. ***Students will not be automatically dropped for non-attendance.*** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/ses/fao).

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

Cell Phones: Please silence all cell phones prior to class. *Texting during class is inappropriate and will not be tolerated.*

Attendance: At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. *As the instructor of this section, I have elected to take attendance because most students in Organic Chemistry find that faithful attendance is necessary for succeeding in this course.* However, attendance alone is not sufficient. In order to succeed in the course, you must master the material, and this requires active participation. Participation includes advance preparation of reading assignments, working online homework problems as well as end-of-chapter problems in the textbook, and involvement with classroom discussions. You are responsible for all of the material covered in the lectures, the assigned text, and the problems.

Course Goals and Student Learning Outcomes: 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.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at http://www.uta.edu/universitycollege/resources/index.php.

Problem-Solving Skills Session: Dr. Rogers will conduct a "Problem-Solving Skills Session" each Tuesday afternoon, 3:30-5:00, room TBA. Emphasis will be given on practicing the skills learned in the Chemistry 2321 lecture. Attendance is optional.

Chemistry Clinic: The Chemistry Clinic, located in Room 318 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 2322.

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.

Supplemental Instruction (SI) is a FREE voluntary academic development program that increases student performance and retention. The program is offered to all students in this class, as well as for other historically difficult subjects on campus. SI provides regularly scheduled out-of-class peer facilitated sessions. Senior students (SI Leaders), who have successfully taken the course before, facilitate structured group study sessions to support students to master course content and learn effective study skills.

On average, students who attend SI on a regular basis, obtain a half letter to a full letter grade higher when compared to those students who do not attend. It is also a great way to get to know students in your class.
All SI Leaders receive extensive training. Session times will be presented by your SI Leader during the first week of class; alternatively you can visit our website at www.uta.edu/utsi

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.

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA),* and *Section 504 of the Rehabilitation Act.* All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of **a letter certified** by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting: **The Office for Students with Disabilities, (OSD)** www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability. **Counseling and Psychological Services, (CAPS)** www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos

Title IX Policy: The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit* www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu.

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

> *I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*
>
> *I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Additional information is available at https://www.uta.edu/conduct/.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/

Student Feedback Survey: At the end of each term, students enrolled in face-to-face and online classes categorized as "lecture," "seminar," or "laboratory" are directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback via the SFS database is aggregated with that of other students enrolled in the course. Students' anonymity will be protected to the extent that the law allows. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit http://www.uta.edu/sfs.

Final Review Week: For semester-long courses, a period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located **at the front/back of the room**. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911.