



Course CHEM 2325 – OU1 Organic Chemistry II
Professor Dr. John Sibert
Term Summer 2020
Meetings MWF 2:30 PM to 3:45 PM (Online)

Professor's Contact Information

Office Phone 972 883-2918
Email Address sibertj@utdallas.edu
Virtual Office Hours M, 4:00 - 5:00 PM; Th, 11:00 - 12:00 PM (Blackboard Collaborate)
TAs Somayeh Taslimy
Yalini Wijesundara
Peer Tutoring M, Th 11:00 AM - 5:00 PM
T, W, 11:00 AM - 7:00 PM
<https://www.utdallas.edu/studentsuccess/help-with-courses/peertutoring/>

General Course Information

Pre-requisites, Co-requisites, & other restrictions General Chemistry I, II and Organic Chemistry I

Course Description

This course is a continuation of Organic Chemistry I, CHEM 2323. Students who successfully complete this course acquire the ability to analyze and predict spectra of organic compounds, assess aromaticity of compounds and the reactivity of aromatic compounds, and to analyze the reactivity and properties of carbonyl-containing compounds. To learn organic chemistry requires dedication on the part of the student. I have designed this class with a clear structure – you should not view this course as self-paced. Organic Chemistry requires consistent, frequent study. Thus, I have constructed an environment in which you will learn lecture-by-lecture with clear expectations as to what you will need to do and by when. (See the accompanying “Summary of the Course” document for the appropriate pacing and study strategies.) Seek help if a concept is causing difficulties. The purpose of this course is to learn how organic molecules are characterized and the underlying basic principles that drive an organic reaction, allowing for both the explanation and prediction of chemical reactions. Some memorization is mandatory, but merely memorizing a certain reaction will only allow you to see a small part of organic chemistry. Understanding why the reaction occurs will enable you to see the bigger picture, appreciate what you are learning and retain the knowledge gained for future courses and standardized professional/graduate school exams.

Upon completing this class, students will

Learning Outcomes

- Be able to predict the reactivity of a variety of classes of organic compounds, including alcohols, amines, epoxides, aromatics, and carbonyl containing reactants.

- Be able to interpret spectral data of small organic molecules.
- Be able to predict reactivity of specific functional groups and to construct simple and efficient routes for the preparation of desired organic compounds.

Required Texts & Materials

L.G. Wade, Jr. "Organic Chemistry" 8th edition (hard copy or eBook).

Optional Texts, Readings, & Materials

1. Solutions manual
2. For review of Organic Chemistry I Foundations: "Organic Chemistry I as a Second Language" by David R. Klein.
3. Molecular model sets.

Course Policies

<p>Grading Criteria</p>	<p>Course Evaluation:</p> <table border="0"> <tr> <td>(i) Midterm Exams (5 x 14%)</td><td>70%</td></tr> <tr> <td>(ii) Final Exam</td><td>15%</td></tr> <tr> <td>(ii) Quizzes (Completion Grade)</td><td>10%</td></tr> <tr> <td>(iii) Attendance</td><td>5%</td></tr> </table> <p>Grading is on a traditional 10 point scale (i.e. 90 - 100 = A- to A+, 80 – 89 = B- to B+, etc.)</p> <p>1. Homework assignments (end of chapter and instructor written problems):</p> <ul style="list-style-type: none"> • Not collected or graded • Will be assigned specifically to match each lecture, key posted • Feedback to determine what you don't understand; will correlate with exam scores <p>2. Midterm exams:</p> <ul style="list-style-type: none"> • Exams are given during our class period as noted in the schedule. • Each exam is written for 60 minutes, but you will have the entire class time to complete, scan and submit it. • Exams will be posted on eLearning at the beginning of the class time (2:30 PM) on the day noted in the schedule. Students may print and complete (preferred) or use their own paper to complete the exam while scrolling through the exam on screen. The completed exam must be scanned by the student and submitted to chem2325@utdallas.edu by the end of the class period (3:45 PM). Your must include your name on any submitted work. • There will be no makeup exams given • A higher final exam score will automatically replace the lowest of the 5 exam scores. <p>3. Quizzes:</p> <ul style="list-style-type: none"> • There will be weekly quizzes. These will be posted on eLearning with a specified due date. Each quiz is to be downloaded, completed, scanned and sent to chem2325@utdallas.edu by the specified due date and time. The quiz will be checked for complete, logical answers, but not graded. The key will be posted after the submission date and should be used by each student to check his/her own work. <p>4. Final exam:</p> <ul style="list-style-type: none"> • Comprehensive exam • The final exam is 2 hours and 45 minutes long • The final exam must be taken and cannot be replaced by any other grade, so don't 	(i) Midterm Exams (5 x 14%)	70%	(ii) Final Exam	15%	(ii) Quizzes (Completion Grade)	10%	(iii) Attendance	5%
(i) Midterm Exams (5 x 14%)	70%								
(ii) Final Exam	15%								
(ii) Quizzes (Completion Grade)	10%								
(iii) Attendance	5%								

	miss it • No makeup final will be given. The day and time of the final exam will be determined by the University no later than June 4.
Make-up Exams	There are no make-up exams or quizzes . If a student misses one exam, the final exam will replace it. If two exams are missed, then one of the recorded exam scores will be zero.
Class Attendance	Your attendance (and participation/engagement) is CRITICAL for your ultimate performance in this course! Lectures will be given using Blackboard Collaborate, which is accessed through our eLearning page. Students may enter the lecture “room” 15 minutes before each lecture begins (2:30 PM CST). Each lecture that a student attends for a minimum of 60 minutes will count as attended. Each lecture that is partially (less than 60 minutes) or not attended will NOT count as an attended lecture. The percentage of attended lectures makes up 5% of your final course grade.
Student Conduct and Discipline	<p>The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations that govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, <i>A to Z Guide</i>, which is provided to all registered students each academic year.</p> <p>The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the <i>Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3</i>, and in Title V, Rules on Student Services and Activities of the university's <i>Handbook of Operating Procedures</i>. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).</p> <p>A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.</p>
Academic Integrity	<p>The faculty expects from its students a high level of responsibility and academic honesty, even more so in an online environment. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.</p> <p>Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, 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.</p> <p>Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.</p>
Copyright Notice	The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials, including music and software. Copying, displaying, reproducing, or distributing copyrighted works may infringe the copyright owner's rights and such infringement is subject to appropriate disciplinary action as well as criminal penalties provide by federal law. Usage of such

	<p>material is only appropriate when that usage constitutes “fair use” under the Copyright Act. As a UTD student, you are required to follow the institution’s copyright policy (Policy Memorandum 84-I.3-46). For more information about the fair use exemption, see:</p> <p>http://www.utsystem.edu/ogc/intellectualproperty/copypol2.htm</p>
Email Use	<p>The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student’s UTD email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at UTD provides a method for students to have their UTD mail forwarded to other accounts.</p>
Technical Support	<p>If you experience any problems with your UTD account, you may send an email to: assist@utdallas.edu or call the UTD Computer Helpdesk at 972-883-2911.</p>
Withdrawal from Class	<p>The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester’s course catalog. Administration procedures must be followed. It is the student’s responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of “F” in a course if you choose not to attend the class once you are enrolled.</p>
Student Grievance Procedures	<p>Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university’s <i>Handbook of Operating Procedures</i>.</p> <p>In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called “the respondent”). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent’s School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean’s decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.</p> <p>Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.</p>
Incomplete Grades	<p>As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester’s end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.</p>
Office of Student AccessAbility	<p>The Office of Student AccessAbility is committed to ensuring that qualified students with documented disabilities are provided with an equal opportunity to participate in the variety of educational, recreational and social opportunities at UT Dallas. The Office of Student AccessAbility provides:</p> <ol style="list-style-type: none"> 1. academic accommodations for students with a documented permanent physical,

	<p>mental or sensory disability</p> <p>2. non-academic accommodations</p> <p>3. resource and referral information and advocacy support as necessary and appropriate.</p> <p>Student AccessAbility</p> <p>Student Services Building 3.200 Phone: 972-883-2098 Fax: 972-883-6561 disabilityservice@utdallas.edu</p> <p>Office Hours</p> <p>Please check their website for summer hours.</p> <p>Mailing Address</p> <p>UT Dallas Student AccessAbility 800 W. Campbell Rd., SSB32 Richardson, TX 75083</p> <p>Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.</p> <p>It is the student's responsibility to notify his or her professors of the need for such an accommodation. Student AccessAbility Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.</p>
Religious Holy Days	<p>The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.</p> <p>The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.</p> <p>If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling</p>

	from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.
Off-Campus Instruction and Course Activities	Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm . Additional information is available from the office of the school dean.

Schedule

Class Period	Day	Date	Topic	Chapter
1	Wed	May 27	Intro, Course Structure, Org. Chem. 1 Review	
2	Fri	May 29	IR Spectroscopy	12
3	Mon	June 1	Mass Spectrometry	12
4	Wed	June 3	Proton NMR Spectroscopy	13
5	Fri	June 5	Proton NMR Spectroscopy	13
6	Mon	June 8	Carbon NMR Spectroscopy	13
7	Wed	June 10	EXAM 1	
8	Fri	June 12	Reactions of Alcohols	11
9	Mon	June 15	Reactions of Alcohols/Ethers	11,14
10	Wed	June 17	Ethers	14
11	Fri	June 19	Conjugated Systems	15
12	Mon	June 22	Conjugated Systems	15
13	Wed	June 24	EXAM 2	
14	Fri	June 26	Aromatic Systems	16
15	Mon	June 29	Aromatic Systems	16
16	Wed	July 1	Reactions of Aromatics	17
17	Fri	July 3	Reactions of Aromatics	17
18	Mon	July 6	EXAM 3	
19	Wed	July 8	Ketones and Aldehydes	18
20	Fri	July 10	Ketones and Aldehydes	18
21	Mon	July 13	Amines	19
22	Wed	July 15	Amines	19
23	Fri	July 17	EXAM 4	
24	Mon	July 20	Carboxylic Acids	20
25	Wed	July 22	Carboxylic Acids	20
26	Fri	July 24	Carboxylic Acid Derivatives	21
27	Mon	July 27	Carboxylic Acid Derivatives	21
28	Wed	July 29	Enols and Enolates	22
29	Fri	July 31	Enols and Enolates	22
30	Mon	Aug 3	EXAM 5	
	TBA	TBA	Cumulative Final Exam (date/time TBA no earlier than June 4)	

These descriptions and timelines are subject to change at the discretion of the Professor.