

Course Syllabus



Course	CHEM 2325.002 and .005
Course Title	Organic Chemistry Dos
Professor	Bruce M. Novak
Term	Spring 2022
Meetings	Section .002 T/Th 10:00 – 11:15 AM Section .005 T/Th 2:30 – 3:45 PM

Professor's Contact Information

Office Phone 972-883-4070

Office Location BE 3.516

Email Address bruce.novak@utdallas.edu

Office Hours T/Th 11:15 – 12:15 pm and T/Th 3:45 – 4:45 pm (both right after class), additional TBD, and by appointment.

Other Information Course is rated R for language and graphic depictions of molecular violence

SI Leader: Zaineb Saeed, Zaineb.Saeed@UTDallas.edu

Course Modality and Expectations

First Three Weeks: Synchronous, Online Lectures and Office Hours. January 18 – February 3.

Remainder of the Semester: In-class lectures (no recordings are planned)

Instructional Mode	The course will be taught in the Synchronous Remote format for the first three weeks and live lectures after that. Online synchronous attendance and live, in-class attendance are mandatory. The lectures will not be routinely recorded.
Course Platform	The three online weeks for the course will be delivered using Teams (links can be found on our eLearning page).
Expectations	The chapter material and other supplementary materials can be downloaded as pdf files from eLearning. Homework and course readings posted on eLearning is mandatory.
Synchronous Learning Guidelines (First three weeks)	<p>Technical Requirements In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage.</p> <p>Course Access and Navigation This course can be accessed using your UT Dallas NetID account on the eLearning website.</p> <p>Please see the course access and navigation section of the Getting Started with eLearning webpage for more information.</p> <p>To become familiar with the eLearning tool, please see the Student eLearning Tutorials webpage.</p> <p>UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The eLearning Support Center includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.</p> <p>Communication This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. For more details, please visit the Student eLearning Tutorials webpage for video demonstrations on eLearning tools.</p> <p>Student emails and discussion board messages will be answered within 3 working days under normal circumstances.</p> <p>Server Unavailability or Other Technical Difficulties The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online eLearning Help Desk. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.</p>

General Course Information

Pre-requisites, Co-requisites, & other restrictions	Prerequisite: CHEM 2323, Organic Chemistry 1
Course Description	<p>This course is a continuation of CHEM 2323. Students who 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.</p> <p>Tests (two, 90-minute Tests) will be in-person on the dates listed in the syllabus. The tests will be given at night (e.g., 8:00 PM start time).</p> <p>There will also be 4 open-book/notes quizzes given throughout the semester. Quizzes will be given on eLearning on the dates listed in the syllabus. You will have 30 minutes to complete the quiz after you start, and there will 6-hour time window to take the quiz (e.g., 2 pm - 8 pm, central time in the days scheduled for quizzes). If the provided time window to take the tests and quizzes does not work, then you should contact the instructor for re-scheduling 48 hours before the originally scheduled date.</p> <p>These assignments will serve to help with you learning the material each week and also serve as a form of participation for the course. Even if you do not know the answer to questions being asked, you should submit the assignment to demonstrate you have been participating in the course.</p> <p>Exam and quizzes are strictly individual assessments. For exams, students may only use a periodic table, molecular model kit, and pen/pencil and paper to work problems. For No other external aids such as notes, lectures, the book, or the internet, can be used.</p> <p>Students who do not have a laptop can find information about the UTD loan program at: https://www.utdallas.edu/oit/news/student-computer-checkout-availability/</p> <p>To learn organic chemistry requires dedication on the part of the student. This course traditionally does not reward the student who chooses to cram before the exams. You should attempt to keep up with the material on a daily basis. Read the materials posted on the eLearning page. Do the problem sets I post. Seek help via office hours if a concept is causing difficulties. Re-read the lecture materials after we cover them to reinforce the concepts. Also, remember this is not a memorization course. The course instead favors the student who can apply the information learned to a new example. Some memorization is mandatory, but merely memorizing a certain reaction will only allow you to see a very small part of organic chemistry. Understanding why the reaction occurs will enable you to see the bigger picture. Finally, always remember that the properties of organic molecules are determined by the location of electrons.</p>

	<p>Office Hours. Office Hours are generally run as group problem solving sessions. Even if you do not have specific questions, please come and listen to other students questions and subsequent answers. This will greatly help your understanding of course topics. In the absence of specific questions, I will just start making up questions for the attendees to do.</p>
Learning Outcomes	<p>Upon completing this class, students will:</p> <ul style="list-style-type: none"> • Be able to analyze unknown organic compounds through spectroscopy and to predict the spectra of known organic compounds. • Be able to assess aromaticity of organic compounds and to predict the reactivity of aromatic compounds. • Be able to predict the reactivity of various functional groups, including carbonyl compounds, and to construct simple and efficient routes for the preparation of desired organic compounds.
Required Texts & Materials	L.G. Wade, Jr., "Organic Chemistry", eighth edition, 2012 (Really this book is optional. I will provide you with readings and homework sets for the semester.)
Recommended Materials	Molecular model kit
PLTL Program	<p>Peer Led Team Learning (PLTL) is a program designed to provide an active learning experience in which students can gain the skills and confidence to be successful learners in Organic Chemistry and other historically difficult courses. In weekly ninety-minute PLTL sessions, small groups of students will work together to solve problems written by faculty members. An undergraduate PLTL leader who is trained in group facilitation and has the mastery of course content will lead them. This is an optional component to the course, however, if you choose to participate, you are expected to stay in the program throughout the semester. You can learn more about PLTL at the following link: https://www.utdallas.edu/studentsuccess/help-with-courses/peer-led-team-learning/. If you would like to pre-register to be a part of priority registration, you can fill out the following form by Tuesday, January 19, 2021 @ 12PM CST: https://eforms.utdallas.edu/utd-pltl-lottery. Registration will be during the first week of classes. For more questions, you can email PLTL@utdallas.edu.</p>
SI Program	<p>Supplemental Instruction (SI) provides free, collaborative-group study sessions that follow the instruction of the course. SI sessions encourage active, collaborative learning based on critical thinking and transferable study skills. Sessions will directly reflect the content covered during the class sessions. This fall, SI sessions will be held via Blackboard Collaborate. Students will be enrolled in their SI Shell on eLearning during the first week of school. They will find access to the SI services under the My Organizations section on eLearning. Each course will have a shell and will be labeled based on the course name, i.e., "SI – CHEM 2325." Your SI leader for this semester will be Zaineb Saeed, Zaineb.Saeed@UTDallas.edu</p>

Assignments and Academic Calendar

Lec	Date	TOPIC	Chapter	Quiz/Test
1	1/18	Carbon and Proton NMR	13.1-13.11	No
2	1/20	Carbon and Proton NMR	13.1-13.11	No

3	1/25	Carbon and Proton NMR	13.1-13.11	No
4	1/27	Carbon and Proton NMR	13.1-13.11	No
5	2/01	Carbon and Proton NMR	13.1-13.11	No
	2/02	QUIZ 1 (Tentative date)		YES
6	2/03	Reactions of Alcohols	11.1-11.11	No
7	2/08	Reactions of Alcohols / Protecting Groups	11.1-11.11	No
8	2/10	Aldehydes and Ketones	18.7-18.20	No
9	2/15	Aldehydes and Ketones	18.7-18.20	No
10	2/17	Aldehydes and Ketones	18.7-18.20	No
11	2/22	Aldehydes and Ketones	18.7-18.20	No
	2/23	QUIZ 2 (Tentative date)		YES
12	2/24	Enols and Enolates	22.5-22.11	No
13	3/01	Enols and Enolates	22.5-22.11	No
	3/02	TEST 1		YES
14	3/03	Enols and Enolates	22.5-22.11	No
			22.18-22.19	
15	3/08	Enols and Enolates	22.18-22.19	No
16	3/10	Carboxylic Acids and their Derivatives	21.1-21.9	No
	3/14	<i>Spring Break</i>		
	3/16	<i>Spring Break</i>		
17	3/22	Carboxylic Acids and their Derivatives	21.1-21.9	No
18	3/24	Carboxylic Acids and their Derivatives	21.1-21.9	No
19	3/29	Carboxylic Acids and their Derivatives	21.1-21.9	No
	3/30	Quiz 3 (Flexible Date, Instructors choice)		YES
20	3/31	Carboxylic Acids and their Derivatives	20.7-20.15	No
21	4/05	Conjugated π -Systems and Molecular Orbitals	15.1-15.13	No
	4/06	TEST 2		YES
22	4/07	Conjugated π -Systems and Molecular Orbitals	15.1-15.13	No
23	4/12	Aromatic Compounds and their Reactions	16.2-16.10	No
24	4/14	Aromatic Compounds and their Reactions	16.2-16.10	No
25	4/19	Aromatic Compounds and their Reactions	16.2-16.10	No
26	4/21	Aromatic Compounds and their Reactions	16.2-16.10	No
27	4/26	Reactions of Amines	19.1,19.3,19.8	No
28	4/28	Reactions of Amines	19.11,19.14, 19.20	No
29	5/03	Biological Chemistry: Sugars	23.3-23.16	No
	5/04	Quiz 4 (Flexible Date, Instructors choice)		YES
30	5/05	Biological Chemistry: Sugars (last lecture)	23.3-23.16	No
		Final Examination Time/Location tbd (May 07 – May 13)		

Days with either a test or quiz are marked in bold

Course Policies

Grading (credit) Criteria	Grades will be determined from a combination of 4 quizzes, 2 tests, and a final exam. The lowest exam grade can be substituted with the final exam (by percentage).			
	Tests	2 x 250	500 points	
	Quizzes	4 x 50	200 points	
	Final Test	1 x 300	300 points	
	Total		1000 points	
	900 – 1000 = A+	700 – 759 = B+	550 – 599 = C+	400 – 449 = D+
	800 – 899 = A	650 – 699 = B	500 – 549 = C	350 – 399 = D
	760 – 799 = A-	600 – 649 = B-	450 – 499 = C-	<350 = F
	<i>This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:</i> <i>“As a Comet, I pledge honesty, integrity, and service in all that I do.”</i>			
Make-up Exams	There are no make-up exams or quizzes except for University excused absences.			
Academic Support Resources	<i>The information contained in the following link lists the University’s academic support resources for all students.</i> <i>Please go to http://go.utdallas.edu/academic-support-resources.</i>			
UT Dallas Syllabus Policies and Procedures	<i>The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus.</i> <i>Please go to http://go.utdallas.edu/syllabus-policies for these policies.</i>			

COVID-19 Guidelines and Resources

The information contained in the link lists the University’s COVID-19 resources for students and instructors of record. Visit [Comets United webpage](http://go.utdallas.edu/comets-united) to obtain the latest information on the University’s guidance and resources for campus health and safety. Additional information can be found at <http://go.utdallas.edu/syllabus-policies>.

Class Participation

Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. Participation also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures. Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Class Recordings

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may

not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Course lectures will not be routinely recorded. Lectures will be recorded only when there is student absences due to student covid quarantine/isolations. These recordings will be available to all students registered for this class. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Comet Creed

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The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.