Course Syllabus



Course CHEM 2325.001 & .002 Course Title Organic Chemistry Dos Professor Bruce M. Novak Term Fall 2023 Section .001 T/Th 8:30 – 9:45AM SCI 1.210 Section .002 T/Th 11:30 – 12:45 AM/PM SLC 2.303

Professor's Contact Information

Office Phone	972-883-4070	
Office Location		
Email Address	bruce.novak@utdallas.edu	
Office Hours	T/Th 1:00 - 2:00 in BE 2.528 or BE3.516, additional hours TBD, and by appointment.	
Other Information	Course is rated R for language and graphic depictions of molecular violence	

SI Leader: Taha Khalilullah (<u>txk190018@utdallas.edu</u>)

Course Modality and Expectations

In-class lectures (not recorded)

Instructional Mode	In-class attendance is mandatory. Missing three sections will lower your grade by one level (included are +/- levels, e.g., B- to C+)			
Course Platform	eLearning Course Page			
Expectations	The chapter material and other supplementary materials can be downloaded as pdf files from eLearning. Homework and course readings posted on eLearning are mandatory.			
Synchronous Learning Guidelines	 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. Course Access and Navigation This course can be accessed using your UT Dallas NetID account on the elearning website. Please see the course access and navigation section of the Getting Started with elearning website. Please see the course access and navigation section of the Getting Started with elearning webpage for more information. To become familiar with the eLearning tool, please see the <u>Student elearning Tutorials</u> webpage. 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. 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 <u>Student elearning Tutorials</u> webpage for video demonstrations on elearning tools. Student emails and discussion board messages will be answered within 1 working day under normal circumstances. 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 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.			

General Course Information

General Course			
Pre-requisites, Co-requisites, & other restrictions	Prerequisite: CHEM 2323, Organic Chemistry 1		
	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.		
	Tests: Three, 75-minute Tests will be in-person on the dates listed in the syllabus. The tests will be given on Wednesday evenings, 7:00-8:15 PM. As of this writing the testing rooms will be ECSW 1.315 and HH 2.402. Further details will be announced.		
	Exams are strictly individual assessments . For exams, students may only use a periodic table, molecular model kit, and pen/pencil and paper to work problems. No other external aids such as notes, lectures, the book, or the internet, can be used.		
Course Description	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.		
	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.		
Learning Outcomes	 Upon completing this class, students will: 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. 		

Recommended Texts & Materials Recommended Materials	L.G. Wade, Jr., "Organic Chemistry", 8 th or 9 th edition (Really, this book is optional. I will provide you with readings and homework sets for the semester.) Molecular model kit		
PLTL Program	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: <u>https://www.utdallas.edu/studentsuccess/help-with- courses/peer-led-team-learning/</u> . 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: <u>https://eforms.utdallas.edu/utd-pltl- lottery</u> . Registration will be during the first week of classes. For more questions, you can email <u>PLTL@utdallas.edu</u> .		
SI Program	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 Taha Khalilullah (txk190018@utdallas.edu).		

Assignments and Academic Calendar

Lec	Date	TOPIC	Chapter	Quiz/Test
1	8/22	IR & Carbon NMR	12.1-12.12 & 13.1-13.11	No
2	8/24	Carbon and Proton NMR	13.1-13.11	No
3	8/29	Carbon and Proton NMR	13.1-13.11	No
4	8/31	Carbon and Proton NMR	13.1-13.11	No
5	9/05	Carbon and Proton NMR	13.1-13.11	No
6	9/07	Reactions of Alcohols	11.1-11.11	No
7	9/12	Reactions of Alcohols / Protecting Groups	11.1-11.11	No
	9/13	Test 1, 7-8:15 PM, location (ECSW 1.315 &	& HH 2.402)	YES
8	9/14	Aldehydes and Ketones	18.7-18.20	No
9	9/19	Aldehydes and Ketones	18.7-18.20	No
10	9/21	Aldehydes and Ketones	18.7-18.20	No
11	9/26	Aldehydes and Ketones	18.7-18.20	No
12	9/28	Enols and Enolates	22.5-22.11	No
13	10/3	Enols and Enolates	22.5-22.11	No
14	10/5	Enols and Enolates	22.5-22.11	No
			22.18-22.19	

15	10/10	Enols and Enolates	22.18-22.19	No
	10/11	Test 2, 7-8:15, location ((ECSW 1.315 & HH 2.402)		YES
16	10/12	Carboxylic Acids and their Derivatives	21.1-21.9	No
17	10/17	Carboxylic Acids and their Derivatives	21.1-21.9	No
18	10/19	Carboxylic Acids and their Derivatives	21.1-21.9	No
19	10/24	Carboxylic Acids and their Derivatives	21.1-21.9	No
20	10/26	Carboxylic Acids and their Derivatives	20.7-20.15	No
21	10/31	Conjugated π -Systems and Molecular Orbitals	15.1-15.13	No
22	11/02	Conjugated π -Systems and Molecular Orbitals	15.1-15.13	No
23	11/07	Aromatic Compounds and their Reactions	16.2-16.10	No
	11/8	Test 3, 7-8:15, location (ECSW 1.315 & HH 2.402)		YES
24	11/09	Aromatic Compounds and their Reactions	16.2-16.10	No
25	11/14	Aromatic Compounds and their Reactions	16.2-16.10	No
26	11/16	Aromatic Compounds and their Reactions	16.2-16.10	No
	11/21	Fall Break		
	11/23	Fall Break		
27	11/28	Reactions of Amines	19.1,19.3,19.8	No
28	11/30	Reactions of Amines	19.11,19.14,	No
			19.20	
29	12/05	Biological Chemistry: Sugars	23.3-23.16	No
30	12/07	Biological Chemistry: Sugars (last lecture)	23.3-23.16	No
	12/14	Final Examination: Week of 12/9 – 12/15		YES
		(ECSW 1.315 & HH 2.402)		

Days with either a test or quiz are marked in bold

Course Policies

Course roneies				
	Grades will be determined from a combination the three tests, and the final exam. The lowest test grade will be substituted with the final exam score.			
Grading (credit) Criteria	Tests 3	x 100 300 p x 100 100 p 400 p	points points	
	90.0 - 100 = A + 80.0 - 89.9 = A $76.0 - 79.9 = A$	70.0 - 75.9 = B + 65.0 - 69.9 = B - 60.0 - 64.9 = B - 60.0 - 60.0 - 60.0 = B - 60.0 = B - 60.0 = B - 60.0 = 0.0	55.0 - 59.9 = C + 50.0 - 54.9 = C $45.0 - 49.9 = C$	40.0 - 44.9 = D + 35.0 - 39.9 = D <35.0 = F
	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: "As a Comet, I pledge honesty, integrity, and service in all that I do."			
Make-up Exams	There are no make-up exams except for University excused absences.			
Academic Support Resources	The information contained in the following link lists the University's academic support resources for all students. Please go to http://go.utdallas.edu/academic-support-resources .			
UT Dallas Syllabus Policies and Procedures	The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <u>http://go.utdallas.edu/syllabus-policies</u> for these policies.			

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 <u>Comets United webpage</u> to obtain the latest information on the University's guidance and resources for campus health and safety Additional information can be found at <u>http://go.utdallas.edu/syllabus-policies.</u>

Class Participation

Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty and docking your grade (Missing three sections will lower your grade by one level (included are +/- levels, e.g., B- to C+). 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 <u>Student Code of Conduct</u>.

Class Recordings

Course lectures will not be recorded although online review sessions will be. 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 <u>Student Code of Conduct</u>.

Comet Creed

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:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

Academic Support Resources

The information contained in the following link lists the University's academic support resources for all students. Please go to <u>Academic Support Resources</u> webpage for these policies.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

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