

DRAFT 1 Course Syllabus



Course CHEM 2325.001 & .002
Course Title Organic Chemistry II
Professor Bruce M. Novak
Term Fall 2025
Section .001 M/W 10:00 – 11:15 AM
SLC 2.303
Meetings Section .002 M/W 1:00 – 2:15 PM
SLC 2.303

Professor's Contact Information

Office Phone 972-883-4070 (please use email)
Office Location BE 3.516
Email Address Bruce.Novak@UTDallas.edu
Office Hours M/W 2:30 - 3:30 PM in BE 2.528 (group office hours) or BE 3.516 (one-on-one meetings by appointment).

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

SI Leaders:

Faiz Mustafa, Faiz, Faiz.Mustafa@UTDallas.edu
Tavri Mohammed, Tavri.Mohammed@UTDallas.edu

SI Session Times: Once settled, these will be located on the last page of this syllabus.

TA's:

Benjamin John, Benjamin.John@UTDallas.edu
Ibrahim Alsahhar, Ibrahim.Alsahhar@UTDallas.edu
Josiah Garner, Josiah.Garner@UTDallas.edu

TA Session Times: Once settled, these will be located on the last page of this syllabus.

PLTL Leaders:

James (Quinn) Miller, James.Miller@UTDallas.edu
Sameeha Gazi, Sameeha.Gazi@UTDallas.edu

Course Modality and Expectations

Instructional Mode	In-class lectures (not recorded).
Course Platform	eLearning Course Page. Periodic Exam Review sessions and Exam Postmortems will be on BB Collaborate (all recorded and posted on eLearning).
Expectations	<p>All course material can be downloaded as pdf files from eLearning. It is mandatory that you will read the course documents and do <i>all</i> of the posted homework sets. Recorded Exam Review Sessions and Recorded Exam Postmortems (in-depth explanation of each unit exam after each unit exam) posted on eLearning are also mandatory to view.</p> <p>Lecture attendance is mandatory. Missing four sessions (2 weeks), may subject you to lowering your course grade by one step, i.e., A- to B+, etc.</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 and amines.</p> <p>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. Dates: September 17th, October 15th, and November 12th. The Final Exam day tbd.</p> <p>Exams are strictly individual assessments. For exams, students may only use a periodic table, molecular model kit, organic stencils, and pen/pencil to work problems. No other external aids such as notes, lectures, the book, or the internet, can be used. There are no makeup exams except for University excused absences. In lieu of makeup exams, the Final Exam score will replace a missed exam (or the lowest exam score), <i>vide infra</i>.</p> <p>Regrades: Exams will be accepted for regrades after students view the key and preferably the online Exam Postmortems. Normally, the graded exams will be returned on the week following the exam. Online, recorded Exam Postmortems will be held after the exams are returned. These Exam Postmortems, and all review sessions, are mandatory and can be attended live or by viewing the recordings. During the Exam Postmortems, I will be doing a deep dive explaining how each problem is solved. This is an important learning opportunity because your Final Exam is cumulative. You have one week after the Exam Postmortem to return your exam for a regrade. When turning it in, please return it in its manila envelope and put a note on the front exam page directing me to the problems you want me to look at.</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 need to keep up with the material on a daily basis. Re-write your notes. 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. That being said, some memorization is required (flashcards can be quite helpful), but merely memorizing a certain reaction will only allow you to see a very small part of organic chemistry. Reaction mechanisms (the step-by-step conversion of starting materials to products) will be heavily emphasized. Understanding mechanisms, the why's and how's reactions occur, will enable you to see the bigger picture and provide you the power of predictability.</p> <p>Group Office Hours. 2:30 – 3:30 M/W in BE 2.528. 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. The problems and their solutions we work on will be made available to everyone.</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, amines, alcohols, and to construct simple and efficient routes for the preparation of desired organic compounds. • Understand the mechanisms (the step-by-step chemical reactions beginning with starting materials and ending with the desired product(s)).
Textbook and Required Materials	<p>L.G. Wade, Jr., "Organic Chemistry", 8th or 9th edition. The textbook for the course is recommended. The important content material and other supplementary materials can be downloaded as pdf files from eLearning. One manila envelope (reusable), marked with your full name and section number, envelope is to be brought with you to each of the three exams. The purpose of such is to protect your privacy.</p>
Recommended Materials	<p>Molecular model kit, Organic drawing stencil, and sharp pencils.</p>
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 eighty-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 mastery of course content will lead them. This is an optional component of 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/studentssuccess/help-with-courses/peer-led-team-learning/.</p>

	<p>If you would like to pre-register to be a part of early access registration, you can fill Students who are selected for early access registration will be given access to sign up for PLTL sessions on August 22nd @ 12 PM. Seats are filled on a first-come, first-serve basis. For those who don't enter the PLTL Lottery, Open Registration opens on August 23rd @ 12 PM. The last day to register for a PLTL session is September 6th @ 5 PM. PLTL Sessions for Organic Chemistry II (CHEM 2325) will begin on 8/30/24. For more questions, you can email PLTL@utdallas.edu.</p> <ul style="list-style-type: none"> • Aug. 26 @ 12 PM – Aug. 27 @ 11:59 PM: Lottery Open • Aug. 28 @ 12 PM: Early Access Registration • Aug. 29 @ 12 PM – Sept. 19 @ 5 PM: Open Registration • Sept. 4: CHEM 2325 Sessions Start • Sept. 19 @ 5 PM: Registration Closes / Last Day to Drop • Oct. 1–3: Late Start Window • Dec. 9: Last Day of PLTL
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. 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 TBD</p>
Organic Chemistry Clinic	<p>The Organic Chemistry Clinic is staffed with tutors that are available to help with both the course materials and the CHEM 2233 Lab. The Organic Chemistry Clinic is held in BE 3.502, Monday-Friday, 9:00 AM to 6:00 PM. Your Chem Clinic for this semester TBA</p>

Assignments and Academic Calendar

Lec	Date	TOPIC	Chapter	Test
1	8/25	IR & Carbon NMR	12.1-12.12 & 13.1-13.11	No
2	8/27	Carbon and Proton NMR	13.1-13.11	No
3	9/03	Carbon and Proton NMR	13.1-13.11	No
4	9/08	Carbon and Proton NMR	13.1-13.11	No
5	9/10	Carbon and Proton NMR	13.1-13.11	No
6	9/15	Reactions of Alcohols	11.1-11.11	No
7	9/17	Reactions of Alcohols / Protecting Groups	11.1-11.11	No
	9/17	Test 1, 7-8:15 PM, location (ECSW 1.315 & HH 2.402)		YES
8	9/22	Aldehydes and Ketones	18.7-18.20	No
9	9/24	Aldehydes and Ketones	18.7-18.20	No
10	9/29	Aldehydes and Ketones	18.7-18.20	No
11	10/01	Aldehydes and Ketones	18.7-18.20	No
12	10/06	Enols and Enolates	22.5-22.11	No
13	10/08	Enols and Enolates	22.5-22.11	No

14	10/13	Enols and Enolates	22.5-22.11	No
15	10/15	Enols and Enolates	22.18-22.19	No
	10/15	Test 2, 7-8:15 PM, location (ECSW 1.315 & HH 2.402)		YES
16	10/20	Carboxylic Acids and their Derivatives	21.1-21.9	No
17	10/22	Carboxylic Acids and their Derivatives	21.1-21.9	No
18	10/27	Carboxylic Acids and their Derivatives	21.1-21.9	No
19	10/29	Carboxylic Acids and their Derivatives	21.1-21.9	No
20	11/03	Carboxylic Acids and their Derivatives	20.7-20.15	No
21	11/05	Conjugated π -Systems and Molecular Orbitals	15.1-15.13	No
22	11/10	Conjugated π -Systems and Molecular Orbitals	15.1-15.13	No
23	11/12	Aromatic Compounds and their Reactions	16.2-16.10	No
	11/12	Test 3, 7-8:15 PM, location (ECSW 1.315 & HH 2.402)		YES
24	11/17	Aromatic Compounds and their Reactions	16.2-16.10	No
25	11/19	Aromatic Compounds and their Reactions	16.2-16.10	No
	11/24	Fall Study Week		
	11/26	Fall Study Week		
26	12/01	Aromatic Compounds and their Reactions	16.2-16.10	No
27	12/03	Reactions of Amines	19.1,19.3,19.8	No
28	12/08	Reactions of Amines	19.11,19.14,	No
29	12/10	Reactions of Amines		No
	12/11 – 12/16	FINALS WEEK		YES
		(ECSW 1.315 & HH 2.402)		

Course Policies

Grading (credit) Criteria	Grades will be determined from by an average of the three tests, and the final exam. The lowest test grade will be substituted with the final exam score. And don't forget to sing when you win.											
	<table> <tbody> <tr> <td>Tests</td> <td>3 x 100</td> <td>300 points</td> </tr> <tr> <td>Final Exam</td> <td>1 x 100</td> <td>100 points (Cumulative)</td> </tr> <tr> <td>Total</td> <td></td> <td>400 points</td> </tr> </tbody> </table>	Tests	3 x 100	300 points	Final Exam	1 x 100	100 points (Cumulative)	Total		400 points		
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Comet Creed	<p><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></p> <p><i>“As a Comet, I pledge honesty, integrity, and service in all that I do.”</i></p>											
Make-up Exams	There are no make-up exams except for University excused absences. The final exam grade will replace the grade for a missing test or your lowest score of the three tests.											
Academic Support Resources	<p>The information contained in the following link lists the University's academic support resources for all students.</p> <p>Please go to http://go.utdallas.edu/academic-support-resources</p>											
UT Dallas Syllabus Policies and Procedures	<p>The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.</p> <p>Please go to http://go.utdallas.edu/syllabus-policies for these policies.</p>											

Class Participation

Regular class participation is mandatory. Students who fail to participate in class regularly are inviting scholastic difficulty. 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 violates the [Student Code of Conduct](#).

Class Recordings

Course lectures will not be recorded although online Exam Review sessions, Exam Postmortems, and online classes (in an emergency, campus closures, or inclement weather conditions) will be. These recordings will be available in eLearning in the Recordings folder 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 violates the [Student Code of Conduct](#).

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