



**Course** CHEM 2325 002 Organic Chemistry II

**Professor** Dr. Daniel Tran

**Term** Spring 2025

**Meetings** Tuesday/Thursday 10:00 am - 11:15 am

**Office Hours** After class or by appointment

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**Professor's Contact Information**

**Office Phone** 972 – 883 – 3993

**Office Location** BE 2.519

**Email Address** [tran.daniel@utdallas.edu](mailto:tran.daniel@utdallas.edu)

**Other Information** Contact by e-mail to set up an appointment if you cannot make it to normal office hours.

## Course Syllabus

<b>Pre-requisites, Co-requisites, &amp; other restrictions</b>	CHEM 2323, Organic Chemistry 1
<b>Course Description</b>	<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. 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 chapters before they are covered in class. Do the suggested problems as we cover each chapter. Seek help 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>
<b>Learning Outcomes</b>	<p>Upon completing this class, students will:</p> <ul style="list-style-type: none"><li>• Be able to analyze unknown organic compounds through spectroscopy and to predict the spectra of known organic compounds.</li><li>• Be able to assess aromaticity of organic compounds and to predict the reactivity of aromatic compounds.</li><li>• 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.</li></ul>
<b>Required Texts &amp; Materials</b>	L.G. Wade, Jr., "Organic Chemistry", 9 <sup>th</sup> edition, 2016
<b>Suggested Texts</b>	Solution manual to textbook, molecular model kit.

<b>Grading Policy</b>	<p>Grades will be determined from a combination of 4 quizzes, 2 tests, and a final exam.</p> <p>The lowest test grade is substituted with the final exam (by percentage). The lowest quiz grade is substituted with the average remaining quiz grades.</p> <table><tr><td>Tests</td><td>2 x 250</td><td>500 points</td></tr><tr><td>Quizzes</td><td>4 x 50</td><td>200 points</td></tr><tr><td>Final Exam</td><td>1 x 300</td><td>300 points</td></tr><tr><td>Total</td><td></td><td>1000 points</td></tr></table> <table><tr><td>900 – 1000 A+</td><td>700 – 759 B+</td><td>550 – 599 C+</td><td>400 – 449 D+</td></tr><tr><td>800 – 899 A</td><td>650 – 699 B</td><td>500 – 549 C</td><td>350 – 399 D</td></tr><tr><td>760 – 799 A-</td><td>600 – 649 B-</td><td>450 – 499 C-</td><td>&lt;350 F</td></tr></table>	Tests	2 x 250	500 points	Quizzes	4 x 50	200 points	Final Exam	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
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<b>Make-up Exams</b>	<p>There are <b>no make-up exams or quizzes</b>. If a student misses either an exam or quiz then that missed grade will be counted as their dropped exam/quiz.</p>																								
<b>Class Information</b>	<p>Quizzes are given in the first 30 minutes of class or will be specified by the instructor.</p> <p>Tests are given outside class time on the days listed in the syllabus.</p> <p>Attendance will be taken at all tests, be sure to bring your Comet Card.</p> <p>All re-grades for tests and quizzes must be turned in within one week of taking the quiz or test.</p> <p>Keys for tests will be posted in eLearning.</p> <p>Practice quizzes and tests will be placed in elearning approximately one week before the actual quiz or test.</p> <p>Video or audio recording of the lectures is not allowed.</p>																								
<b>Chemistry Clinic</b>	<p><b>Chemistry Clinic</b> offers in-person office hours Monday through Friday and is located in the Berkner building.</p> <p>Students can walk in and attend office hours offered by chemistry clinic leaders, graduate TAs and faculty.</p> <p>Room: BE 3.502</p> <p>Hours: Monday - Friday 9.00 am - 5.00 pm</p> <p>For more information: <a href="https://chemistry.utdallas.edu/chemclinic/">https://chemistry.utdallas.edu/chemclinic/</a></p>																								

<p><b>Peer Led Team Learning (PLTL)</b></p>	<p>What is PLTL?</p> <ul style="list-style-type: none"> <li>• Cohort-style academic support program for chemistry, math, and physics subjects. Sessions are designed to encourage problem-solving strategies in pairs and in groups. It is run through the Student Success Center.</li> <li>• <b>Registration is required.</b></li> <li>• If you sign-up for a session, attendance is required every week.</li> </ul> <p>More Details</p> <ul style="list-style-type: none"> <li>• Visit the <a href="#">PLTL webpage</a> and follow the Instructions for <a href="#">Registration in CourseBook (PDF)</a></li> <li>• Questions? Email <a href="mailto:PLTL@utdallas.edu">PLTL@utdallas.edu</a></li> </ul>
<p><b>Supplemental Instruction (SI)</b></p>	<p>Supplemental Instruction (SI) is offered for this course. SI sessions are collaborative group study sessions, scheduled two times per week. Sessions are facilitated by an SI Leader, who has taken the course and received a high final grade. Attendance is voluntary. For information about the days, times, and locations for SI sessions, refer to <a href="http://www.utdallas.edu/studentsuccess/help-with-courses/supplemental-instruction/">http://www.utdallas.edu/studentsuccess/help-with-courses/supplemental-instruction/</a>. <a href="http://www.utdallas.edu/studentsuccess/leaders/si.html">www.utdallas.edu/studentsuccess/leaders/si.html</a>.</p>
<p><b>Tutoring</b></p>	<p>Tutoring is available for organic chemistry through the Student Success Center. The center has drop-in times during the week for one-on-one tutoring. See the schedule for organic chemistry at <a href="http://www.utdallas.edu/studentsuccess/leaders/tutoring.html">www.utdallas.edu/studentsuccess/leaders/tutoring.html</a>.</p>
<p><b>University Policies</b></p>	<p>For more University policies please see: <a href="#">UT Dallas Syllabus Policies and Procedures webpage</a></p>

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

## Assignments & Academic Calendar Spring 2025

Date		Topic	Chapter
Jan 21	23	Introduction / IR Spectroscopy	12
	28	30	Mass Spectroscopy
Feb 4	<b>6</b>	Proton / Carbon NMR <b>Quiz 1</b>	13
	11	13	Alcohols
	18	Review	
Wednesday <b>February 19</b> 8:30 PM – 10:00 PM		<b>Test 1</b> Chapters 11 – 13	
	20	Ethers Epoxides	14
	25	27	Conjugated Systems
March 4	6	Aromatics	16
	11	<b>13</b>	Aromatics / Reactions of Aromatics <b>Quiz 2</b>
		<b>Spring Break</b>	
	25	27	Reactions of Aromatics
April 1		Review	
Wednesday <b>April 2</b> 8:30 PM – 10:00 PM		<b>Test 2</b> Chapters 14 – 17	
	3	Ketones and Aldehydes	18
	8	10	Amines
	15	<b>17</b>	Carboxylic Acids <b>Quiz 3</b>
	22	24	Carboxylic Acid Derivatives
	29	<b>May 1</b>	Enols and Enolates <b>Quiz 4</b>
	6	8	Review
		<b>Final Exam TBD</b> Chapters 11 – 22	