



Course CHEM 2325 Organic Chemistry II
Professor Mihaela C. Stefan
Term Spring 2019
Meetings T/R 10:00 am -11:15 am, SLC 2.303

Professor's Contact Information

Office Phone 972-883-6581
Office Location BE 2.522

Email Address mihaela@utdallas.edu

Office Hours T/R 2-3 pm

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

General Course Information

Pre-requisites, Co-requisites, & other restrictions CHEM 2323, Organic Chemistry 1

Course Description

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.

Upon completing this class, students will:

Learning Outcomes

- 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

Suggested Texts Solution manual to textbook, molecular model kit.

Assignments & Academic Calendar

[Topics, Reading Assignments, Due Dates, Exam Dates]

Date	Topic	Chapter	Quiz
Jan. 15	Alcohols	11	N
Jan. 17	Alcohols/ IR Spectroscopy	11, 12	N
Jan. 22	IR Spectroscopy/ MS Spectrometry	12	N
Jan. 24	Proton NMR	13	N
Jan. 29	Proton NMR	13	N
Jan. 31	Carbon NMR (Quiz 1)	13	Y
Feb.05	Carbon NMR + Review Ch.11, 12, and 13		N
Feb. 06	TEST 1 (8:30 PM)		Y
Feb. 07	Ethers	14	N
Feb. 12	Ethers, Epoxides/ Conjugated Systems	14/15	N
Feb. 14	Conjugated Systems	15	N
Feb. 19	Conjugated Systems	15	N
Feb. 21	Aromatics (Quiz 2)	16	Y
Feb. 26	Aromatics	16	N
Feb. 28	Reactions of Aromatics	17	N
Mar.05	Reactions of Aromatics	17	N
Mar. 07	Reactions of Aromatics (Quiz 3)	17	Y
Mar.12	Review Ch. 14, 15, 16, and 17		N
Mar.13	TEST 2 (8:30 PM)		Y
Mar. 14	Ketones and Aldehydes	18	N
Mar. 26	Ketones and Aldehydes	18	N
Mar. 28	Ketones and Aldehydes/Amines	18/19	N
Apr.02	Amines	19	N
Apr.04	Amines (Quiz 4)	19	Y
Apr.09	Amines/ Carboxylic Acids	19/20	N
Apr.11	Carboxylic Acids	20	N
Apr.16	Carboxylic Acid Derivatives	21	N
Apr.18	Carboxylic Acid Derivatives (Quiz 5)	21	Y
Apr.23	Enols and Enolates	22	N
Apr.25	Enols and Enolates	22	N
Apr.30	Enols and Enolates	22	N
May 01	TEST 3 (8:30 PM)		Y
May 02	Review chapters 11-22		N
May 08	FINAL (8:00 pm)		Y

Days with either a test or quiz are marked in bold

Course Policies

The University's policies and procedures segment of course syllabi can be found at <http://provost.utdallas.edu/syllabus-policies/>

Grading (credit) Criteria	Grades will be determined from a combination of test, quiz and final grades			
	Tests	2 x 250	500 points (best 2 out of 3)	
	Quizzes	4 x 50	200 points (best 4 out of 5)	
	<u>Final</u>	1 x 300	<u>300 points</u>	
	Total	1000 points		
	900 – 1000 = A+	700 – 769 = B+	550 – 599 = C+	400 – 449 = D+
	800 – 899 = A	650 – 699 = B	500 – 549 = C	350 – 399 = D
	770 – 799 = A-	600 – 649 = B-	450 – 499 = C-	<350 = F
Make-up Exams	There are no make-up exams or quizzes. If a student misses either an exam or quiz then that missed grade will be counted as their dropped exam/quiz.			
Class Attendance	Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting academic difficulty. Absences may lower a student's grade where class attendance and class participation are deemed essential by the instructor. Attendance will be taken for this class in the days of quizzes and also in other days as decided by the instructor.			
Class Rules	<p>1) Some handouts given in the class may be posted on E-learning. The handouts can be additional lecture notes or solutions to problems posted on E-learning.</p> <p>2) Quizzes will be given in class during the regular class time at the end of class. Total time of 20 or 30 minutes will be allocated for quizzes.</p> <p>3) Tests will be given outside regular class time. Please see scheduling for details. All students must be present for a quiz or test to receive credit. Students who take tests at StudentAccessAbility must schedule their tests preferably at times given in the syllabus. This also applies to the final exam. All test and quiz dates and times are marked in the schedule.</p> <p>4) Attendance will be taken for tests and the final, and the students will be required to show their Comet Card.</p> <p>5) If you wish to submit an exam or quiz for re-grading because you believe you lost points unfairly, you must do so within one week of receiving your quiz or exam. Your entire exam /quiz will be re-graded, not just the exact problem you pointed out. No exceptions will be allowed.</p> <p>6) A short key (only answers) for tests and quizzes will be posted on E-learning.</p> <p>7) If you plan to get a letter of recommendation from me, you have to make sure that your attendance for this course is 80% or above and you should come to see me in my office during office hours. A statement about what grade you made for this course does not constitute a strong letter of recommendation.</p>			

Recitations will be conducted on Fridays before the tests from 5:30 pm to 6:30 pm in SLC 1.102. Any changes regarding recitations will be announced in the class.

Additional Office Hours provided by graduate students:

- 1) Justin Miller, Tuesday, 3:00 pm to 4:00 pm
- 2) Ruwan Gunawardhana, Friday, 2:30 pm to 3:30 pm
- 3) Lakmal Gamage, Wednesday, 4:00 pm to 5:00 pm
- 4) John Cue, Monday, 3:00 pm to 4:00 pm
- 5) Mahesh Udamulle, Friday, 5:00 pm to 6:00 pm
- 6) Muktadir Talukder, Friday, 11:00 am to 12:00 pm
- 7) Hanghang Wang, Thursday, 3:30 pm to 4:30 pm
- 8) Lynn Graham, Friday, 1:30 pm to 2:30 pm

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