

Course CHEM 2325 Organic Chemistry II

Professor Mihaela C. Stefan Term Spring 2017

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

restrictions

Pre-requisites, Co-requisites, & other

CHEM 2323, Organic Chemistry 1

This course is a continuation of CHEM 2323. Students who successfully 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 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,

Course Description

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 allows you to see the bigger picture. Finally, always remember that reactions are governed, and the properties of organic molecules are determined, by where the electrons are located.

Upon completing this class, students will:

• Be able to analyze unknown organic compounds through spectroscopy and to predict the spectra of known organic compounds.

Learning Outcomes

• Be able to assess aromaticity of organic compounds and to predict the reactivity of aromatic compounds.

• Be able to predict 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	te Topic		Quiz	
Jan. 10	Alcohols	11	N	
Jan. 12	Alcohols/ IR Spectroscopy	11, 12	N	
Jan. 17	IR Spectroscopy/ MS Spectrometry	12	N	
Jan. 19	Proton NMR (Quiz 1)	13	Y	
Jan. 24	Proton NMR	13	N	
Jan. 26	Carbon NMR	13	N	
Jan. 31	Review Chapters 11, 12, and 13		N	
Feb. 01	TEST 1 (8:30 PM)		Y	
Feb. 02	Ethers	14	N	
Feb. 07	Ethers, Epoxides/ Conjugated Systems	14/15	N	
Feb. 09	Conjugated Systems	15	N	
Feb. 14	Conjugated Systems	15	N	
Feb. 16	Aromatics (Quiz 2)	16	Y	
Feb. 21	Aromatics	16	N	
Feb. 23	Reactions of Aromatics	17	N	
Feb. 28	Reactions of Aromatics	17	N	
Mar. 02	Reactions of Aromatics (Quiz 3)	17	Y	
Mar.07	Review Chapters 14, 15, 16, and 17)		N	
Mar.08	TEST 2 (8:30 PM)		Y	
Mar. 09	Ketones and Aldehydes 18		N	
Mar. 21	Ketones and Aldehydes 18		N	
Mar. 23	Ketones and Aldehydes/Amines	18/19	N	
Mar. 28	Amines	19	N	
Mar.30	Amines (Quiz 4)	19	Y	
Apr.04	Amines/ Carboxylic Acids	19/20	N	
Apr.06	Carboxylic Acids 20		N	
Apr.11	Carboxylic Acid Derivatives	21	N	
Apr.13	Carboxylic Acid Derivatives (Quiz 5)	21	Y	
Apr.18	Enols and Enolates 22		N	
Apr.20	Enols and Enolates 22		N	
Apr.25	Enols and Enolates 22		N	
Apr 26	TEST 3 (8:30 PM)		Y	
Apr.27	Review chapters 11-22		N	
May XX	FINAL		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/

	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	* '				
Grading	_					
(credit)	Total 1000 points					
Criteria	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	There are no make-u	There are no make-up exams or quizzes. If a student misses either an exam or quiz then				
Exams	that missed grade will be counted as their dropped exam/quiz.					
	Regular and punctual	Regular and punctual class attendance is expected. Students who fail to attend class				
Class	regularly are inviting scholastic difficulty. Absences may lower a student's grade where					
Attendance	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.					
	1) Some handouts given in the class will not be posted on E-learning. The handouts can					
	be additional lecture notes or solutions to problems posted on E-learning.					
	2) Quizzes will be given in class during the regular class time at the end of class. A total					
	time of 30 minutes will be allocated for the quiz.					
	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 at the times given in the syllabus. This					
	also applies to the final exam. All test and quiz dates and times are clearly marked in the					
	schedule.					
Class Rules	4) Attendance will be taken for tests and the final and the students will be required show their Comet Card.					
	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 and/or quiz will be re-graded, not just the exact problem you pointed					
	out. No exceptions will be allowed.					
	6) A short key (only answers) for tests and quizzes will be posted on E-learning.					
	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.					
Desitations	constitute a strong letter of recommendation.					

Recitations will be conducted on Fridays from 4 pm to 5 pm in SLC 2.303. Any changes regarding the recitations will be announced in the class.

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