

Course CHEM 2323 Organic Chemistry I

Professor Mihaela C. Stefan

Term Fall 2018

Meetings T/R 10:00 am -11:15 am, SLC 2.303

Professor's Contact Information

Office Phone 972-883-6581

Other Phone

Office Location BE 2.522

Email Address mihaela@utdallas.edu

Office hours: T/R 2-3 pm; additional office hours listed at thee end of the

Office Hours syllabus

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

hours

General Course Information

Pre-requisites, Corequisites, & other restrictions

CHEM 1312 General Chemistry II

This course is designed to provide an overview of fundamental organic chemistry for science majors. Students who successfully complete this course will acquire an integrated understanding of molecular architecture, molecular transformations, reaction energetics and mechanisms, synthetic strategy, and structure determination.

Course Description

Tests will be given at the date and time listed in the syllabus. No makeup tests will be given. You may drop one test score. Quizzes will be given at end of class time on the Thursdays indicated by the syllabus. One quiz may also be dropped.

The course notes used during lectures can be downloaded as pdf files from E-Learning. Problems and supplementary material will also be posted on E-Learning.

Upon completing this class, students will:

• Be able to predict bonding and three-dimensional structure, including chirality, and to analyze properties of this 3-D structure of organic compounds.

Learning Outcomes

- Be able to compare reactivity amongst a series of organic compounds.
- Be able to predict reactivity of specific functional groups 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, Readings, & Materials

Solution manual to textbook, molecular model kit.

Assignments & Academic Calendar [Topics, Reading Assignments, Due Dates, Exam Dates]

Date	Topic	Chapter	Quiz		
Aug 21	Introduction/General Chemistry Review	1	N		
Aug 23	Introduction/General Chemistry Review	1	N		
Aug 28	Structure and Bonding of Organic Molecules	2	N		
Aug 30	Structure and Bonding of Organic Molecules	2	N		
Sep 4	Alkanes (Quiz 1)	3	Y		
Sep 6	Alkanes	3	N		
Sep 11	Stereochemistry	5	N		
Sep 13	Stereochemistry (Quiz 2)	ochemistry (Quiz 2) 5			
Sep 18	Stereochemistry (Review for Test 1) 5		N		
Sep 19	TEST 1 (8:30 PM)	EST 1 (8:30 PM)			
Sep 20	Chemical Reactions	4	N		
Sept 25	Chemical Reactions	4	N		
Sep 27	Nucleophilic Substitution (S _N 2)	6.1-6.12	N		
Oct 2	Nucleophilic Substitution (S _N 2)	6.1-6.12	N		
Oct 4	Nucleophilic Substitution (S _N 1)	Nucleophilic Substitution $(S_N 1)$ 6.13-6.21			
Oct 9	Eliminations (E1, E2)	6.13-6.21	N		
Oct 11	Compare S_N1 , S_N2 , $E1$, and $E2$ (Quiz 3)	Notes	Y		
Oct 16	Alkenes	7	N		
Oct 18	Alkenes	7	N		
Oct 23	Review for Test 2 (Ch. 4, 6, and 7)		N		
Oct 24	TEST 2 (8:30 PM)				
Oct 25	Reactions of Alkenes	8	N		
Oct 30	Reactions of Alkenes	8	N		
Nov 1	Reactions of Alkenes	8	N		
Nov 6	Alkynes (Quiz 4)	9	Y		
Nov 8	Alkynes	9	N		
Nov 13	Alcohols	9	N		
Nov 15	Alcohols (Quiz 5)	10	Y		
Nov 27	Review for Test 3 (Ch. 8, 9, and 10)	10	N		
Nov 28	TEST 3 (8:30 PM)		Y		
Nov 29	Review Stereochemistry	5	N		
Dec 4	Review of Reactions (Alkenes and Alkynes)	8+9	N		
Dec 6	Review of Reactions (Alcohols)	10	N		
Dec 12	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/

	Grades will be determined from a combination of test, quiz and final grades							
Grading			1 ,					
	•		200 points (best 4 out of 5)					
(credit)		1 x 300 <u>300 points</u>						
Criteria	Total 1000 points							
Crittin	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-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 class attendance is expected. Students who fail to attend class							
Class	regularly are inviting	scholastic difficulty.	Absences may lower	a student's grade wher	e			
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) The recitation material will be posted on E-learning.							
	3) 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.							
	4) 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							
Class Rules	schedule.							
	5) Attendance will be taken for tests and the final and the students will be required show							
	their Comet Card.							
	6) 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.							
	7) The keys for tests and quizzes will be posted on E-learning.							
	8) 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							
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Recitations will be conducted on Fridays before the test from 5:30 pm to 6:30 pm in SLC 1.102. The recitation before Test 3 will take place on Monday November 26 at 5:30 pm in HH 2.402. Any changes regarding the recitations will be announced in the class.

Students with last names from A to O will take the tests and the final in the room HH 2.402. Students will last names from P to Z will take the tests and the final in the room ECSS 2.410

Additional Office Hours provided by Chemistry graduate students: 1) YiXin Ren, Monday 8:00 am – 9:00 am and Wednesday 4:00 pm to 5:00 pm

- 2) Justin Miller, Tuesday 3:00 pm to 4:00 pm
- 3) Ruwan Gunawardhana, Friday 2:00 pm to 3:00 pm
- 4) Lakmal Gamage, Friday 9:00 am to 10:00 am
- 5) Erika Calubaquib, Thursday 3:00 pm to 4:00 pm
- 6) John Cue, Wednesday 9:00 am to 10:00 am
- 7) Mahesh Udamulle, Friday 5:00 pm to 6:00 pm
- 8) Muktadir Talukder, Monday 11:00 to 12:00 pm

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