

Course CHEM 2323.003 Organic Chemistry I

**Professor** Christina Thompson

Term Fall 2016

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

## **Professor's Contact Information**

 $\begin{array}{ll} \textbf{Office Phone} & 972\text{-}883\text{-}5781 \\ \textbf{Office Location} & BE \ 3.502 \\ \end{array}$ 

Email Address Christina. Thompson 2@utdallas.edu

Office Hours Tuesday 2:00-3:00 and Wednesday 2:00-3:00 pm

## **General Course Information**

Pre-requisites,		
Co-requisites, &	CHEM 1312 General Chemistry II	
other restrictions	CITEM 1312 Conord Chemistry II	
Course Description	This course is designed to provide a unified overview of fundamental organic chemistry for science majors. Students who successfully complete this course acquire an integrated understanding of molecular architecture, molecular transformations, reaction energetics and mechanisms, synthetic strategy, and structure determination.  Tests will be given at the date and time given in the syllabus. No make-up tests will be given. You may drop one test score. There will in addition be quizzes at the end of class time on the Thursdays indicated by the syllabus. One quiz may also be dropped.  Students often view organic chemistry as a difficult course. I strongly recommend that everyone attempt to keep up with the class as it proceeds. This is not a course where it is easy to 'cram' for a test. Students invariably do better once they learn how to visualize organic molecules, and reactions, in three dimensions. If you know this is hard for you I recommend using molecular models to try and view the molecules. Also try to realize that this is not a memorization course. While some memorization is unavoidable in learning anything new, the purpose of this course is to teach the underlying basic principles that drive an organic reaction. Once these principles are handled a student will be able to understand, and predict, why any reaction occurs.  The test and quiz answers will be posted on the bulletin board outside my office.	
Learning Outcomes	Upon completing this class, students will:  • Be able to predict bonding and three-dimensional structure, including chiralty, and to analyze properties of this 3-D structure of organic compounds.  • 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	
Recommended Materials	Molecular model kit	

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

Date		Topic	Chapter	Quiz
AUG 23	25	Introduction	1	N
30	SEP 1	Structure and Bonding	2	N
6	8	Alkanes	3	Y
13	15	Stereochemistry	5	Y
20		Stereochemistry	5	
	<b>SEP 21</b>	TEST 1 (8:30 PM)		
	22	Chemical Reactions	4	
27	29	Chemical Reactions	4	N
OCT 4	6	Nucleophilic Substitutions (S <sub>N</sub> 2)	6.1-6.12	N
11	13	Nucleophilic Substitutions ( $S_N1/E1/E2$ )	6.13-6.21	Y
18	20	Alkenes	7	Y
25		Representing Chemical Reactions		
	<b>OCT 26</b>	TEST 2 (8:30 PM)		N
	27	Reactions of Alkenes	8	
NOV 1	3	Reactions of Alkenes/Alkynes	8/9	N
8	10	Reactions of Alkynes	9	N
15	17	Alcohols	10	Y
29		Alcohols	10	N
	30	TEST 3 (8:30 PM)		
	Dec 1	Review		
6		Review		
		FINAL Date and Time TBD		

Days with either a test or quiz are marked in bold

## **Course Policies**

Course I officies					
	Grades will be determ	mined from a combina	ation of test, quiz and	final grades	
	Tests 2 x	250 500 p	oints (best 2 out of	3)	
	Quizzes 4 x	200 p	200 points (best 4 out of 5)		
Grading (credit)	Final 1 x	300 <u>300 p</u>	<u>oints</u>		
Criteria	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.				

	Recitation problems will be posted in e-learning
	Quizzes are given in the first 30 minutes of class.
	Tests are given outside class time on the days listed in the syllabus.
Class	Attendance will be taken at all tests, be sure to bring your Comet Card.
Information	All re-grades for tests and quizzes must be turned in within one week of taking the quiz or
Inivi mation	test.
	Keys for tests will be posted outside Dr. Stefan's office, BE 2.522, and in E-learning
	Practice quizzes and tests will be placed in e-learning approximately one week before the
	actual quiz or test.
	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, potentially, future courses. In weekly ninety-minute PLTL sessions,
	small groups of students will work together to solve problems written by UT-Dallas'
Peer Led Team	chemistry faculty. An undergraduate PLTL leader who has training in group dynamics and
Learning (PLTL)	mastery of course content will lead them. This is an optional component to the course.
	However, if you choose to participate, you are required to stay in the program throughout the
	semester—the integrity of the group depends on it. PLTL groups will meet on a Friday-
	Wednesday weekly schedule. To participate in a PLTL group, you will need to complete the
	PLTL application. More details of this program will be announced in class.
	Supplemental Instruction (SI) is offered for this course. SI sessions are free group study
Supplemental	opportunities, scheduled three times per week. Attendance is voluntary. For information
Instruction (SI)	about the days, times and locations for SI sessions, refer to
	www.utdallas.edu/studentsuccess/leaders/si.html.
	Tutoring is available for organic chemistry through the Student Success Center. The center
Tutoring	has drop in times during the week for one-on-one tutoring. See the schedule for organic
	chemistry at www.utdallas.edu/studentsuccess/leaders/tutoring.html.
Recitation	Designation and the held on the Fills of the A.F. and in Cl. C. 202
Sessions	Recitation sessions will be held on most Fridays from 4-5 pm in SLC 2.303.
University	For more University policies please see: UT Dallas Syllabus Policies and
Policies	Procedures webpage

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