DRAFT Course Syllabus Fall 2021

Course	CHEM 2323.002 and .005
Course Title	Organic Chemistry 1
Professor	Bruce M. Novak
Term	Fall 2021
Meetings	T/R 10:00 pm – 11:15 pm (.002) T/R 2:30 pm – 3:45 pm (.005) All Lectures in SLC 2.303*

* For at least the first three weeks of classes, the University is de-densifying the classrooms. Each student will attend a live lecture one day a week and view a recorded lecture the second day.

If your Net-ID ends with zero or an even number, your live lecture is Tuesday and your recorded lecture is Thursday.

If your Net-ID ends with an odd number, your live lecture is Thursday and your recorded lecture is Tuesday.

Professor's Contact Information

Office Phone	972-883-4070 (email communication is highly preferred)
Office Location	BE 3.516
Email Address	bruce.novak@utdallas.edu
Office Hours	T/R 11:15 – 12:00 noon, T/R 3:45 – 4:30 pm (tentative, depending on student availability) and by appointment.
Other Information	Course is rated R for language and graphic depictions of molecular violence SI Leader: Ishav Shukla, iys170000@utdallas.edu TA: Somayeh Taslimy, Somayeh.Taslimy@utdallas.edu

Course Modality and Expectations

Instructional Mode	Live Lectures, SLC 2.303 (except for the three de-densification weeks)
Course Platform	Some review sessions and Office Hours will be on Teams
Expectations	Extensive course material including topic descriptions, problem sets and their answer keys are available on eLearning. These must be downloaded and the problem sets worked for each chapter. Have plenty of paper and pencils ready. This class requires writing out the lecture notes.

General Course Information

Pre-requisites, Co-requisites, & other restrictions	CHEM 1312 General Chemistry II
Course Description	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. Two common exams will be given on the dates listed in the syllabus, 8:30 – 10:00 PM. Once you begin you will have 90 minutes to complete and submit the exam. There will be 4 quizzes given throughout the semester. Quizzes will either be in class or online. If online, they will be be accessed through eLearning and their approximate dates listed in the syllabus. You will have 30 minutes to complete the quiz after you started, but you will have an 6-hour time window to take the quiz (tentatively set for 8 – 2:00 pm, central time). These assignments are designed to help you learn the material and also serve as a guage of class participation. Even if you do not know the answer to questions being asked, you should submit the assignment to demonstrate you have been participating in the course. The final exam will be on Friday, December 12, 2021, 8 – 10:45 PM. Exam and quizzes are strictly individual assessments. For exams and quizzes students may only use a periodic table, molecular model kit and pen/pencil and paper to work problems. Unless I say otherwise, no other external aids such as notes, lectures, books or the internet will be premitted. Students often view organic chemistry as a difficult course but its not, and in fact, it's a hell of a lot of fun. You need to keep up with the class as it proceeds and *you must practice drawing structures and reaction mechanisms during lecture and working out your homework problems*. Organic chemistry uses a hieroglyphic (pictorial) language to communicate and you must become, through practice, highly skilled at drawing to communicate fluiently. This is not a course where you can 'cram' for an exam or skim over PP slides. Students do better once they learn how to visualize organic molecules in 3D. To this end, a molecular model kit is recommended to assist in this visualization. Despite extensive rumors, organic chemistry is not a memorization course. While some memorization is necessary, the purpose of this course is to teach you the underlying principles that drive an organic reaction. Once these principles are understood a student will be able to predict the outcome of fundamental organic reactions. Before attending the lectures, everyone should, 1) read the book chapter being discussed, and 2) worked through suggested problems from each chapter in the book and the additional homework problems posted on eLearning. The suggested problems from the textbook will be listed on eLearning.
Learning Outcomes	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. • 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. Actually, editions 6-8 are fine.
Recommended Materials	Molecular model kit and plenty of paper and sharp pencils
PLTL Program	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 other historically difficult courses. In weekly ninety-minute PLTL sessions, small groups of students will work together to solve problems written by faculty members. An undergraduate PLTL leader who is trained in group facilitation and has mastery of course content will lead them. This is an optional component to the course, however, if you choose to participate, you are expected to stay in the program throughout the semester. Due to COVID-19, PLTL will be virtual in Fall 2020. Sessions will be hosted on BlackBoard Collaborate and will still continue to provide an active learning experience. As such, it is still critical to attend every session. You can learn more about PLTL at the following link: https://www.utdallas.edu/studentsuccess/help-with-courses/peer-led-team-learning/. If you would like to pre-register to be a part of priority registration, you can fill out the following form by Monday, August 17th @ 5pm: https://eforms.utdallas.edu/utd-pltl-lottery. Registration will be during the first week of classes. For more questions, you can email PLTL@utdallas.edu.
SI Program	Your SI leader is Ishav Shukla, iys170000@utdallas.edu. Supplemental Instruction (SI) provides free, collaborative-group study sessions that follow the instruction of the course. SI sessions encourage active, collaborative learning based on critical thinking and transferable study skills. Sessions will directly reflect the content covered during the class sessions. This fall, SI sessions will be held via Blackboard Collaborate. Students will be enrolled in their SI Shell on eLearning during the first week of school. They will find access to the SI services under the My Organizations section on eLearning. Each course will have a shell and will be labeled based on the course name, i.e., "SI – CHEM 2323."

Lec	Date	Topic	Chapter	Quiz/Test
1	8/24	Introduction and Review of Chemical Principles	1	No
2	8/26	Introduction and Review of Chemical Principles	1	No
3	8/31	Molecular Structure, Orbital Hybridization and Bonding	2	No
4	9/2	Molecular Structure, Orbital Hybridization and Bonding	2	No

5	9/7	Functional Groups and IR Spectroscopy	2, 12.1-12.12	No
6	9/9	Alkanes: Saturated Hydrocarbons	3	No
7	**9/14**	Alkanes, Cycloalkanes and Cyclic Conformations **Quiz 1** (Tentative)	3	**YES**
8	9/16	Alkanes, Cycloalkanes and Cyclic Conformations	3	No
9	9/21	Stereochemistry	5	No
10	9/23	Stereochemistry	5	No
11	9/28	Stereochemistry	5	No
	9/29	**Test 1 Wednesday Evening**		**YES**
12	9/30	Chemical Reactions, Free Radical Halogenations	4	No
13	10/5	Chemical Reactions	4	No
14	10/7	Alkylhalides, Nucleophilic Substitutions (S_N2)	6.1-6.12	No
15	**10/12**	Nucleophilic Substitutions (S_N2) **Quiz 2** (Tentative)	6.1-6.12	**YES**
16	10/14	Substitutions and Eliminations (S_N1, E1 and E2)	6.13-6.21	No
17	10/19	Substitutions and Eliminations (S_N1, E1 and E2)	6.13-6.21	No
18	10/21	Alkenes	7, 8	No
19	10/26	Alkenes	7, 8	No
20	10/28	Alkenes	7, 8	No
21	11/2	Alkenes	7, 8	No
	11/3	**Test 2, Wednesday Evening**		**YES**
22	11/4	Alkenes	7, 8	No
23	11/9	Alkenes	7, 8	No
24	**11/11**	Alkenes	7, 8	**YES**

		Quiz 3 (Tentative)		
25	11/16	Alkynes	9	No
26	11/18	Alkynes	9	No
	11/23	Unnecessary Break	9	No
	11/25	Thanksgiving Break		
27	11/30	Alkynes	10	No
28	**12/2**	Alcohols **Quiz 4** (Tentative)	10	**YES**
29	12/7	Last Day of Class, Alcohols	10	No
	12/10 – Final Exam Friday, 8:00 – 10:45 PM			**YES**

Days with either a test or quiz are marked in **bold**

Course Policies

Grading (credit) Criteria	Grades will be determined from a combination of 4 quizzes, 2 exams, and a final exam. The lowest exam grade can be substituted with the final exam (by percentage). Tests 2 x 250 500 points Quizzes 4 x 50 200 points Final Test 1x300 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
	This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same: *"As a Comet, I pledge honesty, integrity, and service in all that I do."*
Make-up Exams	There are no make-up exams or quizzes except for University excused absences.
Academic Support Resources	*The information contained in the following link lists the University's academic support resources for all students.* *Please go to http://go.utdallas.edu/academic-support-resources.*
UT Dallas Syllabus Policies and Procedures	*The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.* *Please go to http://go.utdallas.edu/syllabus-policies for these policies.*

COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record.

Please see http://go.utdallas.edu/syllabus-policies

Classroom Conduct Requirements Related to COVID-19

Don't catch COVID-19. How do you best protect yourself? The University strongly encourage all Comets to get vaccinated and wear face coverings as recommended by the CDC. If you have questions or concerns about COVID-19 vaccines, I urge you to watch these presentations and Q&A sessions, featuring an infectious diseases expert from UT Southwestern, that clearly explain the safety and efficacy of the vaccines available in the U.S. and the risks borne by the unvaccinated. Specific recommendations:

- Get a COVID-19 vaccine, and register your vaccination status through our voluntary vaccine reporting form.
- Wear a mask indoors, regardless of your vaccination status.
- Stay home when sick.
- Cover coughs and sneezes.
- Practice good hand hygiene.
- For the first three weeks of the fall semester, this course will be taught at a half-capacity, i.e., one day of in-classroom lectures and one day of recorded lecture per week.

If you do not have reliable access to a computer or the internet, please use the UT Dallas' technology loaner program.

Class Attendance

Class attendance is mandatory be it live or recorded. Three or more unexcused absences may lower your grade by a +/- increment.

Class Recordings

The instructor will record review sessions and any online office hours. Any recordings will be available to all students registered for this class as they are intended to supplement the classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans

any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.