CHEM 2370.004: Organic Chemistry

Summer 2020, University of North Texas, Denton Lecture: remote (Asynchronously); Monday and Wednesday Recitation: Friday 2.00 – 2.50 pm (August 24, 2020 – December 11, 2020)

Instructor

Dr. Sri S. Subramanium
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Office Hours: Wednesday at 4.00 pm

Other times by appointment made through email

Course Objectives: Learn the principal concepts related to:

- ❖ The correlation between properties of functional groups and molecules and intermolecular forces
- ❖ The structures, properties, and nomenclature of organic molecules. How to identify, classify, and name the three-dimensional arrangement of atoms and molecules
- ❖ The step-by-step processes of a chemical reaction, reaction mechanism. How to plan the synthesis of any organic molecule.
- ❖ Tools for the identification of functional groups and for the determination of connections between the atoms in molecules

Course content:

The CHEM 2370.004 is the first of introductory undergraduate organic chemistry curriculum at UNT. The course will cover material from chapter 1-11 from the textbook. The focus of the study will be on learning the structure, nomenclature, occurrence and uses of main classes of organic compounds; functional groups and their interconversion; character of chemical bonding; stereochemistry; structure and reactivity; acid/base reactions, resonance, inductive and steric effects; reaction mechanisms.

Textbook

Required:

Organic Chemistry", 12th Ed. by Solomons/Fryhle (Wiley). The course will cover topics presented in Ch. 1-11.

Optional:

- 1) Study Guide and Solutions Manual for Organic Chemistry, 12th Ed., Solomons/Fryhle (Wiley)
- 2) A molecular modeling kit for organic chemistry

Lecture Notes and Lectures

The lecture notes will be posted on the course's CANVAS Learn site. You are strongly encouraged read them before viewing the recorded lectures. One hour and 20 minutes of recorded lectures will be uploaded to CANVAS on Monday and Wednesday during the semester.

Class will meet for the recitation via ZOOM meeting Friday from 2.00 p.m. to 2.50 pm. Zoom meeting link for the class will be posted into the course CANVAS page.

Lecture Review and Exam Review Questions

Review questions covering the topic discussed in the class will be posted on CANVAS for each recorded class. You are strongly encouraged to do the problems before watching next recorded class. Before each exam, an exam review will be posted on CANVAS. Again, you are strongly encouraged to do the exam review and get the help from the professor if needed.

Homework

Sapling Learning will be used for homework assignment. Assignments and due dates will be announced through email and/or will be posted at the course CANVAS site. Follow the link http://bit.ly/saplinginstructions to create your sapling account for this course. Problems from the textbook will be assigned but will not be graded. You are strongly encouraged to do the problems to get good marks on exams.

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Class Attendance

Regular attendance at lectures and recitations is required for this course. Attendance will be taken during the class. It would be difficult to catch up if you miss one or more lectures. Recitation session is very important for the learning of organic chemistry, and to help you refine your study skills to tackle this course. It is very important to attend recitation session for this course.

Announcements

Announcements will be either posted at the course CANVAS site and/or distributed by email.

Communicating with your instructor

It is best to reach me through email with any concerns or questions. Response to email is usually within 48 hours on weekdays and by the next business day on weekends.

Super Teaching Assistant

The super TA for this course Mr. Timothy Parker. Mr. Parker will hold 2 hours of office hours per week. The Super TA will also serve as substitutes for Dr. Subramanium when Dr. Subramanium is at conferences or other business trips/meetings.

Email: timothyparker@my.unt.edu

Supplementary Instruction

Supplemental Instructor (SI) for this course is Pablo Lopez. The SI will hold four study sessions outside the class schedule where you can go and ask questions about the course. He will contact you all in the first week of class. Further information about when and where he will hold his sessions will be provided as it becomes available.

Email: pablolopez@my.unt.edu

More information about supplemental Instruction available at https://learningcenter.unt.edu/si.

Additional Support

Additional Support is available through the Chemistry Resource Center (by ZOOM).

LockDown Browser

Exams and quizzes must be completed online. LockDown Browser with a webcam is required to take the exams and quizzes. LockDown Browser is like any other browser, the only difference is that LockDown Browser will not let you open additional pages while you are working in Canvas. Please notice that LockDown Browser is not available for Chromebook. Intallation information will be uploaded as separate document into CANVAS.

Exams

Three exams and a final exam will be given for the course. Each exam will consist of multiple-choice questions and will be closed book. The exam will be administered online on CANVAS (more details will be provided in an announcement) during the time window given in the syllabus.

You will be allowed to use the modeling kit while taking exams.

- Exams, 1-3, are 60 minutes in length (25 30 questions) and final exam is 120 minutes in length (50-60 questions).
- Be prepared for multiple choice type questions. Some questions may have different point values.
- No one is permitted to leave the exam sessions and return during exams.
- Only one attempt is given for exam.
- Cell phones or electronic devices are not permitted during exams.
- Cheating will result in a zero. Any talking, notes or textbook, saved equations on calculators, cheat sheets etc. will result in an automatic F for student involved.
- There is no talking or asking questions during exams. Hold all questions until exam has concluded.

Ouizzes

Quizzes will be given as an extra credit (50 points total). Quizzes will consist of multiple-choice and will be closed book. The quiz will be administered online on CANVAS (more details and time windows will be provided in an announcement). No make-up quizzes will be allowed.

Grading

Composition of grades:

Exam 1: 100 points Exam 2: 100 points Exam 3: 100 points Final: 200 points

Sapling homework: 100 points

Total points: 600 points

Extra credits: 50 points (5 extra quizzes)

Letter grades: $A \ge 90\%$ (540 points), $B \ge 80\%$ (480 points), $C \ge 70\%$ (420 points), $D \ge 60\%$ (360

points), F < 60%.

The grade curving will be used if necessary.

Note: Students must report grading errors within seven (7) days after the return of the exam.

Grades of (exams, homework, quizzes) will be posted after all students complete the assignment.

Make-Up Exam

If you must miss an exam due to a University-approved absence, please contact the instructor to discuss the needed accommodations. A make-up exam will only be allowed in cases of illness and university approved absence. The instructor must be notified in written by the student prior to the regularly scheduled exam. Failure to do so may result in a grade of zero for the missed exam. The make-up exams will be scheduled for a day/time following the regularly scheduled exams and may have a different format from the original exam. Emergency situations will be handled on an individual basis.

Academic Integrity Standards and Consequences.

According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Academic dishonesty is not acceptable to UNT. Students caught cheating will receive a "0" for that assignment or exam. In addition, the incident will be reported to the Dean of Students, who may impose further penalty. Academic misconduct includes the following:

Using another person as a substitute in taking an examination

Cheating during an examination (This includes talking to another person during an examination)

Having any notes or textbooks in view during an exam Providing false excuses to delay taking an examination Having another individual provide answers to submitted problem sets

ADA Accommodation Statement.

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website at disability.unt.edu.

The Chemistry Department believes in reasonably accommodating individuals with disabilities and complies with the university policy established under section 504 of the *Rehabilitation Act of 1973* and the *Americans with Disabilities Act (1990)* to provide for equal access and opportunity. Please communicate with me as to your specific needs so that appropriate arrangements can be made through the department and/or the office of Disability Accommodation (ODA, Room 318A, Union, 565-4323).

Emergency Notification & Procedures.

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to CANVAS for contingency plans for covering course materials.

Table 01: Important Dates for Fall Session

August 24, 2020	First class day (Monday)
August 21-28, 2020	Student-requested schedule changes may be made during add/drop.
August 28, 2020	Last day for change of schedule other than a drop. (Last day to add a class.)
September 7, 2020	Labor Day (university closed)
October 2, 2020	Last day for change in pass/no pass status.
November 2, 2020	Last day to drop a course.
November 9, 2020	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
November 20, 2020	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
November 26-27, 2020	Thanksgiving break (university closed)
December 2-3, 2020	Pre-finals days
December 3, 2020	Last class day
December 4, 2020	Reading day (no classes)
December 5-11, 2020	Final examinations

Table 02: Tentative Schedule of Topics

Week	Date/s	Chapter/s	Notes
01	Aug 24	01	SHW 01 will be posted
	Aug 26	01	
	Aug 28	01	Recitation
02	Aug 31	01	
	Sep 02	01 & 02	SHW 02 will be posted
	Sep 04	01 & 02	Recitation
03	Sep 07		Labor Day (university closed)
	Sep 09	02	
	Sep 11	02	Recitation
04	Sep 14	02	
	Sep 16	03	SHW 03 will be posted
	Sep 18	02 & 03	Recitation
05	Sep 21	03	
	Sep 23	03	
	Sep 25		Exam 01 (Chapter 1 & 2)
06	Sep 28	04	SHW 04 will be posted
	Sep 30	04	
	Oct 02	03 & 04	Recitation

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07	Oct 05	04	
	Oct 07	04	
	Oct 09	04	Recitation
08	Oct 12	05	SHW 05 will be posted
	Oct 14	05	
	Oct 16	05	Recitation
09	Oct 19	06	SHW 06 will be posted
	Oct 21	06	
	Oct 23		Exam 02 (Chapter 3, 4 & 5)
10	Oct 26	07	SHW 07 will be posted
	Oct 28	07	-
	Oct 30	06 & 07	Recitation
11	Nov 02	08	SHW 08 will be posted
	Nov 04	08	
	Nov 06	08	Recitation
12	Nov 09	09	SHW 09 will be posted
	Nov 11	09	-
	Nov 13		Exam 03 (Chapter 5, 6 & 7)
13	Nov 16	09	
	Nov 18	10	SHW 10 will be posted
	Nov 20	09 & 10	Recitation
14	Nov 23	11	
	Nov 25	11	
	Nov 27		Thanksgiving break (university closed)
15	Nov 30		Final Exam review
	Dec 02		Final Exam review
	Dec 04		Reading day (no classes)
Final	Dec 09		Final Exam (Chapter 1-11)
week			

Studying Organic Chemistry

Contrary to what you may have heard, organic chemistry does not have to be a difficult course. You will learn more in it than in almost any course you will take—and what you learn will have a special relevance to life and the world around you. However, because organic chemistry can be approached in a logical and systematic way, you will find that with the right study habits, mastering organic chemistry can be a deeply satisfying experience.

- 1. Be prepared before class -
- 2. Keep up with your work from day to day—never let yourself get behind.
- 3. Study material in small units and be sure that you understand each new section before you go on to the next.
- 4. Work all class review questions before the next class.
- 5. Work all the in-chapter and assigned problems.
- 6. Write when you study.
- 7. Learn by teaching and explaining.
- 8. Use molecular models when you study.

Any class recordings are only for the use of students in this class for educational purposes and should not be shared outside the class.

(Instructor reserves the right to amend this information, as necessary.)