CHEM 2370.002: Organic Chemistry

Fall 2019, University of North Texas, Denton
Lecture: Mon, Wed & Fri; 8.00 a.m. – 8.50 a.m. @ Essc 255
Recitation: Wed 3.00 p.m. – 3.50 p.m. @ SAGE 116
(Aug 26, 2019 – Dec 13, 2019)

Instructor

Dr. Sri S. Subramanium
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Office Hours: Mon 9.00 a.m. – 10.00 a.m.
Wed 9.00 a.m. – 10.00 a.m.
Other time by appointment 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, codify, 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 2370.002 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

The lecture notes will be posted on the course's CANVAS Learn site prior to the lectures. You are strongly encouraged to print out the lecture notes, read them before class and bring them to the class. Announcements will be either posted at the course CANVAS site and/or distributed by e-mail.

Class Review and Exam Review Questions

After each class, review questions covering the topic discussed in the class will be posted on CANVAS. You are strongly encouraged to do the problems before coming to next class. One week before the exam, an exam review will be posted on CANVAS. Again you are strongly encouraged to do the problems and get the help from the professor or super TA if needed.

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.

Super Teaching Assistant

The super TA for this course Mr. Alejandro Benitz. The Super TA will also serve as substitutes for Dr. Subramanium when Dr. Subramanium is at conferences or other business trips/meetings.
email: alejandro.benitz@unt.edu

Office hours: Tue 8.00 a.m. – 10.00 a.m. @ CHEM 361

Supplementary Instruction

Supplemental Instructor (SI) for this course is Elizabeth Brown. The SI will hold three 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. More information about supplemental Instruction available at https://learningcenter.unt.edu/si.

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 in order to get good marks on exams.

Additional Support

Additional Support is available through the Chemistry Resource Center (CRC- room 231) and UNT Student Learning Center.

Exams

Exam 1: Wed, Sep. 25th, 3:00–3:50 p.m., SAGE 116
Exam 2: Wed, Oct. 23rd, 3:00–3:50 p.m., SAGE 116
Exam 3: Wed, Nov. 20th, 3:00–3:50 p.m., SAGE 116
Final Exam: Mon, Dec 9th, 8.00-10.00 a.m., @ Essc 255

Note: Exams 1–3 will emphasize the most recently covered materials. Final Exam will cover Chapter 1-11 in the textbook.
You will be allowed to use the modeling kit while taking exams.

- *Exams, 1-3, are 50 minutes in length (20-25 questions) and final exam is 2 hours in length (50-60 questions).*
- *Be prepared for multiple choice or short answer type questions. Some questions may have different point values.*
- *No new exams will be handed out once the exam has been turned in and the student has left the room.*
- *No one is permitted to leave the room and return during exams.*
- *Cell phones or electronic devices are not permitted* ***during exam****s.*
- *Examiners reserves the right to move you to a different seat during the exam.*
- *Cheating will result in a zero. Any talking, notes or text book, saved equations on calculators, cheat sheets, showing answer to another student or looking at another student answer sheet etc. will result in an automatic F for all students involved.*
- *There is no talking or asking questions during exams. Hold all questions until exam has concluded.*

Quizzes

Unannounced in class quizzes (~ 5 in total) will be given during lecture/recitation periods as an extra credit (~50 points total). No make-up quizzes will be allowed. Therefore, it's up to the individual to attend the lectures regularly to gather these quiz points.

Grading

Composition of grades:

Exam 1: 100 points
Exam 2: 100 points
Exam 3: 100 points
Final: 150 points
Sapling homework: 100 points
Total points: 550 points
Extra credits: 50 points (5 extra quizzes)

Letter grades: A ≥ 90% (495 points), B ≥ 80% (440 points), C ≥ 70% (385 points), D ≥ 55% (303 points), F < 55%.
The grading curving will be used if necessary.
Note: Students must report grading errors within seven (7) days after the return of the exam.

Make-Up Exam

If you must miss an exam due to a University-approved absence, please see 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.

Disabilities:

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).

Academic Misconduct

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 or looking at someone else's answers)
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

Important Dates

Last day for change in pass/no pass status: Oct. 04th, 2019
Last day to withdraw from this semester: Nov. 22nd, 2019

Tentative Schedule of Topics

Week	Week of	Lecture (Chapter)	Notes
1	Aug 26	01	Create account with sapling learning
2	Sep 02	01 contd 02	Homework chapter 01
3	Sep 09	02 contd 03	Homework chapter 02
4	Sep 16	03 contd	Homework chapter 03
5	Sep 23	04	Homework chapter 04 Exam 01
6	Sep 30	04 contd 05	Homework chapter 05
7	Oct 07	05 contd 06	Homework chapter 06
8	Oct 14	06 contd	
9	Oct 21	07	Exam 02 Homework chapter 07
10	Oct 28	07 contd 08	Homework chapter 08
11	Nov 04	08 contd	
12	Nov 11	9	Homework chapter 09
13	Nov 18	09 contd 10	Exam 03 Homework chapter 10
14	Nov 25	10 contd 11	Homework chapter 11
15	Dec 01	11 contd	
	Dec 03		Review for final exam
	Dec 9	8.00 a.m. – 10.00 a.m.	Final Examination (per UNT schedule)

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 you come to 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 of the in-chapter and assigned problems.
6. Write when you study.
7. Learn by teaching and explaining.
8. Use molecular models when you study.

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