CHEM 2370.002: Organic Chemistry

Spring 2020, University of North Texas, Denton
Lecture: Mon, Wed & Fri; 9.00 a.m. – 9.50 a.m. @ ESSC 255
Recitation: Wed 3.00 p.m. – 3.50 p.m. @ LIFE A117
(Jan 13, 2020 – May 08, 2020)

Instructor

Dr. Sri S. Subramanium
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Phone: (918) 200-5933 or (940) 565-2713 (Chemistry Department office)
Office Hours: Mon 10.00 a.m. – 11.00 a.m.
Wed 10.00 a.m. – 11.00 a.m.
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 2370.002 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 TAs for this course are Mr. Spenser Washburn and Mr. Islam Sheikh. Super TAs will also serve as substitutes for Dr. Subramanium, when Dr. Subramanium is at conferences or other business trips/meetings.

Mr. Spenser Washburn
email: *SpenserWashburn@my.unt.edu*
Office hours: Tuesday and Thursday (10.00 a.m. – 11.00 a.m.)

Mr. Islam Sheikh
email: *sheikhmohamislam@my.unt.edu*
Office hours: Tuesday and Thursday (11.00 a.m. – 12.00 noon)

Supplementary Instruction

Supplemental Instructor (SI) for this course is Elizabeth Brown (elizabethbrown8@my.unt.edu) 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, Feb. 12th, 3:00–3:50 p.m., @ LIFE A117
Exam 2: Wed, Mar. 18th, 3:00–3:50 p.m., @ LIFE A117
Exam 3: Wed, Apr. 15th, 3:00–3:50 p.m., @ LIFE A117
Final Exam: Wed, May 6th, 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 textbook, 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: 200 points
Sapling homework: 100 points
Other homework: 50 points
Total points: 650 points
Extra credits: 50 points (5 extra quizzes)

Letter grades: A ≥ 90% (585 points), B ≥ 80% (520 points), C ≥ 70% (455 points), D ≥ 60% (390 points), F < 60% (lower than 390 points).
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.

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 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

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 Blackboard for contingency plans for covering course materials.

Important Dates

January 17, 2020	Last day for change of schedule other than a drop. (Last day to add a class.)
January 20, 2020	MLK Day (university closed)
January 28 – March 30, 2020	Student may drop a course with a grade of W by completing the Request to Drop Class form and submitting it to the Registrar's Office.
February 21, 2020	Last day for change in pass/no pass status.
March 9-13, 2020	Spring break (no classes)
March 30, 2020	Last day to drop a course.
April 6, 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.)
April 17, 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.
April 29-30, 2020	Pre-finals days
April 30, 2020	Last class day
May 1, 2020	Reading day (no classes)
May 2-8, 2020	Final examinations

Tentative Schedule of Topics

Week	Date/s	Lecture (Chapter/s)	Notes
01	Jan 13 Jan 15 Jan 15 (R) Jan 17	01	Create account with sapling learning and training. *Start* of SHW Ch. 01
02	Jan 22 Jan 22 (R) Jan 23	01 cont'd 02	SHW Ch. 01 *due* ***Ch. 01 problem discussion during recitation***
03	Jan 27 Jan 29 Jan 29 (R) Jan 31	02 cont'd	*Start* of SHW Ch. 02 ***Ch. 01 and 02 problem discussion during recitation***
04	Feb 03 Feb 05 Feb 05 (R) Feb 07	02 cont'd 03	SHW Ch. 02 *due* ***Ch. 02 and 03 problem discussion during recitation*** *Start* of SHW Ch. 03
05	Feb 10 Feb 12 Feb 12 (R) Feb 14	03 cont'd 04	***Exam 01 (Ch. 01 - 02) during recitation*** SHW Ch. 03 *due* *Start of* SHW Ch. 04
06	Feb 17 Feb 19 Feb 19 (R) Feb 21	04 cont'd	SHW Ch. 04 *due* ***Ch. 03 and 04 problem discussion during recitation***
07	Feb 24 Feb 26 Feb 26 (R) Feb 28	05	*Start of* SHW Ch. 05 ***Ch. 05 problem discussion during recitation***
08	Mar 02 Mar 04 Mar 04 (R) Mar 06	05 cont'd 06	SHW Ch. 05 *due* ***Ch. 05 and 06 problem discussion during recitation*** *Start* SHW of Ch. 06
Mar 09 – Mar 15		SPRING BREAK	
09	Mar 16 Mar 18 Mar 18 Mar 20	06 cont'd	***Exam 02 (Ch. 03 - 05) during recitation*** SHW Ch. 06 *due*
10	Mar 23 Mar 25 Mar 25 (R) Mar 27	07	*Start* of SHW Ch. 07 ***Ch. 06 and 07 problem discussion during recitation***
11	Mar 30	07 cont'd	*Start* SHW Ch. 08

	Apr 01 Apr 01 (R) Apr 03	08	***Ch. 07 and 08 problem discussion during recitation*** SHW Ch. 07 *due*
12	Apr 05 Apr 07 Apr 07 (R) Apr 09	08 cont'd 09	*Start of* SHW Ch. 09 ***Ch. 08 and 09 problem discussion during recitation*** SHW Ch. 08 *due*
13	Apr 12 Apr 14 Apr 14 (R) Apr 16	09 cont'd 10	***Exam 03 (Ch. 06 - 08) during recitation*** *Start of* SHW Ch. 10 SHW Ch. 09 *due*
14	Apr 19 Apr 21 Apr 21 (R) Apr 23	11	*Start of* SHW Ch. 11 ***Ch. 09, 10 and 11 problem discussion during recitation*** SHW Ch. 10 *due*
15	Apr 26 Apr 28 Apr 28 (R)	11 cont'd	Review for final exam SHW Ch. 11 *due*
	May 06	8.00 a.m. – 10.00 a.m.	Final Examination (***(Ch. 01 - 11)*** at ESSC 255 (per UNT schedule)

* (R): Recitation, SHW: Sapling Homework

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.)