CHM 3217 sect 1444 Organic Chemistry/Biochemistry I

Fall 2018

Dr. Nicole Horenstein, Leigh 402, **Office Hours**: T 2:30-4:30 PM; W 1-2 PM. Th 1-2 392-9859, horen@chem.ufl.edu Attendance at office hours is strongly encouraged!

Course Description

This is an accelerated one-semester course focused on an overview of the structure, properties, and reactions of organic compounds, including biomolecules and polymers. This is the first half of a two-semester sequence in biochemistry. The prerequisites for this course are CHM 2046 or CHM2047 or CHM2051 and CHM 2046L, or the equivalent.

Text & Materials

"Organic Chemistry with Biological Applications, 3rd edition" by John McMurry. Also get the accompanying Study Guide and Solutions Manual! <u>I recommend</u> you purchase molecular models www.darlingmodels.com; kit #1; \$25.00

Web:

The course website is on UF's e-learning pages; link: https://ufl.instructure.com/courses/353725

Lecture

T, Th, periods 2-3 (8:30-10:25) LIT Hall, room 0121. Please plan to attend all lectures; quizzes and exams draw from lecture material and discussions we have in class! We have a short break after the first hour in which you can reconnect to the outside world and stretch, so please be polite and do not text, etc, during lecture.

Attendance

I can't think of a harder way to learn organic chemistry than not showing up for class! Further, We will have 5 unannounced 15 minute quizzes that will count for ~17 % of your grade. Please do come.

Exams

There will be 5 quizzes (15 points each) and 3 exams (100 points each). Quizzes should be easy for you if you are keeping up with the work! Your lowest quiz grade will be dropped in calculating your grade, which will be based on a total of 360 possible course points. There are no makeups for missed quizzes or exams. Make-up exams will only be granted for absences consistent with UF policy. Military service, UF teams, religious observation, serious illness, etc. Documentation will be required! Please contact me in advance about a pending absence and no matter what contact me within one day of an unanticipated absence. No makeups are offered for a missed quiz- you can drop the missed quiz.

Grades/Grading

The following grading scale will apply (Equal to or above: 92=A; 90=A-; 86=B+; 81=B; 79=B-; 76=C+; 71=C; 69=C-; 65=D+; 61=D; 59=D-) The letter grade of A reflects exemplary work. Exams may be photocopied to ensure academic honesty. Regrades require an explanatory note on the cover from you, and the entire exam will be regraded for accuracy. If necessary, exams will be curved to an average of 76/100.

Homework

Work the problems found in your book! They will not be graded, but working these problems will greatly facilitate your understanding of the course material. (See "How to do well", below) Come in to see me or your TAs and we will help you with the material.

How to do well!

Organic chemistry is best learned through practice! (Like most things)

I cannot overemphasize how important it is to work as many problems as you can.

Save any tough ones (showing your work) for me or a TA to look at and we will help

© University of Florida, 2018

you learn how to figure it out! *Active learning* is the name of the game, and just attending lecture and reading your text is a good start, but not enough. The active learner practices what they are learning, and when it is show-time, (e.g. a quiz or exam) you are ready!

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code." On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Approximate Semester Schedule (each date represents 2 class meetings!)

Date(s)	Chapter/Activity	Topic Area	
8/23	Ch 1 lecture	Structure & Bonding	
8/28	Ch 2 lecture	Polar covalent bonds; Acids/Bases	
8/30	Ch 2 lecture		
9/4	Ch 3 lecture	Organic Compounds: Alkanes & Stereochemistry	
9/6	Ch 3 & 4 lecture	Organic Compounds: Cycloalkanes & Stereochemistry	
9/11	Ch 4 lecture		
9/13	Ch 5	Stereochemistry at Tetrahedral Centers	
9/18	Ch 6,	An overview of Organic Reactions	
9/20	Ch 7; problem sessions	Alkenes and Alkynes	
9/25	Exam 1(ch 1-6)		
9/27	Ch 7 lecture; Ch 8 lecture	Reactions of Alkenes and alkynes	
10/2	Ch 8 lecture Ch 9 lecture	Aromatic Compounds	
10/4	Ch 9 lecture		
10/9	Ch 10 lecture	Structure Determination: Mass Spec and IR Spectroscopy	
10/11	Ch 11 lecture	Structure Determination: Nuclear Magnetic Resonance	
10/16	Ch 12 lecture	Organohalides: Nucleophilic substitutions and eliminations	
10/18	Ch 12 & 13 lecture	Alcohols, Phenols and Thiols: Ethers and Sulfides	
10/23	Ch 13 lecture, problem sessi	Ch 13 lecture, problem sessions	
10/25	Exam 2(ch 7-12)		
10/30	Ch 14 lecture Aldehydes ar	Ch 14 lecture Aldehydes and Ketones: Nucleophilic addition Reactions	
11/1	Ch 14 lecture, Ch 15 lecture	Ch 14 lecture, Ch 15 lecture	
11/6	Ch 15 lecture	Carboxylic Acids & Nitriles	
11/8	Ch16 lecture	Carboxylic acid derivatives: Nucleophilic acyl substitution	
11/13	Ch 16, Ch 17 lecture	Carbonyl α-substitution and Condensation Reactions	
11/15	Ch 17 lecture		
11/20	Ch 18 lecture Amin	es and Heterocycles	
11/22	Thanksgiving break, No Class		
11/27	Ch 18 lecture; Polymer Chemistry		
11/29	problem sessions, Mega-review!		
12/4	Exam 3 (75% chapters 13-18, polymer, and it will draw on older material too		

TA: Haoxi Li <u>hl2500@ufl.edu</u>; also Organic Chemistry Learning Center in Flint 258

CHM 3217 sect 1444 Organic Chemistry/Biochemistry I

Fall 2018

Campus Resources

The Counseling & Wellness Center

Provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation www.dso.ufl.edu/drc/

Disability Resource Center 352-392-8565, 001 Reid Hall

(Located 1/8 mi. north of the intersection of SW 13th Street & Museum Road)