

SYLLABUS - CHEMISTRY 222

Spring, 2018

Lectures: Tu/Th, 9:30-10:50 am, Kent 107

Professor: Raymond Moellering, Ph.D.
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Office: GCIS E505A
Office Hrs: W 12-2pm, or by appointment

Student Responsibility: You are responsible for changes to this syllabus and other announcements made in class. If you are absent you are expected to obtain class notes, announcements and handouts from a classmate.

Textbook: *Organic Chemistry, 12th Edition*, by T.W. Graham Solomons, Craig B. Fryhle & Scott A. Snyder. Additional handouts may be posted on the course website throughout the quarter.
Molecular Models - HGS Models are highly recommended.

Course Meetings

Dates	Class #	Chapter	Subject	Reading
March 27, 29	1, 2, 3/	16	Aldehydes and Ketones: Nucleophilic Addition	711-760
April 3*, 5, 10	/3, 4, 5	17	Carboxylic Acids and Their Derivatives	761-810
April 12, 17*	6, 7	18	Reactions at the α Carbon of Carbonyl Compounds	811-848
April 19, 24	8, 9	19	Condensation and Conjugate Addition Reactions of Carbonyl Compounds	849-889
MIDTERM EXAM-I	Thursday, April 26 (Chapters 16-18; material covered on April 24 will not be included on this exam)			
May 1*, 3	10, 11	19/20	Condensation and Conjugate Addition, cont., Amines	890-937
May 8, 10	12, 13	20/22	Amines/Carbohydrates	965-1009
May 15*	14	22	Carbohydrates	965-1009
MIDTERM EXAM-II	Thursday, May 17 (Chapters 19, 20, 22; material covered on May 15 will not be included on this exam)			
May 22	15	23	Lipids	1011-1044
May 24, 29*	16, 17	24	Amino Acids and Proteins	1045-1089
May 31-June 1	Reading Period			
FINAL EXAM	Thursday, June 7, 2018 – 10:30am-12:30pm (Cumulative)			

*Indicates due dates for course homework – every other Tuesday, except on exam days.

Course Grading: Your course grade will be determined as follows:

Midterm Exams	40.0%
Final Exam	30.0%
Laboratory Grade	25.0%
Homework	2.5%
Recitation Quizzes	2.5%

EXAMINATIONS: There will be two Midterm exams and a comprehensive final exam on the dates indicated. You must take three exams to pass the course. Only under special circumstances *and with advanced, prior approval from the instructor* will someone be allowed to take the exam at a time other than scheduled. Re-grades of exams must be submitted within **one week** of when they were returned. If submitting a regrade make sure you have *not made any changes* to your exam, as these will be considered as an attempt to change your answers. If any changes have been inadvertently made to your exam, it is your responsibility to point them out on your exam, in blue pen and initialed, when submitting the regrade.

HOMEWORK and PRACTICE PROBLEMS: Like learning a new language or skill, regular practice is critical for success in Organic Chemistry. While you will need to learn a large number of organic reactions throughout the course, it is more important that you understand *why* a reaction proceeds the way it does, rather than just memorizing that a set of reagents will enact a specific transformation. Therefore, it is a good idea to focus on practicing reaction mechanisms in both your practice problems and homework. When possible, you should work the problems within the chapter and at the end of the chapter. Write out complete answers, with neat structures and detailed explanations and mechanisms. Refer to the Study Guide only after you have made effort to answer the question. Because evaluation of your knowledge in this course hinges on your performance on exams, you are advised to use the problems to develop your skills in taking organic chemistry examinations. Homework assignments will be posted on the course website and due every other Tuesday throughout the course. It is ok to work together on homework, but your answers must be your own.

RECITATION SECTIONS & QUIZZES: Your teaching assistants will hold recitations at an agreed upon time. Attendance is expected. Quizzes will be given during the recitation section the week after a problem set is due (e.g. the Monday-Friday following the due date). Quizzes will account for 2.5% of your final grade. The best way to study for these quizzes is to do the homework problems to the best of your ability and understand the reasoning behind the answers. There will be NO MAKE UP quizzes.

ADDITIONAL HELP: You are encouraged to attend as many recitations as you wish. All the teaching assistants will be holding office hours and you can go see any teaching assistant. In addition, I am generally available to answer questions right after class, during scheduled office hours above or by appointment.

ACADEMIC CONDUCT: Any material submitted for evaluation towards your course grade must be your own work. University policies on academic honesty are applied throughout the course; please refer to the student manual for a description of these policies: <https://studentmanual.uchicago.edu/Policies>. Phones, tablets, computers or other written materials cannot be out at any time during examinations.