CHEM:2220       ORGANIC CHEMISTRY II       SPRING, 2019

INSTRUCTOR: Dr. Rebecca Laird; Office W341 CB; rebecca-laird@uiowa.edu;


OPTIONAL MATERIALS:  A "Student Study Guide/Solutions Manual" for the textbook is also available which contains answers to the problems in the text. The bookstore offers model kits and I strongly suggest purchasing one. It will greatly help you to “see” organic molecules in three-dimensions.

LECTURE: MWF 9:30-10:20 in W290 CB

WEB SITE:  Online content for the course will be managed using the ICON (Iowa Courses Online) system (http://icon.uiowa.edu/index.shtml). The site will be used to post copies of the slides used in class, practice exams, exam keys, and announcements.

OFFICE HOURS: Mon. 12:30 pm -2:00 pm in W341 CB

COURSE DESCRIPTION:  This course is intended for science majors (botany, biology, microbiology, or chemistry), pre-pharmacy, pre-medical, pre-dental, or pre-veterinary students, or anyone planning to take two years of chemistry.  This course is a continuation of CHEM:2210.  It is organized around the concept of the functional group, but includes di- and poly-functional molecules.  Methods for establishing the structure of organic compounds are presented, with an emphasis on NMR and IR spectroscopy and mass spectrometry.  The chemistry of carbonyl compounds, carboxylic acids, carboxylic acid derivatives, amines, and heterocyclic compounds is discussed.  Finally, the organic chemistry of carbohydrates and amino acids is presented.  There are three lectures each week by the professor and a number of discussions sections by TAs.

COURSE GRADES:  The maximum possible score is 540 points, 100 points apiece for each hour exam and 150 points for the final, and 10 points for each homework assignment.  For a large-enrollment course, such as ours, the College of Liberal Arts and Sciences strongly suggests a Norm-Referenced grading scheme with the following grade distribution.

18% A  36% B  39% C  5% D  2% F

The grade distribution for this course will be close to these values, but it may vary based on class performance.  Plus and minus grades will be given, and are left to the discretion of the instructors at the end of the semester.  Your test scores will be posted on ICON.  I will post the grade distributions for each exam on ICON so that students know how they scored on the exam in relation to the course average.  I will not release final point distributions at the end of the semester.
EXAM SCHEDULE: Exams dates, times and places are given below.

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<thead>
<tr>
<th>Exam</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feb. 13</td>
<td>8:45-10:15 pm</td>
<td>100 PH/LR1 VAN</td>
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<tr>
<td>2</td>
<td>Mar. 27</td>
<td>8:45-10:15 pm</td>
<td>100 PH/LR1 VAN</td>
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<tr>
<td>3</td>
<td>Apr. 24</td>
<td>8:45-10:15 pm</td>
<td>100 PH/LR1 VAN</td>
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<tr>
<td>Final</td>
<td>TBD</td>
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EXAMINATIONS: Exams are closed-book. Leave textbooks, notes, etc., at home or in the front of the room before the start of the exam. No electronic devices are allowed during exams, including cell phones. There will be three exams of 90 minutes each and a two-hour final. Exams must be written in ink, but not red or erasable ink. Exams on which white-out was used or which were written in pencil, red or erasable ink will not be regraded. Exams will be graded and returned through the Chemistry Center (E225 CB) as soon as possible. Note: I will not respond to emails nor hold meetings regarding exam material/questions beginning 24 hours prior to exams.

Each exam is comprehensive but will emphasize material since the previous exam. Organic chemistry builds on what was learned before, it is important to continually add to your fountain of knowledge. Exams must touch on material that was learned earlier in the semester, but in most instances we will use concepts that we covered since the previous exam. It is wise to review all of the material since Day 1 for each exam.

Anything that is covered through the end of class on the day before the exam is fair game for the exam. I more or less follow the book, so you will be able to determine where we stopped before the exam. If you have any doubt, study for the whole chapter that we are working on.

The final exam will be comprehensive.

MAKE-UP EXAMS: Make-up exams will be given under exceptional circumstances only. You must sign up for the make-up and give an acceptable reason before the regular exam is given. Under no circumstances will a make-up be given to take the place of a regular exam taken earlier. To sign up for a make-up exam, email the chemistry center prior to the regular exam with the reason for your absence.

FINAL EXAMINATIONS: No student is required to take more than two examinations in one day. A potential problem may be eased by students closely checking the exam schedule. An undergraduate student who has (a) two examinations scheduled for the same period or (b) more than two examinations scheduled for the same day may schedule an alternate time for the final exam.

REGRADING OF EXAMS: If you feel that a mistake has been made in grading your exam, turn it in at the Chemistry Center (E225 CB) for regrading. Write on the cover the question to be regraded, with a one sentence explanation of what you believe was incorrectly graded. The entire exam will be regraded. Exams for regrading must be turned in within one week after the exam is first returned to you. No regrades will be granted after this time. This regrading policy will be strictly enforced. This is the only way that you can get consideration for regrading.
**HOMEWORK:** The online homework on Mastering will force you to draw structures, learn concepts, and prepare you to excel in this course. These problems are critical to learning organic chemistry, so we will take advantage of Mastering.

I will post one homework assignment for each chapter (chapter 14-22) the due date and time will be clearly listed in Mastering. You should assume we are going to have regular homework assignments and look on Mastering for them.

The homework questions will be assigned at random from a pool of questions so folks working on adjacent computers will get different questions. Because of this, I am assigning the homework as “full collaboration”. That phrase means that you may work with your classmates, friends, tutors, or anyone else to complete the homework. You may work alone if you wish, but no penalty will be given to those who work together. This policy does not mean that you should copy someone else’s homework; that is not allowed and will be viewed as cheating. You must make an honest effort to complete the homework and understand the answers. One good method to know if you understand the answers is to ask yourself if you can reproduce your homework if you are alone in front of the computer. If you can reproduce your homework, you have some level of understanding of it. Homework is an excellent vehicle for learning class material, take advantage of this opportunity and you will do well on the exams.

The instructions for each assignment will be clearly listed on each assignment. **No late homework will be graded nor will extensions be given.**

**DISCUSSION SESSIONS:**

Our course TAs will lead these discussions. This time is reserved for problem solving, discussion of lecture material, and explanations of exam answers. We strongly encourage you to attend these sections as the TAs are excellent and can help you learn the material. Their email addresses and office hours will be given on ICON. All TA office hours are held in the TA center on the second floor of the chemistry building.

**DROP-ADD SLIPS:** Drop and add slips will be signed in the Chemistry Center (E225 CB).

**COURSE INFORMATION:** Inquiries about details of the course (e.g. extra copies of the syllabus, exam times and places, times and places of discussion sessions, etc.) should be taken to the Chemistry Center (E225 CB).

**DROP DATES:**  **Deadline Date:** Jan. 28, 2019: last day to drop a course without a W.  
**Deadline Date:** Apr. 1, 2019: Last day to drop without Dean’s approval.

**CHEATING**

Our scientific environment is maintained through the actions of its members and the trust we place in one another. Scientists are expected to remain honest in their words and actions. When this trust is broken the results are often severe and career threatening. One should not cheat on the false assumptions that 1) no one is harmed if no one is aware of the cheating or 2) it is alright to cheat
if you aren’t caught. A good scientist will hold themselves to a higher standard where cheating, even if it isn’t discovered, is wrong.

With this important responsibility comes the privilege of being a member of a community that values openness and truth. As you are all scientists in training I will expect you to act accordingly and with an upright manner. Anyone caught cheating will fail and will be reported to the administration.

DEPARTMENTAL HOME: Department of Chemistry

DEPARTMENTAL CONTACT INFORMATION: James Gloer, DEO, E331 CB; Lindsay Elliott, Secretary to the Chair, E331 CB, 319-335-0200.

ADMINISTRATIVE HOME
The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS Academic Policies Handbook at http://clas.uiowa.edu/students/handbook.

ELECTRONIC COMMUNICATION
University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences (Operations Manual, III.15.2, k.11).

ACCOMMODATIONS FOR DISABILITIES
A student seeking academic accommodations should first register with Student Disability Services and then meet with the course instructor privately in the instructor's office to make particular arrangements. See http://sds.studentlife.uiowa.edu/ for more information.

ACADEMIC HONESTY
All CLAS students or students taking classes offered by CLAS have, in essence, agreed to the College's Code of Academic Honesty: "I pledge to do my own academic work and to excel to the best of my abilities, upholding the IOWA Challenge. I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled (CLAS Academic Policies Handbook).

CLAS FINAL EXAMINATION POLICIES
The final examination schedule for each class is announced by the Registrar generally by the fifth week of classes. Final exams are offered only during the official final examination period. All students should plan on being at the UI through the final examination period. It is the student's responsibility to know the date, time, and place of a final exam.
MAKING A SUGGESTION OR A COMPLAINT
Students with a suggestion or complaint should first visit with the instructor (and the course supervisor), and then with the departmental DEO. Complaints must be made within six months of the incident (CLAS Academic Policies Handbook).

UNDERSTANDING SEXUAL HARASSMENT
Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment for assistance, definitions, and the full University policy.

REACTING SAFELY TO SEVERE WEATHER
In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Department of Public Safety website.

SUGGESTIONS FOR SUCCESSFUL STUDY IN ORGANIC CHEMISTRY II:

- Learning Organic Chemistry requires commitment of time and effort on your part. This course will require at least two hours of out-of-class preparation and study for every hour that you spend in class.
- Reinforce the material that is presented in the lectures by reading the corresponding sections in the book. Work out the in-chapter problems as you go.
- Test your understanding of the material by working out the problems at the end of each chapter. Work out the problems before you check the answers in the Student Study Guide/Solutions Manual.
- You have a wealth of opportunities to reinforce concepts and solve problems with which you may be having difficulty. Avail yourself of the instructor and TA office hours, and attend the lectures and discussion sessions. These opportunities are offered to help you learn Organic Chemistry. Use them!