CHEM:2220    ORGANIC CHEMISTRY I   Fall, 2018

INSTRUCTOR: Prof. David F. Wiemer; Office E531 CB; david-wiemer@uiowa.edu


OPTIONAL MATERIALS: A "Solutions Manual" for the textbook also is available which
contains answers to the problems in the text. A set of molecular models, e.g. HGS
Molecular Model Set – C SET for Organic Chemistry, is strongly recommended.

LECTURES: MWF 9:30 to 10:20 a.m. in 100 Phillips Hall.

WEB SITE: https://icon.uiowa.edu The course syllabus, announcements, and lecture slides will
be available on the ICON site in PDF formats. These slides are not necessarily entire
presentations – details and notes will be added during course lectures.

OFFICE HOURS: Monday, 10:30–11:50 and Tuesday 10:30–11:50 (in E427 CB). Questions
on course material will be answered during class as time permits, at review sessions, during
office hours, or by appointment. Electronic media (e.g. e-mail and texting) will not be used
to address course concepts. Priority will be given to e-mails that include the “word of the
day” in the subject line.

DEPARTMENTAL HOME: The Department of Chemistry

DEPARTMENTAL CONTACT INFORMATION: James B. Gloer, DEO, E331 CB; through
Ms. Janet Kugley, Secretary to the Chair, E331 CB, 319-335-1350.

EXAMINATIONS: Exams are closed-book. Leave textbooks, notes, etc., at home or in the
front of the room before the start of the exam. There will be three mid-term exams and a
final exam. 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
considered for regrades. Exams will be graded and returned through the Chemistry
Center (E225 CB) as soon as possible.

EXAM SCHEDULE: Midterm exams dates, times, and places are given below. Exams
locations for the final will be posted on the course web site as soon as they are announced
by the Registrar.

Exam 1 – Wednesday, September 19, 6:30 – 8:00 PM. C20 PC / SC1505
Exam 2 – Wednesday, October 17, 6:30 – 8:00 PM. C20 PC / SC1505
Exam 3 – Wednesday, November 14, 6:30 – 8:00 PM. C20 PC / SC1505
Final Exam – TBA by the Registrar.

MAKE-UP EXAMS: Make-up exams will be given under exceptional circumstances only.
You must sign up for the make-up through the Chemistry Center (E225 CB) and give an
acceptable reason before the regular exam is given. To sign up for a make-up exam, fill out the
request form (https://uiowa.qualtrics.com/SE/?SID=SV_ebbpDYzM8MA4hEN), which is also
linked on our ICON course site, prior to the regular exam with the reason for your absence. Under no circumstances will a make-up be given to take the place of a regular exam taken earlier. The decision as to the acceptability of any make-up request rests with the instructor and a point penalty may be imposed. Vacation travel plans are NOT recognized as a valid excuse for the purpose of taking a make-up exam. Make-up exams are comparable to the regular unit exams, but you will not be able to keep the make-up exam. You can review it during the instructor’s office hours and you will have access to the unit exam questions given to the entire class. Make-up exams will be given in Room W290 CB at the times listed below.

MAKE-UP EXAMS: Make-up exams will be held from 6:30-8:00 PM on the following dates.
- Make-up Exam 1: Friday, 9/28/18, W290 CB
- Make-up Exam 2: Friday, 10/26/18, W290 CB
- Make-up Exam 3: Friday, 11/30/18, W290 CB

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 file a request for a change of schedule at the Registrar Service Center, 17 Calvin Hall, M–F, 8:00 AM to 4:30 PM (384-4300). For exam conflicts during the fall semester, the course having the lower department letter will take precedence.

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 of the time they are first returned to you. No requests for regrades will be considered after one week. This regrading policy will be strictly enforced. It is the only way that you can get consideration for regrading.

COURSE GRADES: The final grade will be based on points earned on the mid-term exams and the final exam.
- 3 hour exams @ 100 pts each ...............................................................300 pts
- Comprehensive final with emphasis on last chapters covered ........................150 pts
  Total ........................................450 pts

Plus and minus grades may be assigned, but not necessarily split evenly among the three categories. The grade of A+ occasionally may be assigned to recognize exceptional achievement. College of Liberal Arts & Sciences recommended grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>% of Class</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>18</td>
<td>minimum A-</td>
</tr>
<tr>
<td>B</td>
<td>36</td>
<td>minimum B-</td>
</tr>
<tr>
<td>C</td>
<td>39</td>
<td>minimum C-</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>minimum D</td>
</tr>
<tr>
<td>F</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

avg recommended GPA = 2.6 / 4.0
DROP DATES: The deadline to drop without receiving a “W” on your transcript is Friday, August 31, 2018. Undergraduates receive a "W" for any course dropped after the date. Monday, October 29, 2018 is the last day to drop a course.

DROP-ADD SLIPS: Drop and add slips will be signed by Trent Tappan or Leigh Mather 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 Trent Tappan in the Chemistry Center (E225 CB).

DISCUSSION SESSIONS: Discussion sessions will be conducted by a TA. These sessions provide additional opportunities to ask questions, work on problems, and improve your understanding of the course material. The schedule for the discussion sessions follows:

<table>
<thead>
<tr>
<th>Discussion Section</th>
<th>Time</th>
<th>Place</th>
<th>TA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0002</td>
<td>8:30 to 9:20 AM, M</td>
<td>E215 CB</td>
<td>Alisa Fairweather</td>
</tr>
<tr>
<td>0012</td>
<td>2:30 to 3:20 PM, M</td>
<td>E203 CB</td>
<td>Alisa Fairweather</td>
</tr>
<tr>
<td>0013</td>
<td>3:30 pm to 4:20 pm, M</td>
<td>E203 CB</td>
<td>Alisa Fairweather</td>
</tr>
<tr>
<td>0042</td>
<td>8:30 to 9:20 AM, W</td>
<td>E215 CB</td>
<td>Alisa Fairweather</td>
</tr>
<tr>
<td>0044</td>
<td>10:30 to 11:20 AM, W</td>
<td>E215 CB</td>
<td>Alisa Fairweather</td>
</tr>
<tr>
<td>0052</td>
<td>2:30 pm to 3:20 pm, W</td>
<td>E203 CB</td>
<td>Chloe Schroeder</td>
</tr>
<tr>
<td>0053</td>
<td>3:30 pm to 4:20 pm, W</td>
<td>E215 CB</td>
<td>Chloe Schroeder</td>
</tr>
<tr>
<td>0054</td>
<td>4:30 pm to 5:20 pm, W</td>
<td>E203 CB</td>
<td>Chloe Schroeder</td>
</tr>
<tr>
<td>0071</td>
<td>1:30 pm to 2:20 pm, Th</td>
<td>W258 CB</td>
<td>Chloe Schroeder</td>
</tr>
<tr>
<td>0072</td>
<td>2:30 pm to 3:20 pm, Th</td>
<td>W258 CB</td>
<td>Chloe Schroeder</td>
</tr>
</tbody>
</table>

TA OFFICE HOURS: Alisa Fairweather: Monday 10:30-11:30 and 12:30-1:30  
Chloe Schroeder: Tuesday 10:30-11:30 and Thursday 8:30-9:30
College Statements.

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 Student Academic Handbook.

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

ACADEMIC FRAUD: Plagiarism and any other activities when students present work that is not their own are academic fraud. Academic fraud is a serious matter and is reported to the departmental DEO and to the Associate Dean for Undergraduate Programs and Curriculum. Instructors and DEOs decide on appropriate consequences at the departmental level while the Associate Dean enforces additional consequences at the collegiate level. See the CLAS Academic Fraud section of the Student Academic Handbook.

MAKING A SUGGESTION OR A COMPLAINT: Students with a suggestion or complaint should first visit the instructor, then the course supervisor, and then the departmental DEO. Complaints must be made within six months of the incident. See the CLAS Student Academic Handbook.

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

UNDERSTANDING SEXUAL HARRASMENT: 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 Public Safety web site.
COURSE DESCRIPTION: This course is intended for science majors (e.g. botany, biology, or microbiology), pre-medical, pre-dental, pre-pharmacy, or pre-veterinary students, or anyone planning to take two years of chemistry. This course is a direct continuation of CHEM2210, Organic Chemistry I. 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 ethers, unsaturated organic compounds, carboxylic acids, carboxylic acid derivatives, carbonyl compounds, amines, and heterocyclic compounds is discussed. Finally, the organic chemistry of carbohydrates and amino acids is presented as time allows. Because the chemistry of carbon is three-dimensional, students are strongly advised to buy and use a molecular models kit.

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. The best way to build fluency is to study on a day-to-day basis.

- Reinforce the material that is presented in the lectures by reading the corresponding sections in the book. Work through 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.

- To help you organize your study, a part of each exam will come from the suggested problems as posted on ICON.

- You have a wealth of opportunities to reinforce concepts and solve problems with which you may be having difficulty. Attend lectures and your discussion section. Use the resources available to you!