CHEM:1080           GENERAL CHEMISTRY II                              Spring 2020

INSTRUCTOR:
Dr. Justine Olson
E359 CB
justine-olson@uiowa.edu
Walk-in hours: E359 CB Monday & Wednesday 10 – 11:30 am
*or by appointment

TEACHING ASSISTANTS:
Logan Augustine
logan-augustine@uiowa.edu

Nicole States
nicole-states@uiowa.edu

Hannah Nennig
hannah-nennig@uiowa.edu

TEXTBOOK: “General, Organic & Biological Chemistry”, Third Edition, Smith, J.G. (ISBN 9780073511245). Second or fourth editions are also acceptable. A Sapling Learning access card from the IMU bookstore is also required (OR you can pay via credit card directly to Sapling Learning). TopHat is also required for lecture and discussion sections (lecture code: 113031).

OPTIONAL MATERIALS: "Student Study Guide/Solutions Manual" for the textbook is also available. The textbook itself has answers to odd questions (but not the evens).

LECTURES: MWF 2:30 – 3:20 MWF in MH AUD

WEBSITE: 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, old exams, exam keys, recordings of lectures, and announcements. You will also be able to directly link to your assignments and discussion questions from the ICON homepage.

CHEMISTRY RESOURCE CENTER OFFICE HOURS:
All chemistry TAs will have regularly scheduled office hours in the Resource Center, E208 CB (on east side of building, second floor). TA office hours are Monday-Thursday 8:30 am – 6:30 pm and Fridays 9:30 am- 3:30 pm. All students can go to any TA in the Resource Center for help with any chemistry course. The Center is free but you’ll need your student ID.

COURSE CONTENT AND PREREQUISITES:

CHEM 1080: General Chemistry II fulfills the CLAS ‘natural sciences without lab’ requirement.

Content: Introductory organic chemistry and biochemistry: structure and representations of molecules; physical and chemical properties; introduction to reactions; applications: polymers, nutrition, drugs, etc.
Prerequisites: CHEM:1070 or high school chemistry.
A basic understanding of atoms and molecules will be assumed.

**COURSE STRUCTURE AND INSTRUCTION:**
CHEM:1080 consists of a main lecture held three-days per week, discussion sections, online homework, and four exams (three during the semester and one cumulative final). Attendance is expected at both lecture and discussion. Students should also expect to devote at least 6 hours per week to out-of-class studying for this 3-semester hour course (2 study/prep hours per semester hour).

1. **Lecture** – Dr. Olson
2. **Discussion Section** – Logan Augustine, Nicole States, Hannah Nennig
3. **Exams** – proctored by Dr. Olson, class TAs, and other chemistry grad students

**COURSE GRADES:** The maximum possible score is 620 points: 100 points apiece for each semester exam and 150 points for the final, 10 points for each homework assignment (13 assignments per semester), and up to 4 points for each discussion section (with a maximum of 40 points available).

The following point values will correspond to each letter grade. +/- grades will be assigned at the end of the semester. Prof. Olson may lower the point value required for each category, but the number of points needed for each letter grade will never be raised.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>A-, A, A+</td>
<td>≥ 515.00</td>
</tr>
<tr>
<td>B</td>
<td>B-, B, B+</td>
<td>≥ 430.00</td>
</tr>
<tr>
<td>C</td>
<td>C-, C, C+</td>
<td>≥ 310.00</td>
</tr>
<tr>
<td>D</td>
<td>D-, D, D+</td>
<td>≥ 260.00</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 259.99</td>
<td></td>
</tr>
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We will show the grade distributions for each exam in lecture so that students know how they scored on the exam relative to the course average.

**EXAM SCHEDULE:** Exams dates, times and places are given below.

<table>
<thead>
<tr>
<th>Exam</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feb. 26th</td>
<td>8:45-10:15 pm</td>
<td>SHAM Lib/MH AUD</td>
</tr>
<tr>
<td>2</td>
<td>March 25th</td>
<td>8:45-10:15 pm</td>
<td>SHAM Lib/MH AUD</td>
</tr>
<tr>
<td>3</td>
<td>April 22nd</td>
<td>8:45-10:15 pm</td>
<td>SHAM Lib/MH AUD</td>
</tr>
<tr>
<td>Final</td>
<td>TBD</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. There are three 90-minute unit exams and a 2-hour cumulative final exam. Exams are short answer and multiple choice (100 points). **Students should bring a #2 pencil and their University ID to each exam.** Graphing calculators, programmable calculators, or data transmitting devices (e.g., tablet, laptop, cell phone, watch, glasses) will **not** be allowed during exam.
Each exam is comprehensive but will emphasize material since the previous exam. Chemistry builds on what was learned before. Often new ideas will build on previous material. It is wise to review all material since Day 1 for each exam.

Regrade policy. The short answer portion of the exam will be handed back to students (through the Chemistry Center) within a few days following the exam. Students have one week to request a regrade of their short answer portion. Please attach an explanation to your short answer section on why you’ve requested a regrade to speed up the process. Only exams completed in ink will be accepted for regrades.

The final exam will be comprehensive.

MAKE-UP EXAMS: Make-up exams will be given for University-approved excuses or 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 (i.e. no re-takes). To sign up for a make-up exam, email the Chemistry Center prior to the regular exam with the reason for your absence. You can find the request form under ‘Course Details’ on ICON. Students who miss this exam due to car accident, last minute personal emergencies, etc., have three days to contact Prof. Olson. Exams that are missed for non-emergencies will have a 15% penalty applied.

Make-up exam dates (all 6:30 – 8 pm in W290 CB):
Exam 1: Friday, March 6th
Exam 2: Friday, April 3rd
Exam 3: Friday, May 1st

*Note: make-up exams will not be handed back to students. If you would like to review your exam, you can set up an appointment with Prof. Olson with one business day notice.

FINAL EXAMINATIONS: The final exam will be cumulative and worth 150 points, with emphasize on material learned since exam 3.

The final exam schedule is released the fifth week of class each semester. Until this date is announced, students should plan to stay on campus until May 15th. No student is required to take more than two examinations in one day during Finals Week. 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. The make-up final is always given on the last day of the semester. For spring 2020, this is May 15th at 5:30 pm.

HOMEWORK: The online homework on Sapling will allow 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 full advantage of Sapling.

The instructions for each assignment will be clearly listed on each assignment.

We will post one homework assignment for each chapter (10 points each). The due date and time will be clearly listed in Sapling. You should assume we are going to have regular homework assignments and look for them on ICON/Sapling’s schedule. Generally, students will have
approximately 2 weeks to complete an assignment: the assignment opens the first day of a chapter and ends three business days after it’s completed. The exception is the last homework assignment of the semester. All homework assignments, including late work, must be turned in by Friday, May 8th at 4:59 pm.

There is a 15% penalty for late homework/day. After 3 days, late work will no longer be accepted. If you have an emergency that prevents you from completing your homework within this time frame (e.g. death of a family member, major car accident, called up for service in the National Guard, etc.) contact Prof. Olson to make arrangements.

The “Stuff Happens” Clause. Can be invoked once a semester for a 3-day homework extension without a late penalty, no explanation required. You must contact Prof. Olson either before or one day after the deadline to use this (i.e. don’t wait a week to speak up). Cannot be used at the end of the semester retroactively.

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, we are 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.

DISCUSSION SESSIONS: Attendance in your discussion section is expected and will be taken every week. Up to 40 points can be earned in discussion by answering questions through TopHat. During each of the 15 weeks of the semester you can earn up to 4 points. Although it is possible to obtain the point-cap of 40 points before the end of the semester, we encourage you to continue going to discussion to engage with current material.

Chemistry graduate students 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 TA can help you learn the material.

If you miss your scheduled discussion section and would like to make it up, check the ICON homepage under modules for a listing of all times/places for discussion sections. Select one, then contact the TA responsible for that section to ask for permission.

DROP-ADD SLIPS: Drop and add slips will be signed in the Chemistry Center (E225 CB). Do not contact Prof. Olson or TAs to change your discussion section, drop the course, or add the course.
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/WITHDRAWAL DATES:
Feb 2nd: last day to drop a course without a “W”.
April 6th: 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.

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.

Administrative Home

The College of Liberal Arts and Sciences (CLAS) is the administrative home of this course and governs its add/drop deadlines, the second-grade-only option, and other policies. These policies vary by college (https://clas.uiowa.edu/students/handbook).

Electronic Communication

Students are responsible for official correspondences sent to their UI email address (uiowa.edu) and must use this address for all communication within UI (Operations Manual, III.15.2).

Accommodations for Disabilities

UI is committed to an educational experience that is accessible to all students. A student may request academic accommodations for a disability (such as mental health, attention, learning, vision, and physical or health-related condition) by registering with Student Disability Services (SDS). The student should then discuss accommodations with the course instructor (https://sds.studentlife.uiowa.edu/). The SDS coordinator for the Department of Chemistry is Trent Tappan, who can be found in the Chemistry Center during business hours and reached at chemistry-center@uiowa.edu.

Nondiscrimination in the Classroom

UI is committed to making the classroom a respectful and inclusive space for all people
irrespective of their gender, sexual, racial, religious or other identities. Toward this goal, students are invited to optionally share their preferred names and pronouns with their instructors and classmates. The University of Iowa prohibits discrimination and harassment against individuals on the basis of race, class, gender, sexual orientation, national origin, and other identity categories set forth in the University’s Human Rights policy. For more information, contact the Office of Equal Opportunity and Diversity (diversity.uiowa.edu).

**Academic Integrity**

All undergraduates enrolled in courses offered by CLAS have, in essence, agreed to the College's Code of Academic Honesty. Misconduct is reported to the College, resulting in suspension or other sanctions, with sanctions communicated with the student through the UI email address (https://clas.uiowa.edu/students/handbook/academic-fraud-honor-code).

**CLAS Final Examination Policies**

The final exam schedule for each semester is announced around the fifth week of classes; students are responsible for knowing the date, time, and place of a final exam. Students should not make travel plans until knowing this final exam information. No exams of any kind are allowed the week before finals (https://clas.uiowa.edu/faculty/teaching-policies-resources-examination-policies).

**Making a Complaint**

Students with a complaint should first visit with the instructor or course supervisor and then with the departmental executive officer (DEO), also known as the Chair. The current chemistry department DEO is Len MacGillivray. Students may then bring the concern to CLAS (https://clas.uiowa.edu/students/handbook/student-rights-responsibilities).

**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 must uphold the UI mission and contribute to a safe environment that enhances learning. Incidents of sexual harassment must be reported immediately. For assistance, definitions, and the full University policy, see https://osmrc.uiowa.edu/.