CHEM 211-213 Syllabus | Spring 2023

Description of Course: Chemistry 211, Organic Chemistry I. This is the first semester of a two semester introduction to the foundations of organic chemistry. This course covers basic concepts in the chemical structure, reactivity and mechanism of alkanes, alkenes, alkynes, alkyl halides, alcohols, ethers and epoxides. We will also cover analytical methods such as IR, Mass Spec, and NMR. The course will cover all, or selected parts, of chapters 1-14 (pages 1-711) of Loudon's Organic Chemistry, 6th Edition. On occasion additional selected readings may be assigned.

Transferable skills gained: Critical and analytical thinking, application-based problem solving, written and oral scientific communication, time management, organization, and teamwork.

CHEM 211 Instructor:

Dr. Kasey Leigh Yearty (klyearty@rice.edu), DBH 144

CHEM 213 Discussion Leader:

Dr. Humayun Kabir (sk168@rice.edu), DBH 145

Undergraduate TAs:

Anish Attarde (asa19@rice.edu) | Paige Sutter (pes6@rice.edu) | Jaime Tellez (jt50@rice.edu)

Class Times and Avenues:

Lectures: Tuesday/Thursday from 10:50am - 12:05 PM CST in ABL 131 (*recording provided within 24-48 hrs)

Required Discussion Sections: There is an additional, required, discussion section that will be held weekly on Fridays. You must attend and participate in the CHEM 213 section for which you are registered to receive credit. Any questions or concerns about attendance should be directed to the instructor of your discussion section.

Section 1: Dr. Kabir	F 9:00 - 9:50 AM CST	DBH 110
Section 2: Dr. Kabir	F 10:00 - 10:50 AM CST	DBH 110
Section 3: Dr. Kabir	F 11:00 - 11:50 AM CST	DBH 110
Section 4: Dr. Kabir	F 1:00 - 1:50 PM CST	DBH 110
Section 5: Dr. Kabir	F 2:00 - 2:50 PM CST	DBH 110

Course Office Hours: In-person or Zoom appointments may be scheduled with the instructor or a discussion leader as needed.

Dr. Yearty: Tuesdays 3:30-5:30 PM in DBH 110, Wednesdays 1:45-3:45 PM in DBH 110, or by Zoom/in-person appointment

Dr. Kabir: **TBA** CST in DBH 270, or by Zoom/in-person appointment

Anish: Thursdays from 7-9 PM in RZR 205, or by Zoom/in-person appointment

Paige: Sundays from 7-9 PM in RZR 205, or by Zoom/in-person appointment

Jaime: Tuesdays from 7-9 PM in RZR 205, or by Zoom/in-person appointment

A full listing of course office hours and help sessions can be found on the course Google calendar included at the bottom of the front page of our Canvas site.

Course Interactions: This is a fast-paced course that will require a number of hours of your time every day. A typical day in this course will include you reviewing course material before attending and participating in lecture (CHEM 211) or discussion (CHEM 213). Additionally, it is recommended to complete all of the

discussion worksheets, stay up to date with assigned readings/problems, and come to office hours or ask questions using the Q&A portal as needed. A pacing guide is provided within the CHEM 211 subpage in case you need assistance breaking down the course material into more manageable chunks.

Course Materials: We will use Organic Chemistry 6th Ed. and the associated solutions manual by Marc Loudon and Jim Parise. Both are required. We will cover chapters 1-14. If the campus store is out of stock, you are welcome to use alternate vendors. Also useful is a chemical modeling set. Any of the following three sets are acceptable:

- 1003 Alpha/Organic Chemistry Basic Set by Maruzen (preferred by instructor)
- Molecular Visions Molecular Model Kit #1 by Darling
- 1005 Alpha/Organic Chemistry Standard Set by Maruzen (this is a somewhat larger version of #1)

*If you have financial hardship which makes procuring these materials difficult, please email Dr. Yearty at klyearty@rice.edu.

Grades: Grades will consist of the following criteria:

Exam 1: 100 points

Exam 2: 100 points

Exam 3: 100 points

Exam 4: 100 points

Final Exam: 200 points

Discussion Attendance & Participation: 50 points (must attend 10 of 12 your registered sessions, 5 pts each)

Participation in and Completion of Reflections: 36 points (4 points each)

Students may earn a maximum of 686 points in the course. No grades will be dropped and final grades will be based off of points earned throughout the semester, not percentages.

Assigned CHEM 213 worksheets and book problems will not be graded but do indicate the most important topics and those which will most likely be covered on exams. Letter grades will be assigned from numerical grades based on a curve announced after each examination has been graded. Please note that your final letter grade earned in CHEM 211 will be mirrored in CHEM 213, and grades will be based on total points earned, not calculated percentages or the percentages depicted on Canvas. Plus/minus additions to letter grades will be made available on Esther at the end of the semester.

Exams: Exams will take place in-person during a time window on the dates listed below. Please make note of these dates and times now to avoid scheduling conflicts and email Dr. Yearty immediately if you have a course conflict with one of these dates. If you have a medical or other reason why these arrangements are likely to cause a problem for you, please contact Dr. Yearty immediately. Make-up exams will only be offered for students with legitimate excuses as determined by Dr. Yearty. Requests made with less than 24 hours notice may not be able to be accommodated.

Exam 1: Wednesday, February 1st, 7:00 PM – 9:00 PM CST, locations announced prior to exam

Exam 2: Wednesday, March 1st, 7:00 PM – 9:00 PM CST, locations announced prior to exam

Exam 3: Wednesday, March 29th, 7:00 PM – 9:00 PM CST, locations announced prior to exam

Exam 4: Wednesday, April 19th, 7:00 PM – 9:00 PM CST, locations announced prior to exam

Final Exam: TBA by Registrar's Office, Allowed Exam Time: 3 hrs

Exam Review Videos: Dr. Yearty will be posting asynchronous review videos before each unit examination. A comprehensive final exam review will not be posted. Instead, please refer to the individual unit review videos.

Examination Rules: The exams will be distributed at 7:00 PM CST and due by 9:00 PM CST on the exam dates specified. You have until the end of the exam window to complete the examination.

- Once you begin your exam you may not use any resources beyond a) writing utensils + erasers, b) a non-programmable calculator, and c) your model kit. You must bring your Rice ID with you to the exam.
- During the period in which you are taking the exam or once you have seen the exam questions, access to the internet is not permitted to search for, access, read, or otherwise utilize information related to exam content. Accessing course content during these same time frames is also prohibited.
- Any instance of or possibility of a violation of the Honor Code that is discovered during grading or regrading will be automatically forwarded to the Honor Council without warning/notification.
- You are responsible for following all exam directions, including those announced at the exam site either in written or oral formats.

If you have any questions about these rules, or if you have a medical or other reason why these arrangements are likely to cause a problem for you, please contact Dr. Yearty at least 24 hours before the first exam. Requests made with less than 24 hours notice may not be able to be accommodated. You are ultimately and solely responsible for ensuring that your submission is legible and is submitted in accordance with the Honor Code/policies outlined in this syllabus or announced by any instructor or discussion leader.

Re-grades of Exams: Unless otherwise noted, you have three business days from the time that an exam is handed back to submit a regrade request on GradeScope. Do not ask an instructor, discussion leader, or TA to provide their opinion on whether or not to submit a regrade request. This is your decision to make at your discretion within the above specified timeframe. It is highly recommended to review your request to ensure that it is both professional and cordial. Remember that this is a regrade request, not a regrade demand. All regrade requests must be received via GradeScope. Late requests and requests received outside of the GradeScope regrading portal will not be considered. Please note that since the entire exam will be regraded by Dr. Yearty (not a discussion leader or TA), it is possible that your exam score may go down rather than up. Any instance of or possibility of a violation of the Honor Code that is discovered during grading or regrading will be automatically forwarded to the Honor Council.

Please remember that according to Rice's Honor Code "... it is the student's responsibility to understand how the Honor System applies to each individual assignment and any questions should be raised with the instructor before submitting the assignment." In other words, if you have any questions about the rules concerning examinations or regrades it is your responsibility to clarify the issue in advance of the examination.

Course & Pre- and Post-Exam Reflections: These reflections will consist of questions posed by the instructor and can be found within the Quizzes subpage on Canvas. The reflections are meant to be an opportunity to self-regulate our learning process. Self-regulated learning practices have been shown to increase student learning outcomes (see Dr. Yearty for references). Self-regulated learning includes three phases: 1) Goal setting and strategic planning, 2) Putting a plan into action and monitoring it, and 3) Monitoring outcomes and refining strategies. The initial and final course reflections will be administered during the first and last week of the course. The pre- and post-exam reflections will be administered in the 24 hours before the exam and the 24 hours following each exam, likely before exam scores are released. Credit will be awarded for students who provide full responses to the posed questions. In other words, responses such as "n/a", "idk", and/or are off-topic will not result in credit being awarded.

Honor Code Statement: With respect to exams, students may not access, view, or otherwise use resources outside of the resources explicitly specified in this syllabus. Students are also bound by the Rice Honor Code to not tolerate the use of unauthorized aid by other students. Students may not use more than the specified amounts of time to think about exam answers or to write exam answers. Please remember

that according to Rice's Honor Code "... it is the student's responsibility to understand how the Honor System applies to each individual assignment and any questions should be raised with the instructor before submitting the assignment." In other words, if you have any questions about the rules concerning examinations or regrades, it is your responsibility to clarify the issue in advance of the examination. For more information or to read the Rice Honor Code, please visit honor.rice.edu.

Course Values and Culture: This course is founded upon the value of treating all members of the course as partners in learning together. As such, all participants of this course are expected to treat one another with the highest degree of respect and integrity. This class also strives to foster an inclusive community and views the diverse backgrounds and perspectives of its students as a resource and benefit to all. Given the nature of the course content, students are highly encouraged to engage in scientific inquiry and creative self-expression (where applicable), while also demonstrating diligence in understanding how the viewpoints of others may be different from their own.

Chosen Names and Pronouns: All students have the right to be addressed by the name and pronouns that correspond to their identity. Because this information is not readily available on course rosters, students are encouraged to, if they'd like to, share their chosen name and pronouns with the course instructors, TAs, and classmates. Mistakes in addressing one another may happen, so an environment of openness to correction and learning is expected in this course. However, any level of disrespect or antagonism against a person's identity will not be tolerated.

Title IX Statement: Rice University is committed to providing a safe learning environment for all students that is free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these incidents, know that you are not alone. Rice University has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic accommodations, and more. For more information, please don't hesitate to reach out to a member of the instruction team and/or visit safe.rice.edu.

Disability Support Services: If you anticipate receiving accommodations, but do not have a DRC letter yet, please still email Dr. Yearty immediately so that appropriate arrangements can be made. If you have a documented disability that may affect academic performance, you should: 1) make sure this documentation is on file with Disability Resource Center (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; 2) send your accommodations letter to Dr. Yearty and your CHEM 213 instructor; and 3) if needed, make an appointment with Dr. Yearty to discuss your accommodation needs.

Instructor Discretion on Syllabus and Course Content: Dr. Yearty has sole discretion to interpret and/or modify the syllabus and/or course content at any point before, during, or after the course. If you have questions about the syllabus, please reach out to Dr. Yearty directly for clarification.