CHEMISTRY 231, Fall 2020, SECTIONS 01 and 04, 3 credits each:
(updated on 8/27/2020, The syllabus is subject to change by the instructor.)

Instructor: Rick Heldrich, Ph.D. Office: SSMB 108 Research Lab: SSMB 123 & SSMB 343
Office Hours: by zoom; or by email: (heldrichr@cofc.edu)

Teaching Schedule:
- Tuesday/Thursday: 231 04; 9:25 am - 10:40am; JSC 233
- Tuesday/Thursday: 231 01; 10:50 am - 12:05 pm; JSC 233
- Tuesday: 232 L08; 12:30 pm - 3:30 pm; SSMB 105
- Wednesday: 283 02; 2:00 pm – 2:50 pm; SSMB 138
- Thursday: 232 L05; 12:30 – 3:30 pm; SSMB 105

Final Exam: We will be using a timed, departmentally standardized examination for the 1st semester introductory organic chemistry lecture and laboratory course.
- CHEM 231 01: December 10th, from 8 am to 10 am.
- CHEM 231 04: December 8th, from 8 am to 10 am.

Class Meeting Times: The course schedule for instruction and testing is on the last page of this syllabus. Each week you are required to attend class at your regularly scheduled time either in person or via zoom. On most days we will have synchronous lectures (labeled on the schedule as SL). On the days that the class time will be dedicated to problem solving sessions (labeled on the schedule as AL SP), you are expected to asynchronously watch the zoom recording of traditional lecture for that day. One of lecture recordings (from one of the two lectures made that day) will be posted on OAKS the day of the lecture. One of problem solving recordings will also be posted on the day of that session.

Office Hours: All office hours will be conducted using zoom, using the same zoom ID used for the class meetings. They may be made for an individual or a group by appointment. Please see my teaching schedule to find out when I am likely to be available during the week between 8 am and 5 pm. Do not count on my being available on any day before 8 am or after 5 pm. During the week I will try to respond to all emails within 3 hours, but hopefully much sooner than that. On the weekends I will always try to respond within a day to any emails, generally checking for emails each morning and evening.

Final Exam: The Final Exam will be a timed, cumulative test on OAKS. Material from the laboratory course may also be included. Absence from the final exam will result in the grade of "X" being assigned which converts to an "F" within 48 hours unless an excused absence has been granted by the dean in the Office of Undergraduate Studies. Requests for an alternate final exam time must be processed through the Office of Undergraduate Studies no later than 5 p.m. on the last day of class.

Learning Materials:
online learning Connect is recommended although no course grades will be based on the use of the connect website. If you purchase this access for CHEM 231 then you should not need to purchase it a second time for CHEM 232, your access should be valid for the full year long course. The link to the publisher’s e-access for our section of this course is: https://connect.mheducation.com/class/r-heldrich-fall-2020-01--04-1  The College of Charleston bookstore sells a package of the textbook, online Connect access and solutions manual that is cost effective.

- **required**: OAKS. We will make extensive use of the College of Charleston Learning Management System, nick-named OAKS.
- **required**: reliable high speed internet access and a personal computer with audio and video capability.
- **required**: Clutch Prep Video Program: used for video-based homework
- **optional and recommended**: ChemDraw, this is a Free download (http://chemistry.cofc.edu/current-students/resources/index.php) with CofC email.

**Departmental Student Learning Outcomes for CHEM 231:**

- Demonstrate basic communication skills within organic chemistry for example structure, nomenclature, mechanisms, reaction schemes
- Define and use fundamental concepts associated with physical organic chemistry
- Use foundational skills of organic reactions to predict organic reaction outcomes

**Co-requisite Policy**: Chemistry112/112L are prerequisites of this course, and chemistry 231L is a co-requisite for Chemistry 231. If you are repeating the lecture or lab and do not need to repeat the co-requisite course you must remedy this with the department chair before the close of Drop/Add. The last day to Drop/Add is 8/27 at 5:00 p.m.

**Attendance Policy**: Synchronous attendance to class either by Zoom or in person is required. If the College of Charleston closes and members of the community are evacuated due to inclement weather, students are responsible for taking course materials with them to continue with course assignments consistent with instructions provided by faculty. If in-person classes are suspended or not resumed as planned, we will continue with our schedule using synchronous zoom in place of in person instruction.

**Zoom Protocol**: Only use your CofC email to log into zoom sessions for this course. When attending by Zoom, turn your video on so everyone in the class can see who you are. When attending by Zoom, turn your audio off, but prepared to turn it on to ask questions or to respond to questions asked of you. Class sessions will be recorded via both voice and video recording. By attending and remaining in this class, the student consents to being recorded. Recorded class sessions are for instructional use only and may not be shared with anyone who is not enrolled in the class. **Zoom ID for both sections**: 241 732 140
Continuity of Learning: Due to social distancing requirements, this class will include a variety of online and technology enhanced components to reinforce continuity of learning for all enrolled students. Before the drop/add deadline, students should decide whether the course plan on the syllabus matches their own circumstances.

Inclement Weather, Pandemic or Substantial Interruption of Instruction: If in-person classes are suspended, we will continue the course with online instruction as scheduled with Zoom, homework with ClutchPrep, and testing with OAKS. Due to class size restrictions forced on us by COVID social distancing standards, it is likely that not every student will be allowed to attend every lecture in person once in person instruction is allowed. Students will get randomly assigned admission notes (as a group assignment on OAKS) for classes that they can attend. Students not assigned an admission note are still required to attend the lecture synchronously by Zoom. All students must have access to a computer equipped with a web camera, microphone, and Internet access.

Grade Scale:

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<td>B</td>
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<td>B-</td>
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<td>C+</td>
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Graded Work: There may be quizzes, there will be four tests and a final examination. All of the quizzes, the tests and the final examination will be cumulative and timed. Only work that is submitted on time will be graded.

The tests will be composed of two parts, each part worth 50%. One part will be a set of problems assigned through an assignment folder in OAKS the day before the test. Your answers to those problems must be posted before the end of the class period for the scheduled test into the OAKS dropbox as a single PDF file, named as LAST FIRST Test #. (Using your last name, first name, and the number of test you are working on.) I reserve the right to verify and adjust exam scores by oral examinations conducted on Zoom as needed.

Before the first test you must find a way to scan or take a photo of your work and quickly upload it to an OAKS discussion or dropbox. I recommend Adobe Scan or a similar program. Please familiarize yourself with this app or a similar app before our first exam:

https://www.youtube.com/watch?v=HE3IRDblu8U&feature=emb_logo

The other half of the test will be based on your responses to a quiz posted on OAKS. The 20 question OAKS quiz portion of each test must be taken during the scheduled class period. An excused rescheduling of any tests (justified with supporting documentation) will require my approval in advance by email. Grades of 0 will be recorded for all missed evaluations in this course. Local internet access issues will not be considered to be a justified cause for rescheduling. Systematic internet failure (for example the CoC server, loss of city wide service from a major provider, will be considered if supported by appropriate documentation.)
Clutch Prep makes textbook-specific video-based concept and practice content for this course. This semester our class will be piloting the use of Clutch Prep video homework for the graded homework portion of this class. You will have graded homework assignments associated with each test this semester. If done properly, doing this will result in a base test score of 12, with a possible high test score of 112. You will get credit based on attempting the problems and watching the video solutions. It is possible for every student to get 100% on the graded homework portion of your grade, as long as you answer all questions (correctly or incorrectly) and watch all the video solutions.

**Use This Link For Both Sections:**  [https://www.clutchprep.com/join/HELDICH1](https://www.clutchprep.com/join/HELDICH1)

**Accommodations Policy:** Many of the evaluations for this course will be timed. This College abides by section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. If you have a documented disability that may have some impact on your work in this class and for which you may require accommodations, such as extra time on evaluations, please see or contact an administrator at the Center of Disability Services/SNAP, 843.953.1431 and have them contact me so that such accommodation may be arranged. Any accommodation must be approved in advance by our SNAP office.

**Evaluation Policy:** In any online testing experience one of the biggest challenges we all face is to be sure that the evaluation and final course grade is a measure of what each person knows, not who each person knows. None of us should have to worry that any of us is getting unauthorized help on graded work. Whenever you submit your work for evaluation you must be truthful to yourself, your peers and to me that what you are submitting represents your knowledge. For this reason, the use of Chegg®, or Course Hero, or a personal tutor to provide you with answers (or to guide you to possible answers) for any work submitted for evaluation in this course is strictly prohibited. This applies to quizzes, tests and the final examination. It should go without saying, but it apparently must be said, that the standards of the College of Charleston Student Honor Code and Code of Conduct apply to this course. We will also abide by The Departmental Policy on Scientific Integrity, as posted on OAKS. The following information (at the top of the next page), pulled from the College of Charleston policy document for required syllabus content obviously applies to this course.

"Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when suspected, are investigated. Each incident will be examined to determine the degree of deception involved.

Incidents where the instructor determines the student’s actions are related more to misunderstanding and confusion will be handled by the instructor. The instructor designs an intervention or assigns a grade reduction to help prevent the student from repeating the error. The response is recorded on a form and signed both by the instructor and the student. It is forwarded to the Office of the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic
dishonesty. This status indicator will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent. Students can find the complete Honor Code and all related processes in the Student Handbook at: http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php.”

OAKS: including Gradebook, will be used for this course throughout the semester to provide the syllabus and class materials and grades for each assignment, which will be regularly posted. I hope you find the material on our OAKS site to be useful. If you want more (or less, or perhaps a different organization) please let me know. Items are located under the content tabs as follows:

(1) Policy documents like the syllabus are located under Content, then Section Specific Information.
(2) Topical outlines for each chapter are found under Content; Chapter Outlines.
(3) Lecture notes and recordings for each Zoom lecture and problem solving session will be posted by the date of the presentation under the tab Content, then Lecture Notes and Recordings. If you find a topic in a chapter particularly troubling and would like a brief video to explain it, let me know. You may also find the brief video presentations on ClutchPrep to be a very helpful study tool.
(4) CHEM 231 tests (including graded tests from this semester, with answers keys when they are available) are posted under Content: Old Tests.
(5) Prior quizzes for CHEM 231 are posted under Content: Quizzes from an earlier semester.
(6) Spectroscopy review materials are posted under Content: Spectroscopy Review.
(7) Discussion boards for our shared asynchronous conversions about topics that anyone of us might feel needs extra refinement are posted under Communication, Discussions. Please post questions, request topics for discussion, or respond to concerns of others as the semester progresses. It is important that we all work together so that everyone can do their best.
(8) Supplemental CHEM 231 handouts, that I hope you find useful, are under Content: 231 Handouts.

Quizzes: There is a required Flip Grid video assignment as a required quiz in the course. See the news posting on the course OAKS site. You must do this quiz before you can earn credit for any graded work in this course: https://flipgrid.com/heldrich231202110 (use your CofC email to log in).

Grade Formula: Each test will be 15% of the course grade and the final exam will be 40% of the overall course grade. If higher, your final exam grade will replace your lowest test grade. This means that the final exam could be as low as 40% or as high as 55% of your overall course grade. It also means that if your final test grade and your final exam grade are not your lowest grades, that a whopping 70% of your course grade can be determined on the last two days of the course. This is intentional, to reward you for putting it all together at the end of the course.
Tips for Success in On-Line Organic Chemistry: There is no magic pill that makes learning easy. That is the bad news. In this course, our tests will be designed to measure what has been learned, not how it was learned. That is the good news. The universally successful strategy to learning introductory organic chemistry is to use the information as you are trying to learn it. This might seem impossible, after all how can you use something before you learn how to use it? But let’s put it this way. When you were learning how to drive, did you learn more about driving by reading, or did you learn more by sitting behind the wheel and taking charge? You need to take ownership of learning the material, putting yourself in charge. Do not assume you understand anything just because it made sense while reading or listening. Prove to yourself that you understand the material by using what you just read or heard about, as soon as possible to solve a problem. Only then you will learn if you truly grasp the idea, or if maybe you misunderstood it or its value.

No one would take a driver’s license test before they had had practiced driving; it is no different when taking a test in introductory organic chemistry. But practice alone is not what it takes to pass or excel on tests. You must practice with the purpose of learning how to do it the right way. If during your practice driving in an empty parking lot you cannot pull cleanly in-between the lines of a parking spot, odds are pretty high the results of the driver’s test will not go well. There are lots of opportunities to test drive the material in introductory organic chemistry before getting evaluated for how well you have learned on a test. They are listed here in the recommended order in which they are done.

1. Each day, after every class, work every in chapter problem as soon as that material has been covered.
2. Work any challenge problems presented during the lecture before the next lecture class.
3. Work problems from the end of the chapter in the text. If you do not have the time to do all the problems, do as many of each type as you can. Spend extra time on the type of problems that cause you the most trouble or that you are most afraid of facing on test day.
4. Do the ClutchPrep Homework assignments. And then use ClutchPrep to supplement your understanding of the material. If you perceive a difference between ClutchPrep, the text, or the lecture, bring it up with me to get things sorted out.
5. Work previous test questions that are posted on OAKS.
6. Find a study partner, each of you make up your own questions, share them with each other and then get together (zoom) to talk through them.

The art of studying organic chemistry is about learning how to work problems, and in doing them to make a self-assessment of your strengths and weaknesses. Then be confident in your strengths and put in the work needed to turn your weaknesses into strengths. And remember that I am available (by email or zoom or during lecture) and that I want to help you figure it all out as you go along. If you do not ask for my help outside of class, I cannot give it to you.
**Email:** Email is considered an official method for communication at the College of Charleston. Official College of Charleston email accounts are automatically assigned to all students upon acceptance at the College. Students are expected to check their College of Charleston official email on a frequent and consistent basis in order to remain informed of College related communications. Checking email on a daily basis is recommended.

**Class Climate & Netiquette:** As stated in the Student Handbook: “a college classroom requires a higher level of courtesy than many people exercise in ordinary public space. Everyone in a classroom is there for the purpose of learning, and no one should be able to deprive another person of the chance to learn. Expressions of rudeness and even carelessness degrade the high purpose of learning that should be paramount in a college classroom.” This applies equally to the online classroom. Don’t be a troll!

To maintain a respectful and supportive environment, please uphold these rules of netiquette. Netiquette is network etiquette, the do's and don'ts of online communication.

- Be aware of how your communication may be perceived by others.
- Do not write in ALL CAPS – this is perceived as yelling.
- Cite your sources.
- Help each other. We are much stronger and more successful as a united and supportive group.

**Zoom Protocol:** Only use your CofC email to log into zoom sessions for this course. When attending by Zoom, turn your video on so everyone in the class can see who you are. When attending by Zoom, turn your audio off, but prepared to turn it on to ask questions or to respond to questions asked of you. Class sessions will be recorded via both voice and video recording. By attending and remaining in this class, the student consents to being recorded. Recorded class sessions are for instructional use only and may not be shared with anyone who is not enrolled in the class.

**Technical Difficulties/FAQs:** If you have questions or problems related to the course, please follow the communication procedures noted above. If you have technical problems, please contact Student Computing Support or Helpdesk using these methods:
- For **Student Computing Support** (for questions on campus about computing): (1) 843-953-5457; (2) studentcomputingsupport@cofc.edu; (3) blogs.cofc.edu/scs
- For **Helpdesk** (other on campus services for IT): (1) 843-953-3375 (2) helpdesk@cofc.edu (3) it.cofc.edu/help/helpdesk
- For **McGraw-Hill Connect** – Customer Support: (1) (800) 331 5094 (2) https://mhedu.force.com/CXG/s
- For **Zoom** (for individual meetings or meetings with small groups): (1) https://support.zoom.us/hc/en-us/articles/206175806-Top-Questions; (2) https://support.zoom.us/hc/en-us

It is important to resolve technical problems swiftly, so do not delay getting help when required. Computer failure or browser issues do not constitute an excuse for not completing assignments.
Schedule *(Subject to change, no schedule changes are anticipated based on the institutional decision to go from online to in-person instruction)*:

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**SL**

**Nov 3**

**Nov 5**

**Test 3 (C1-C9)**

**Nov 10**

**Nov 12**

**SL**

**AL SP**

**AL SP**

**Test 4 (C1 – C13)**

**Nov 24**

**Nov 26**

**Enjoy Thanksgiving**

**Dec 1**

**Dec 3**

**Online Only C13**

**Online Only T4**

**Test 4 (C1 – C13)**

**Dec 8**

**Dec 10**

**Online Only**

**Final Exam at 8 am for section 04**

**Final Exam at 8 am for section 01**

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