CHEMISTRY 232, Summer 2018, SECTION 02 POSTED July 1st, 2018 (SUBJECT TO CHANGE)

Instructor: Rick Heldrich (FJH); Office - SSMB 320; Lab - SSMB 343; 843-953-5515; heldrichr@cofc.edu

Office Hours: Available by email, by appointment or during designated period, as indicated below

FJH Summer 2018 Schedule:
- CHEM 232 Lecture; SSMB 127, M-F, 2:45 pm - 4:45 pm;
- CHEM 232 Lab; SSMB 109, M-R, 10:30 am - 1:30 pm;
- Office Hours: SSMB 127, M-F, 2:00 pm - 2:45 pm; by email, or by appointment.

Final Exam: We will be using a timed, nationally standardized American Chemical Society examination for the year-long introductory organic chemistry lecture and laboratory course sequence. The CHEM 232 examination for section 02 is scheduled for August 1st.

Required Text: Carey & Giuliano, Organic Chemistry, McGraw Hill, 10e. The link to the publisher’s e-access for this course is: http://connect.mheducation.com/class/heldrich-summer-2018. You can use this site for electronic version of the text, including learn smart for chapter by chapter study of the text and on line versions of practice problems from the text with guided solutions. Use of these e-link materials is NOT required. Some students find it worth the extra expense, others do not.

Content: The goal of this course is to help you learn fundamental principles of organic chemistry to serve as the basis for further study in Chemistry and Biochemistry. The topical coverage will include materials and concepts as described in Chapters 14-23 of the required text and it is assumed you will enhance and build on your knowledge in the prerequisite 231 lecture and laboratory courses; and the co- or prerequisite 232 laboratory course. The course is intentionally cumulative.

Student Learning Outcomes:
- Demonstrate intermediate communication skills within organic chemistry for example structure, nomenclature, mechanisms, reaction schemes
- Draw and interpret mechanisms for organic reactions of increased sophistication
- Integrate knowledge and principles of organic reactions and reactivities to make reasonable predictions about likely outcomes when presented with related chemistry or retrosynthetic schemes

Co- Pre-requisite Policy: CHEM 231/231L are pre-requisites for this course. It is highly recommended that you passed both of those courses with a grade of C or higher before taking CHEM 232/232L. Chemistry 232L is a co- or pre-requisite of this course. If you are taking the lecture and have previously passed the laboratory course, you do not need to retake the laboratory.

Attendance Policy: Attendance is required. Grades of 0 will be recorded for all missed evaluations in this course.
Grade Scale:

A, 100-93; A-, 92-90; B+, 89-87; B, 86-83; B-, 82-80; C+, 79-77;
C, 76-73; C-, 72-70; D+, 69-67; D, 66-63; D-, 62-60; F, <60

Grade Scheme: There will be in four class tests and a timed final examination. The final exam will be the nationally standardized ACS examination for the year-long introductory organic chemistry lecture/lab sequence. Tentative test dates, which are subject to change, are listed on the schedule. The course grade will be calculated two ways; the higher calculated grade will be used to determine the course grade. The first calculation will be 80% of the four test average plus 20% of the final exam grade. The second calculation will be 60% of the highest three test average and 40% of the final exam grade. No make-up tests will be given. In the event of an unexcused absence (illness, family emergency, etc.) from a test you will receive a grade of 0 for that test. It is recommended that you immediately acquire the ACS exam study guide (http://www.examsinstitute.com/).

Evaluation Policy: The tests and the final examination will be timed and lack of time may be a factor for some individuals. Students who qualify for extra time through the SNAP office must follow the SNAP office procedures. The tests may include multiple choice, short answer, matching, transformation, mechanism and synthesis type questions. It is highly recommended that students work problems from old tests (posted on OAKS) and problems from the end of chapter in the text to prepare for tests. No electronic devices will be allowed when taking the tests or the final examination. Please use a PENCIL when taking the tests.

Honor Code: The standards of the College of Charleston Student Honor Code and Code of Conduct apply to this course. The Departmental Policy on Scientific Integrity, which each student is required to sign in the CHEM 232L course, also applies to this course. For Honor Code and Student Handbook:  http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php
For the Departmental Policy on Scientific Integrity:  http://www.cofc.edu/~chem (see link on resources page of departmental website)

Tips for Success: You must challenge yourself to be successful in this course. Work is required before you can begin to study. The work (see more about this in On Doing the Work below) involves three stages: reading the appropriate sections of the text before the lecture on that material; attending class and paying attention to what is presented during the class; reviewing what occurred in class and rectifying that with what is in the text. For each chapter, an average person can expect this initial work to take 3x the hours spent in lecture. For summer organic that means 5-6 hours for each day. But doing that work is not sufficient for passing the course. After that work, you are prepared to study. An average person should expect to spend anywhere from 5 to 15 hours of study for each chapter. (Taking organic in the summer is like having a full-time job that requires overtime during the week and both days of the weekend.) Studying is done by attempting to use the knowledge acquired to solve problems. Solving problems is initially hard, frustrating, and more time consuming than the work needed to prepare to study. But the more problems you solve, the easier it will become to solve problems; and the less time you will need to invest in doing the work needed to prepare to solve

PREVIEW, ATTEND, REVIEW = WORK
PROBLEMS, ACCESS = STUDYING

PREVIEW
ATTEND
REVIEW
PROBLEMS
ACCESS
(ARE YOU LEARNING?
ADJUST AS NEEDED)
problems in the future. As a general rule of thumb is that you should challenge your understanding of an idea or concept, by solving related problems, at least seven times in order to master the material. Images are derived from: https://styluspub.presswarehouse.com/Titles/TeachStudentsHowtoLearn.aspx

On Doing the Work: Your purpose in taking notes (while reading or in class) should be to help you to pay attention and to focus. If by taking notes you miss what is being said or drawn or you stop thinking about what you are reading, then stop taking notes. Study the topical outline and course syllabus before each class to gauge how far ahead to read the text before each class. If you are seeing, hearing or thinking about something that is in the text during lecture for the first time; you are not adequately preparing for class. The better prepared you are for a lecture, the more you will get out of it. It is up to you to make time spent in lecture effective for your own learning. Reaching the level of comprehension is your goal for doing work. Your study should be focused on lifting you up to a higher level of learning so you can do well in the course.

It does take a lot of work, effort and time to learn organic chemistry. But you need to know and believe that you are fully capable of doing well in the course and you need to remember that it is not your effort that is being evaluated. If you do not think you are doing as well as you can, please come in for assistance.

Electronic Devices: The use of electronic devices (IPads, laptops, cell phones, calculators, pages, etc.) is not allowed during tests or the final exam. Please put your electronic devices on silent/vibrate during lecture. Please turn them OFF during exams.

OAKS: The syllabus, supplemental study guides, review material, answer keys, assignments, old tests (warning: tests prior to Spring 2017 are based on the use of a different text), lecture handouts and other material for this course are all posted on OAKS. You can post or respond to questions on the course OAKS discussion page, and send email questions to the instructor or other students in the class through OAKS. Suggestions for OAKS content are always welcome.
**Schedule** (*Subject to change as announced in class.*):

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Test 4
Aug 1
Final Exam