CHM 2200 – Fundamentals of Organic Chemistry (3 credit hours) Spring 2023 – Class number 19945, MWF 8:30-9:20 in SFH 221

Instructor: Cole Stearns, cole.stearns@ufl.edu

Please use Canvas or your official UF email for any correspondence

Office Hours: In-person in SFH 205 (CLC), times TBD

Course Description: This is an elementary one semester organic chemistry course that will expose students to the more important aspects of organic chemistry. The course is intended for people in programs requiring only one semester of organic chemistry. It is not appropriate for chemistry majors or pre-professional students who require two semesters of organic chemistry.

Prerequisites: A passing grade in the final semester of general chemistry (CHM 2046 or its equivalent) is a prerequisite for this course. This course, CHM 2200, is not a prerequisite for CHM 2210 (the first semester of the 2 semester organic sequence), nor does it permit a student to go directly to CHM 2211 (the second semester of the 2 semester organic sequence).

Course Delivery: Face-to-face lectures in SFH 221 (formerly CCB 221) on MWF, period 2 (8:30am-9:20am)

There will **not** be a synchronous Zoom option, but lecture recordings will be made available online.

Text: W.H. Brown, "Introduction to Organic Chemistry, 5th Edition," John Wiley and Sons (2014), recommended

W.H. Brown, "Student Solutions Manual for Introduction to Organic Chemistry, 5th Edition," John Wiley and Sons

(2014), optional

Canvas Site: http://elearning.ufl.edu. Login with Gatorlink ID and password. This site will be updated periodically with announcements, practice materials, grades, and other information.

Course Communication Policy: We will use the Announcements page in Canvas to post information that is relevant to the class as a whole. Please be sure to check the Canvas announcements regularly for updates. Please use the Canvas email tool or your official UF email for all correspondence. We cannot discuss grading or any other course related issues via external email. We will do our best to respond to emails within 24 hours during the work week (Monday-Friday). You should not expect a reply to any email sent after 5pm or over the weekend (or on a holiday) until the next business day.

Attendance and Lecture Etiquette: Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the Undergraduate Catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Although attendance will not be taken, you'll find it is easier to keep up with the course if you are attending lecture regularly. You'll also find that you will do better if you are actively engaged in the class without distraction from personal electronics. Students should plan to attend all lectures and arrive to the classroom on time.

Coursework: Your grade will consist of three components: quizzes, midterm exams, and a final project. The weighted grade distribution is as follows:

Midterm Exams 1 & 2 – 40% (20% each) 11 Weekly Quizzes – 40% (4% each, lowest grade dropped) Final Project (TBA) – 20% **Exams:** Exams in this course will reflect (and sometimes be identical to) the problems given in the text and will emulate many questions seen in **weekly quizzes**. There will be two progress exams given on the following dates and times during the term:

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Midterm Exam 1 – Wednesday, February 22<sup>nd</sup>, 7:30 pm - 9:30 pm (room TBA)
Midterm Exam 2 – Wednesday, April 26<sup>th</sup>, 7:30 pm - 9:30 pm (room TBA)
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Students who miss an exam due to extreme, unusual circumstances (serious illness requiring doctor's attention, death in the family, etc.) need to contact the instructor within 24 hours of missing the exam to discuss their makeup options, and also need to provide proper documentation (doctor's excuse, funeral program, etc.) for the absence. Please note that inadequate preparation because of other academic or extracurricular obligations is not considered to be a viable excuse for special consideration.

Quizzes: There will be 11 quizzes throughout the semester, assigned on the Friday of each week. These quizzes are takehome, open-note quizzes, but students **CANNOT** work together. Each quiz will be made available at 11 am ET and is due by the end of the day (11:59 pm ET). Each quiz will consist of questions directly based on the textbook and lecture material. Due to the nature of the course material, students should be prepared to draw molecular structures, mechanisms, and reactions on these quizzes. All online submissions should be in .jpg or .pdf form as a single file. At the end of the semester, the lowest quiz grade will be dropped, meaning the highest 10 grades will be counted, each worth 4% of your final grade. If students are well-prepared with up-to-date lecture notes, these quizzes should take less than 30 minutes.

Final Project: The final project will be due at the end of the semester. Students will each choose a molecule (or class of molecules) and submit a short video presentation or detailed write-up on its properties and applications. More details to come.

Grading: Every student has a bad day from time to time. Therefore, this course is designed to allow you to make some mistakes along the way without your grade plummeting. The grading scale will be set as follows: $A \ge 90.0\%$, A = 87.0-89.9%, B = 77.0-83.9%, B = 77.0-83.9%, B = 73.0-76.9%, C = 63.0-69.9%, C = 60.0-62.9%, C = 60.0-62.9%

A Plan for Success: In order to be successful in this course, you must be able to apply what you have learned to new situations. The best way to acquire this skill is to work review problems every day. A <u>lot</u> of problems. The more problems you attempt, the more you will learn. All of the study problems contained within the main text of the chapter should be worked. Furthermore, it is strongly recommended that you take the "Quick Quiz" at the end of the chapter, and then start working the end-of-chapter "Problems". Do as many as you can...try at least three or four problems in each section. (A great way to study is to do the odd numbered problems as we move through the chapter, then go back and do the even numbered ones as a way to review for the exams.) Answers and explanations for the problems can be found in the Solutions Manual. Additional help with the problems can be obtained during office hours.

Tentative Schedule: The course will cover chapters 1-10 and 12-14, and the schedule below will be followed closely:

Week	Dates	Reading	Торіс
1	January 9	Ch. 1: Covalent Bonding and Shapes of Molecules	
	January 11	Ch. 1: Covalent Bonding and Shapes of Molecules	
	January 13	Ch. 1: Covalent Bonding and Shapes of Molecules	
2	January 16	Martin Luther King, Jr. Day – no classes	
	January 18	Ch. 2: Acids and Bases	

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	January 20	QUIZ Ch. 1 due 11:59 pm		
3	January 23	Ch. 2: Acids and Bases		
	January 25	Ch. 3: Alkanes and Cycloalkanes		
	January 27	QUIZ - Ch. 2 due 11:59 pm		
4	January 30,	Ch. 3: Alkanes and Cycloalkanes		
	February 1	Ch. 4: Alkenes and Alkynes		
	February 3	QUIZ – Ch. 3 due 11:59 pm		
5	February 6	Ch. 5: Reactions of Alkenes and Alkynes		
	February 8	Ch. 5: Reactions of Alkenes and Alkynes		
	February 10	QUIZ: Ch. 4 & 5 due 11:59 pm		
6	February 13	Ch. 6: Chirality: The Handedness of Molecules		
	February 15	Ch. 6: Chirality: The Handedness of Molecules		
	February 17	QUIZ Ch. 6 due 11:59 pm		
	February 20	EXAM REVIEW - Ch. 1 – Ch. 6		
7	February 22	NO CLASS – EXAM at 7:30 pm		
	February 24	Ch. 7: Haloalkanes		
8	February 27	Ch. 7: Haloalkanes		
	March 1	Ch. 7: Haloalkanes		
	March 3	QUIZ Ch. 7 due 11:59 pm		
9	March 6	Ch. 8: Alcohols and Ethers (no thiols covered)		
	March 8	Ch. 8: Alcohols and Ethers (no thiols covered)		
	March 10	Ch. 8: Alcohols and Ethers (no thiols covered)		
UF Spring Break – no classes				
10	March 20	Ch. 9: Benzene and Its Derivatives		
	March 22	Ch. 9: Benzene and Its Derivatives		
	March 24	QUIZ Ch. 8 due 11:59 pm		
11	March 27	Ch. 10: Amines		
	March 29	Ch. 10: Amines		
	March 31	QUIZ Ch. 9 due 11:59 pm		
12	April 3	Ch. 12: Aldehydes and Ketones		
	April 5	Ch. 12: Aldehydes and Ketones		
				

	April 7	QUIZ Ch. 10 due 11:59 pm	
13	April 10	Ch. 13 & 14: Carboxylic Acids and Derivatives	
	April 12	Ch. 13 & 14: Carboxylic Acids and Derivatives	
	April 14	QUIZ Ch. 12 due 11:59 pm	
14	April 17	Ch. 13 & 14: Carboxylic Acids and Derivatives	
	April 19	Ch. 13 & 14: Carboxylic Acids and Derivatives	
	April 21	QUIZ Ch. 13 & 14 due 11:59 pm	
15	April 24	EXAM REVIEW Ch. 7-14	
	April 26	NO CLASS – EXAM at 7:30 pm	
16	TBD	FINAL PROJECT	

Organic Chemistry Learning Center: In addition to my office hours, teaching assistants will be available in the Organic Chemistry Learning Center (OCLC) in CCB 205, Monday through Friday. The daily schedule will be posted on the Canvas site. Please take advantage of these office hours – we are here to help you learn as much as you can.

Academic Honesty Guidelines: The University of Florida holds its students to the highest standards, and we encourage students to read the University of Florida Student Honor Code and Student Conduct Code (Regulation 4.040), so they are aware of our standards. Any violation of the Student Honor Code will result in a referral the Student Conduct and Conflict Resolution and may result in academic sanctions and further student conduct action. The two greatest threats to the academic integrity of the University of Florida are cheating and plagiarism. Students should be aware of their faculty's policy on collaboration, should understand how to properly cite sources, and should not give nor receive an improper academic advantage in any manner through any medium. You can find more information about UF's Academic Honesty Policy from the Dean of Students Office website at https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.

Accommodations: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, http://www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester. Note that DRC accommodations cannot be applied retroactively.

Evaluations: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Good luck, and don't be afraid to ask for help if you need it!!