Information and Policies

Instructor: Michael W. Giuliano
Office: 124 School of Sciences and Mathematics Building (SSMB)
Email: giulianomw@cofc.edu
Office Phone: (843) 953-8099
Peer Mentor: Danielle Shaddix (shaddixdr@g.cofc.edu)

Office hours: Monday, Wednesday, and Friday from 11am-12pm in my office, SSMB 124. Regarding other times: When my office door is open, I am ready and willing to take questions (or just chat about chemistry!). If my office door is closed and/or I am not in the office, I am working on research and other tasks and cannot meet at the moment. In that case, please come by at another time, or contact me by email to set up an appointment.

Lecture: Chemistry 231, Section 01. CRN: 10207. Class meets Monday, Wednesday, and Friday from 10:00am - 10:50am in the School of Science and Mathematics Building, Room 129. See you there!

Important dates during the semester: Monday, August 27th, 2018 – last day to drop/add; Wednesday, October 24th, 2018 – last day to withdraw with a grade of W; Monday, November 5th, 2018 – no class due to fall break; Wednesday, November 21st and Friday, November 23rd, 2018 – no class due to Thanksgiving break; Tuesday, December 4th, 2018 – Reading Day.

Exam dates: All exams, including the final exam are in the regular classroom at normal class time on the listed day. Should an exam date require a change, students will be notified in advance by email.

Exam 1: Friday, September 7th
Exam 2: Friday, September 28th
Exam 3: Friday, October 19th
Exam 4: Friday, November 9th
Exam 5: Monday, December 3rd

Final Exam: Monday, December 10th, 8am-11am; this is the standardized, first-semester ACS Organic Chemistry Exam, which will be administered to all sections of first-semester organic chemistry.

Required text:

Optional texts:


Co-requisite and pre-requisites: You must be concurrently registered for or have previously passed Chemistry 231 laboratory (231L) and taken and received passing grades in your general chemistry lecture and laboratory courses.

Attendance: Attendance is strongly encouraged! Lectures often include material that is not in the text and you will be responsible for all material covered in lectures and in your text on exams and problem sets. You are expected to take each exam in class as scheduled. Makeup exams will not be available. In cases of officially documented absences resulting in a missed exam, a student may replace the missed exam score with their final exam score. If you are going to miss a class when an assignment is due, it is your responsibility to ensure that the assignment is still completed and turned in on time.
**Components**

- **Exams**: Students will be given five exams during the semester prior to the final exam. Each test will be out of 100 points. If a student completes all five of the midterm exams, then the final exam grade may replace their lowest exam score, provided it is higher than the average score of their other exams.

- **Unannounced quizzes**: Should I feel the need to better assess your grasp on material, I may administer quizzes in class or online. If given the quizzes will be focused on recent lecture material and are meant to provide students with a check on their grasp of course material and study methods out of the classroom – e.g. “Are you keeping up with the end of chapter problems?” These would then be incorporated into the grade for homework for the semester.

- **Graded Homework**: The end of chapter problems will not be graded, however, I strongly suggest that you do these (all of them) regularly to give yourself as much practice as possible. In order to familiarize students with exam format and question types, three take-home problem sets in advance of exams 1, 3, and 5 will be given out and collected one week after they are assigned at the beginning of class. You will be working in groups of three on these assignments. Online LearnSmart homework assignments through Connect will be due prior to each class as a preview of that day’s material. Late assignments of any kind will not be accepted. The LearnSmart Prep assignment for this course is factored into the homework grade coming out to approximately 3% of your final grade.

- **Final Exam**: The final is the American Chemical Society Organic Chemistry Exam and all sections will take it at the end of the semester. It will be weighted to 150 points. If your normalized percentage score on this exam exceeds the average of your five in-class exams, you may use that score to replace your lowest exam score.

- **Extra Credit**: Each exam typically will have more than one hundred points possible – you get all of the points that you earn!

---

**Academic Integrity**: Many instances of academic dishonesty arise from students feeling overwhelmed in a course or by external pressures. College can be an overwhelming time, and if you are feeling this way about my class, please contact me! I would much rather work with a student at office hours and/or by appointment than see them compromise their academic values. The results are upsetting for all involved. As such, I will strictly enforce academic honesty and integrity in all facets of this course. The course is conducted in accordance with the Honor Code of the College of Charleston. You are responsible for reading, understanding, and strictly adhering to this policy, as am I. For more information, please see the College’s policy information at [http://studentaffairs.cofc.edu/honor-system/](http://studentaffairs.cofc.edu/honor-system/) and the Department of Chemistry and Biochemistry’s Scientific Integrity Policy at: [http://chemistry.cofc.edu/current-students/resources/index.php](http://chemistry.cofc.edu/current-students/resources/index.php).

**Email and contact**: As stated, my office hours are open-door times. I may need to email the class list should changes to the course be required or other circumstances arise. Email is considered an official communication method at the College of Charleston, and all students are expected to frequently if not daily check their official CoC email account to ensure that no announcements or messages regarding this course (or any other for that matter) are not missed. With regard to any extenuating circumstances, you must contact me in advance. After-the-fact notice for a missed exam or assignment will not be accepted, excepting instances where the student has contacted the Dean’s office according to College policy.

**Electronic devices in the classroom**: Please be respectful and keep your phones turned off during lectures. So long as they are not a distraction to others in the class, using a laptop or tablet to assist you with taking notes is completely fine – this policy is subject to change should circumstances require it. However, during exams, all electronic devices are prohibited (this means smartphones, tablets, laptops, etc.).

---

**Grading and Evaluation**
Final Grade Calculation:

Option 1 – All exam scores are used.
- 5 midterm exams = 500 points
- Final exam = 150 points
- Scaled homework = 100 points

Option 2 – Final exam score replaces lowest score.
- 4 highest midterms = 400 points
- Final exam = 250 points
- Scaled homework = 100 points

750 points total

Grading Scale: There will be no rounding of scores. A score of 92.99 remains an A-, an 89.99 remains a B+.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100 %</td>
</tr>
<tr>
<td>A-</td>
<td>90-92 %</td>
</tr>
<tr>
<td>B+</td>
<td>87-89 %</td>
</tr>
<tr>
<td>B</td>
<td>83-86 %</td>
</tr>
<tr>
<td>B-</td>
<td>80-82 %</td>
</tr>
<tr>
<td>C+</td>
<td>77-79 %</td>
</tr>
<tr>
<td>C</td>
<td>73-76 %</td>
</tr>
<tr>
<td>C-</td>
<td>70-72 %</td>
</tr>
<tr>
<td>D+</td>
<td>67-69 %</td>
</tr>
<tr>
<td>D</td>
<td>63-66 %</td>
</tr>
<tr>
<td>D-</td>
<td>60-62 %</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60 %</td>
</tr>
</tbody>
</table>

Student Learning Outcomes and Topical Outline

Student Learning Outcomes:
- 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.

Course Topics Outline:
- Chapter 1: Structure Determines Properties
- Chapter 2: Alkanes and Cycloalkanes: Introduction to Hydrocarbons
- Exam 1
- Chapter 3: Alkanes and Cycloalkanes: Conformations and cis-trans Stereoisomers
- Chapter 4: Chirality
- Chapter 5: Alcohols and Alkyl Halides: Introduction to Reaction Mechanisms
- Exam 2
- Chapter 6: Nucleophilic Substitution
- Chapter 7: Structure and Preparation of Alkenes: Elimination Reactions
- Chapter 8: Addition Reactions of Alkenes
- Exam 3
- Chapter 9: Alkynes
- Chapter 10: Introduction to Free Radicals
- Chapter 11: Conjugation in Alkadienes and Allylic Systems
- Exam 4
- Chapter 12: Arenes and Aromaticity
- Chapter 13: Electrophilic and Nucleophilic Aromatic Substitution
- Exam 5

Important note: Topics covered in lecture will often include additional material to what is found in the text. Some topics for those interested in additional reading include: M.O. theory for diatomic molecules with multiple bonds, stereoelectronic effects in substitution and elimination reactions, directing effects in alkene hydrogenation, M.O. theory in Diels-Alder reactions, minor resonance contributors as predictors of organic reactivity, and additional mechanistic detail throughout the reactions covered in this class.
Course Introduction and Some Tips For Success

Organic Chemistry is a challenging subject. The material forces you to understand a number of concepts and then recall them according to the visual cues you are given by the structure of molecules. By nature this visual component of the subject makes it very different than many of the science courses you have taken so far. My goal is to guide you through the material as a class and help you learn a new set of critical thinking skills and hone your ability to interpret and solve a problem based on visual stimuli. These are skills that are crucial for this course that also translate outside of organic chemistry – it is not all that different than what one has to accomplish in diagnostic medicine, except that we study reactions and molecules instead of patients; the stakes are much lower - unless you are studying rocket fuel! So the key question as a student is – what do you need to do in order to be successful? Here are a few tips and words of advice:

- Review old material throughout the course. This subject is very cumulative and very easy to get behind in. Be proactive about going over old material as it arises. In this light, I will supply my old 231 exams as PDF files on our OAKS page that you can use for practice and review early in the semester.

- Use me as a resource! I have three office hours per week and will meet by appointments that we set up through email when available. Please come by if you have questions on material that you may need reinforced (this is not a substitute for class, however). Please come by if you want to work through a couple problems. Please come by if you just think chemistry is cool and want to know more about something!

- **Do problems!** *Repetitionem est mater studiorum* – Repetition is the mother of all learning. This saying is a LOT older than I am, and it is as true today as it ever was. The more practice you give yourself, the better your grasp of the material. You have the problem sets I write, resources on Connect, and the problems in your textbook. If you need/want more – come ask me, I have textbooks full of them!

- Go to class! I’ll be presenting the material to you, including some things that are not found in your text. Furthermore, each class is a chance for you to get better at taking notes and see the material in a different format.

- Go to your Peer Mentoring sessions and/or register for CHEM 283. These are fantastic additional venues for you to work problems in a low-stress environment with your peers and either an advanced student, or professor (CHEM 283).

- **Read the book and read it before the material is covered in class.** Reading a few sections ahead will better position you to ask questions during lecture – *I will always try to stop and make time to answer questions*. The text is a great primary resource where everything is laid out in writing in front of you. I recommend working the in-text problems as you read on a notepad or in a notebook next to you. That physical process of writing out the problems while reading can really help with your retention of the material.

- **Do more problems!** I meant what I said – the more you do, the better you’ll do.

- Give the course and material the time it requires. To be successful and really learn the material, you will need to spend 3-5 hours outside of class for each hour that you are in it. At first this seems like a lot, but between reading the book and working problems, this amount of time will be easily met.

- **Work productively** with your peers. This does not mean sit around, catch up, and compare answers. It means work collaboratively on problems, debate the details of answers and the associated concepts, and use these group exercises to formulate more focused questions to bring to me either via email/OAKS discussion thread or at office hours.

- **DO. MORE. PROBLEMS.** There is a theme here, I swear….