Information and Policies

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Office Phone: (843) 953-8099
Connect web page: http://connect.mheducation.com/class/m-giuliano-fall-2015-231-01-mwf-10am
SI Leader: Lea Russell (russelllg@g.cofc.edu)

Office hours: Subject to change. Monday 1 pm-2 pm, Wednesday 1pm-3 pm, Friday, 1-2 pm. 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 likely 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: 10268. Class meets Monday, Wednesday, and Friday from 10:00am-10:50am in Room 252 of the Robert Scott Smalls Building. See you there!

Important dates during the semester: August 31st, 2015 – last day to drop/add; October 19th, 2015 – no class due to fall break; Thursday, October 29th, 2015 – last day to withdraw with a grade of W; November 25th and 27th – no class due to Thanksgiving holiday; December 8th, 2015 – Reading Day (no class)

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

Midterm 1: Wednesday, September 16th
Midterm 2: Friday, October 9th
Midterm 3: Wednesday, November 4th
Midterm 4: Monday, December 7th

Final Exam: Wednesday, December 16th, 8am-11am; this is the standardized ACS Organic Chemistry Exam, which will be administered to all sections of Chemistry 231.

Required text:

Optional texts:


Co-requisite: You must be concurrently registered for or have previously taken Chemistry 231 laboratory (231L).

Attendance: Attendance is strongly encouraged! Lectures may 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.

Students with Disabilities: Please contact me and stop by my office hours (as early as possible in the semester) if you have been approved to receive accommodations through SNAP Services. Please consult the Student Guide to SNAP Services for more information: http://disabilityservices.cofc.edu/documents/student-guide.pdf
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 under the Honor Code of the College of Charleston. You are responsible for reading, understanding, and adhering to this policy. For more information, please see the College’s policy information at http://studentaffairs.cofc.edu/honor-system/ and the Department of Chemistry and Biochemistry’s policy at http://chemistry.cofc.edu/documents/Scientific_Integrity_2011.pdf.

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 CofC 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 non-calculator electronic devices are prohibited (this means smartphones, tablets, laptops, etc.). Smartphones may not be used as calculators during exams.

Grading and Evaluation

Components:

• Midterm Exams: Students will be given four midterm exams in addition to the ACS Organic Chemistry Exam. Each midterm will be out of 100 points. If a student completes all 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 midterms.

• Graded Problem Sets: The recommended end of chapter problems posted on OAKS will not be graded, however, I strongly suggest that you do these to give yourself as much practice as possible. In order to familiarize students with exam format and question types, three or four problem sets will be given out and collected one week after they are assigned at the beginning of class. Late assignments will not be accepted. If, based on class performance, I feel that you need more problems to practice/more opportunities to earn points, then I may assign an additional problem set. Problem sets will be scaled at the end of the semester to half of an exam grade (50 points).

• 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.

• Extra Credit: The Connect link included on this syllabus will bring students to a web-page for the course that contains sets of problems within the adaptive learning software LearnSmart that can be completed each week. They are graded only on completeness and are meant to accompany and reinforce your reading of the textbook. For each midterm exam, you will be eligible for ten points of extra credit based upon the percentage of these online assignments completed. For example, if a student completes 70% of the online assignments prior to an exam, then they will earn 7 extra credit points (0.7*10 = 7). Assignments for the coming week will be posted each Friday evening on the Connect and must be completed by the following Friday evening, at which point they will deactivate. I recommend that you complete these prior to coming to each lecture.
Chemistry 231 Syllabus – Organic Chemistry I Fall 2015

Final Grade Calculation:

Option 1 – All exam scores are used.
- 4 midterm exams = 400 points
- Final exam = 150 points
- Scaled homework = 50 points

Option 2 – Final exam score replaces lowest score.
- 3 highest midterms = 300 points
- Final exam = 250 points
- Scaled homework = 50 points

600 points total (40 points possible extra credit through LearnSmart)

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

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93-100 %</td>
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<tr>
<td>A-</td>
<td>90-92 %</td>
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<tr>
<td>B+</td>
<td>87-89 %</td>
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<tr>
<td>B</td>
<td>83-86 %</td>
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<tr>
<td>B-</td>
<td>80-82 %</td>
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<td>C+</td>
<td>77-79 %</td>
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<td>C</td>
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<td>70-72 %</td>
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<td>60-62 %</td>
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Learning Objectives and Topical Outline

All sections of Chemistry 231 are taught toward the following specific learning outcomes:

- Interpret and analyze structural formula and resonance characteristics of common functional groups
- Draw and interpret general features of curved arrow notations that illustrate mechanistic processes for common organic reactions
- Use IUPAC and common nomenclature for alkanes, alkenes, alkynes, alkyl halides and alcohols
- Draw and interpret three dimensional structures for all types of isomers of organic compounds
- Define and use fundamental concepts associated with acid-base, thermodynamic, kinetic and structural theories as they relate to processes associated with organic chemistry
- Evaluate knowledge and principles about organic reactions and reactivities to make reasonable predictions about likely outcomes when presented with related chemistry
- Deduce, design, and evaluate retrosynthetic schemes including functional group transformations

Course Topics Outline:

- Chapter 1: Structure and Bonding
- Chapter 2: Acids and Bases
- Chapter 3: Introduction to Organic Molecules and Functional Groups
- Chapter 13: Mass Spectrometry and Infrared Spectroscopy
- Midterm Exam 1
- Chapter 4: Alkanes
- Chapter 5: Stereochemistry
- Chapter 6: Understanding Organic Reactions
- Midterm Exam 2
- Chapter 7: Alkyl Halides and Nucleophilic Substitution
- Chapter 8: Alkyl Halides and Elimination Reactions
- Chapter 9: Alcohols, Ethers, and Epoxides
- Midterm Exam 3
- Chapter 10: Alkenes
- Chapter 11: Alkynes
- Chapter 12: Oxidation and Reduction
- Chapter 15: Radical Reactions*
- Midterm Exam 4

* Some topics from this chapter may be incorporated into Chapter 4 lectures and Chapter 10 lectures
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 (at least in 231); 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:

• 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, the extra credit LearnSmart problems through Connect, and the problems that I will recommend in your textbook. If you need/want more – come ask me!

• 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 from a book. For example, we will cover an early unit on drawing structures – this is by design! You need to be able to write structures throughout this semester and in 232 – they are the chemist’s hieroglyphics, a language of pictures.

• Go to your SI Section. This is yet another venue for you to gain exposure to the material and can be a great resource. Use it!

• 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 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 around 3 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.

• Use me as a resource as well. I have four office hours per week and will meet by appointments that we set up through email. 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!** There is a theme here, I swear….