

Course Information: Chemistry 241 – Fall 2016

Time & Location: MWF at 9:00 am (Hudson, section A) and 10:00 am (Katz, section B) in Miller 14

Instructor Contact Information:

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Office Hours are posted on the course website

Course Website: <https://wiki.colby.edu/x/AgBPBw>

Text and Course Materials:

1. Organic Chemistry by M. Jones, 5th Ed. (required)
2. Study Guide and Solutions Manual for Jones Organic Chemistry 5th Ed. (optional)
3. Molecular Models (highly recommended but optional, available in the bookstore or online)

Objective: We will explore organic chemistry – learning new concepts and chemical reactions. By the end of the term it is our hope that each of you will not only gain mastery over what you have been presented, but be able to use concepts that you have learned to anticipate the behavior of unknown chemical transformations.

Laboratory: For more information about the laboratories, refer to the separate laboratory information handout and the laboratory section of the course website.

Advice to help you succeed: *Don't let yourself fall behind.* Attend all lectures and come to class prepared. Read the relevant sections of the text prior to the lecture. To assist you in taking good notes, lecture slides will be posted to the course website prior to the lecture. This course moves fast at times, and will seem overwhelming if you do not keep up with the lecture material. Work diligently through practice problems (from the textbook and the problem sets). Organic chemistry is best learned by using a pencil and paper (really!) and working through lots of practice problems. If you do not understand something you read or hear in class, please ask! As long as you are putting in the effort, then we will do everything I can to help each of you master the material presented.

Problem Sets: Weekly problem sets and answer keys will be available for download on the course website. These problems are not from the textbook. Homework will not be collected or graded – but you should work through each problem thoroughly to prepare yourself for exams. If you are uncertain about a problem/answer, please come see us. Remember, the best way to learn organic chemistry is by doing problems and “struggling” with the hard problems *before* looking at the answers.

Student collaboration: All material handed in for grading is to be your own work. In CH241, graded material includes exams, laboratory quizzes, and laboratory reports. Ideas that are not your own are to be cited according to Colby policies (see **Citations** below). *Please note: it is considered cheating to copy anyone else's lab writeup or experimental data!*

Working in a group on problems can be a good learning tool. Regular meetings with a group are a useful way to keep up with course work, and discussions are helpful to reinforce and clarify course material. However, if you find that all of the problems seem easy while with the group but suddenly become difficult on your own, then you should take the time to work through the material on your own.

Citations: Any work requiring citations should adhere to Colby policies, including web-based information. See <http://libguides.colby.edu/content.php?pid=7483&sid=47511>
Much more information is available on the chemistry library page at: <http://libguides.colby.edu/content.php?pid=7483>

Exam Schedule: There will be three mid-term exams and one final exam. Mid-term exams will be held on the evenings of **October 5th**, **November 3rd**, and **December 5th** from 5:30-6:30pm (location TBA). There will be no exceptions for exam times, and no makeup exams. If you have a verified reason for not taking an exam (such as an excused medical absence), we will work with you to find an arrangement that does not adversely affect your course grade. Please make travel plans that include being on campus for the final exam (6:00 PM, Wednesday, December 14th). If you expect to be absent for an excused College activity, [sports meet, speech meet, etc.] we will try to arrange for the exam to be administered by a coach or other non-student person. It is your responsibility to let us know, **well in advance** (at least 1 week) of any conflicting College activities.

Policy on time extensions for exams: Exams will be written so that they may be completed during the one-hour allotted time. Some students may have approval from the Dean of Students Office for time extensions on exams. These students must establish with the Dean of Students an appropriate time extension.

Academic Honesty: Honesty, integrity, and personal responsibility are cornerstones of a Colby education and provide the foundation for scholarly inquiry, intellectual discourse, and an open and welcoming campus community. These values are articulated in the Colby Affirmation and are central to CH241 and students are expected to demonstrate academic honesty in all aspects of this course.

Academic dishonesty includes, but is not limited to: plagiarism (including quoting sources without quotation marks around the borrowed words and a citation); claiming another's work or a modification of another's work as one's own; buying or attempting to buy papers or projects for a course; fabricating information or citations; knowingly assisting others in acts of academic dishonesty; violating clearly stated rules for taking an exam or completing homework; misrepresentations to faculty within the context of a course; and submitting the same work, including an essay that you wrote, in more than one course without the permission of instructors.

Academic dishonesty is a serious offense against the college. Sanctions for academic dishonesty are assigned by an academic review board and may include failure on the assignment, failure in the course, or suspension or expulsion from the College. For more on recognizing and avoiding plagiarism, see the library guide: libguides.colby.edu/avoidingplagiarism

The Colby Affirmation

Colby College is a community dedicated to learning and committed to the growth and well-being of all its members.

As a community devoted to intellectual growth, we value academic integrity. We agree to take ownership of our academic work, to submit only work that is our own, to fully acknowledge the research and ideas of others in our work, and to abide by the instructions and regulations governing academic work established by the faculty.

As a community built on respect for ourselves, each other, and our physical environment, we recognize the diversity of people who have gathered here and that genuine inclusivity requires active, honest, and compassionate engagement with one another. We agree to respect each other, to honor community expectations, and to comply with College policies.

As a member of this community, I pledge to hold myself and others accountable to these values.

Resources: Please see us if you have any questions about course material. Help is also available at the Chemistry Help Center, staffed by experienced and knowledgeable chemistry majors, which is open four evenings per week in Keyes 104 (M-Th, 7:30-9:30pm). These students will be happy to answer questions and help with problems. If you feel the need for further help (i.e. after you've met with your Professor and tried using the Chemistry Help Center), student tutors are often available. See Lisa Miller (Keyes 310; lmmiller@colby.edu) to make arrangements.

Electronic Devices: Electronic Devices, such as laptop computers, cell phones, and tablets can be useful educational tools to facilitate learning. However, used inappropriately, electronic devices can be a significant distraction to especially you but also other members of your class. We request that students be respectful of the instructor and other students when using electronic devices during lecture.

Grading: Your overall course score will be calculated using the percentages shown below. As an incentive to never give up and work toward improvement, all mid-term exam grades will be adjusted upwards by replacing the exam score with the average of that exam grade and the subsequent unadjusted exam grade (the final exam will be used to adjust the third exam grade). Note that this recalculation is automatic, and will only be applied if it improves your grade.

Percent of Final Course Grade

Mid-term exams	18% each
Final exam	25%
Laboratory	21%

Anticipated Topics and Schedule

Date	Topic (Chapter)
September 7	Orbitals and Bonding (Chapter 1)
September 9	Orbitals and Bonding (Chapter 1)
September 12	Alkanes (Chapter 2)
September 14	Alkanes (Chapter 2)
September 16	Alkanes (Chapter 2)
September 19	Alkenes and Alkynes (Chapter 3)
September 21	Alkenes and Alkynes (Chapter 3)
September 23	Alkenes and Alkynes (Chapter 3)
September 26	Stereochemistry (Chapter 4)
September 28	Stereochemistry (Chapter 4)
September 30	Stereochemistry (Chapter 4)
October 3	Rings (Chapter 5) [Exam 1 October 5th]
October 5	Rings (Chapter 5)
October 7	Rings (Chapter 5)
October 10	Substituted Alkanes (Chapter 6)
October 12	Substituted Alkanes (Chapter 6)
October 14	Substituted Alkanes (Chapter 6)
October 17	Fall Break
October 19	Substitution Reactions (Chapter 7)
October 21	Substitution Reactions (Chapter 7)
October 24	Substitution Reactions (Chapter 7)
October 26	Substitution Reactions (Chapter 7)
October 28	Elimination Reactions (Chapter 8)
October 31	Elimination Reactions (Chapter 8)
November 2	Elimination Reactions (Chapter 8) [Exam 2 November 3rd]
November 4	Elimination Reactions (Chapter 8)
November 7	Analytical Chemistry (Chapter 9)
November 9	Analytical Chemistry (Chapter 9)
November 11	Analytical Chemistry (Chapter 9)
November 14	Analytical Chemistry (Chapter 9)
November 16	Analytical Chemistry (Chapter 9)
November 18	Additions to Alkenes I (Chapter 10)
November 21	Additions to Alkenes I (Chapter 10)
November 23	Thanksgiving Break
November 25	Thanksgiving Break
November 28	Additions to Alkenes I (Chapter 10)
November 30	Additions to Alkenes I (Chapter 10)
December 2	Additions to Alkenes II (Chapter 11)
December 5	Additions to Alkenes II (Chapter 11) [Exam 3 December 5th]
December 7	Additions to Alkenes II (Chapter 11)
December 9	Additions to Alkenes II (Chapter 11)