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Fall 9-1-2021

CHMY 221.01: Organic Chemistry I

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Recommended Citation

Priestley, Nigel D., "CHMY 221.01: Organic Chemistry I" (2021). *University of Montana Course Syllabi*. 12141.

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ORGANIC CHEMISTRY I

CHMY 221

Instructor:

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Office hours: MW 1:30 – 2:45

Course objective:

The sophomore organic courses are a traditional one year sequence in organic chemistry. Our goal is to provide you with the tools and knowledge to understand organic chemistry so that you may succeed in future studies of organic chemistry and fields (medicine, pharmacy, biochemistry, microbiology) that rely upon organic chemistry.

Text:

The following text is recommended for the year: "Organic Chemistry", Jones and Fleming, 5th Ed. Other editions of the text are perfectly fine. Other sophomore organic textbooks are also useful. Sentiment expressed online suggests that students particularly like the organic chemistry text by Klein. Sharing textbooks is also a good idea. Choose an option that fits your budget, whether that's Amazon, eBay. Be aware that we do not 'teach from the book.' The text is an additional resource for material we teach in class. Purchase of a study guide that goes along with a particular text is recommended.

The American Chemical Society publishes a study guide (<https://uwm.edu/acs-exams/students/student-study-materials/>) for the whole two semester sequence that will be very useful for the final examinations in both CHMY221 and CHMY223. Indeed, the PCAT/MCAT exams use the same multiple choice format so the book serves as a great study guide for those exams too.

Khan Academy has an awesome series of videos on organic chemistry: <https://www.khanacademy.org/science/organic-chemistry>. They can be very helpful for the basics but be aware that some of the material is, for want of a better word, wrong. When you find yourselves finding inaccuracies, and understanding why they are wrong, you are well on your way to mastering organic chemistry.

Molecular model kit:

Model kits are available from the bookstore, former students, online or you can recycle the kits from General Chemistry. We recommend getting a kit and building many of the molecules we talk about. In particular, stereochemistry is going to make a lot more sense when you have access to the models. You will need to use the model kits in quizzes and examinations.

Online resources:

We will be making extensive use of Moodle (<http://umonline.umn.edu>) to post lecture notes, additional material and to deliver examinations in the course. There is a significant correlation between poor performance and lack of use of Moodle resources.

Lecture notes:

The style of the lectures and the pace of the lectures will simply not allow you to take full notes as you go along. You are expected to have the online lecture notes available to you in the lecture. You will then be able to focus on the lecture and annotate the basic notes and work on questions in class. The notes will be available on Moodle prior to the lectures

and will be available as Microsoft OneNote files to allow tablet users to annotate the notes directly without having to print them out.

Online quizzes

We will be using Moodle for online quizzes and mid-terms. The Moodle quizzes will account for 20% of your overall grade. You can complete them at any time during the semester. You can take them as many times as you want. They must all be completed prior to taking your final examination. Warning: there will be a lot of them. Do not ignore these as you will run out of time to complete them. We expect that you'll be helping each other and using online resources for these quizzes. The best way to do them, however, is to attempt them alone without external resources just as you would take an examination. The more you deviate from this the less the quizzes will be worth to you in terms of improving your chemistry knowledge and your ability to do well on the final.

Midterms

There will be four, hour long midterm examinations and your scores from all of these will count towards your grade. These examinations will start at 3:00 PM on a Friday. The examinations will generally emphasize the material given since the previous exam, but you must recognize that some material given much earlier in the course will be required to successfully answer questions on quizzes and exams. The midterm examinations will be conducted online using Moodle and will be open book – you can use any written or online resource. You are not allowed to consult with or get help from another person during the exam.

1. Everyone gets different content for their exam. The questions you get are randomly assigned from pools of questions of equivalent difficulty.
2. The question pools are independent of the online quizzes.
3. The final exam will still be a traditional exam.

Final

A comprehensive two-hour final exam will be given using the officially scheduled day for CHMY 221. The exam will be the standard American Chemical Society (ACS) first semester organic chemistry exam (CHMY221). This examination is multiple choice - 64 questions in 110 minutes. We strongly recommend getting the appropriate study guide. This examination is difficult with an average student only getting about half the questions correct. We do have an appropriate curve for the examination but be aware that a poor score on this exam will impact your grade significantly.

Lowest Midterm Exam Grades/Missed examinations: A missed exam counts as a zero. If you cannot take the online midterm during the assigned time due to an *emergency*, then you can make up the examination prior to lecture on the following Friday. To make up the exam, schedule an appointment to come to my office and take the exam on a computer there.

Make-ups are permitted solely at the discretion of the instructor, and only in the case of documented, significant personal hardship. No make-up will be given before the regularly scheduled examination. These policies are designed for **emergencies and other infrequent, unplanned absences**. They are not for schedule and work conflicts.

As the ACS examination used for the final is a nationally standardized examination there will be no make-ups, this examination will only be given during the assigned examination time.

Point Distribution and Grades:

Online quizzes:	Many	All are counted*	200 points total	200 points (20%)
Examinations:	Four in total	All are counted	150 points each	600 points (60%)
Final examination:	One	Score is included	<u>200 points</u>	<u>200 points (20%)</u>
			Total	1000 points

* All online quizzes count, however, each quiz can be taken an unlimited number of times and only the best score will be used in the grade calculation.

There will be no extra credit questions and no extra credit assignments. ***There will be no chemistry questions answered during examinations or quizzes either by the instructor or the TA's.*** This is an issue of fairness as students often take examinations (DSS, for example) where we are not available to correct examination mistakes or answer questions.

The course will be graded using the standard grades from A, A-, B+... D-, F. Grades will correspond to scores as follows:

	930	(93 %)		1000	(100 %)	A
	900	(90 %)		930	(93 %)	A-
	870	(87 %)		900	(90 %)	B+
	830	(83 %)		870	(87 %)	B
	800	(80 %)		830	(83 %)	B-
Score greater than or equal to	770	(77 %)	but less than	800	(80 %)	C+
	730	(73 %)		770	(77 %)	C
	700	(70 %)		730	(73 %)	C-
	670	(67 %)		700	(70 %)	D+
	630	(63 %)		670	(67 %)	D
	550	(55 %)		630	(63 %)	D-
Score less than	550	(55 %)				F

We will only review a student's final grade in the case of likely mathematical errors in the grade calculation. The grade you receive in this class will be the grade that you earn solely by demonstrating competence in course work and examinations. If you have trouble taking examinations, or have difficulty with multiple choice examinations, please immediately seek out resources on campus that can aid you.

Prerequisite grade for CHMY 223:

As CHMY221 is a prerequisite for CHMY223 you must pass CHMY221 with a C- or better to enroll in CHMY223. There is no point in trying to take CHMY223 if the preparatory material in CHMY221 has not been mastered. Not only will the material in CHMY223 not make much sense, the examination at the end of CHMY223 covers material from the entire year. Many years of grading statistics show us that nobody does well in CHMY223 who did not also do well in CHMY221.

Class Attendance:

Attendance for lecture is not mandatory; there are no points to be had for just turning up. Attendance for quizzes and examinations is not mandatory either but if you don't take an examination you will get zero points for it (subject to the make-up provisions detailed earlier). For quizzes and examinations, you are responsible for all information given in class whether you were in attendance or not; many examples of practical applications not found in the text will be given. If you must be absent, check with a fellow student first to see what was missed.

Cheating: All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor (see below) and/or a disciplinary sanction by the University.

All students need to be familiar with the Student Conduct Code. The code is available for review online at: http://life.umt.edu/vpsa/student_conduct.php

Looking at another student's exam or quiz is cheating. Altering exams for re-grading is cheating. The instructor's academic penalty for cheating will be an F grade for the whole course. The University may also level additional punishments.

Incomplete grades: Review the current University "Incomplete" grade policy. It includes the following points:(a) factors beyond the student's control (and acceptable to the instructor) must make it impossible to complete the course on time, (b) the student should have been in attendance and passing through three weeks before the end of the semester, and (c) the instructor should believe that there is a reasonable probability the student can complete the course without repeating the entire course. Early travel before the final exam date is not sufficient reason for an "Incomplete."

Withdrawal/Other Change in Grading Option: After the 30th day of instruction, a grade of WF or WP will be assigned.

Turn Off Cell Phones. The use of cell phones in class is not allowed.

Exam Schedule / other notable events. Exams: Fridays at 3 PM.

CHMY221:

Monday, August 30 th	First lecture
Monday, September 6 th	No class - Labor Day
Friday, September 17 th	Mid-term #1 – 3 PM
Friday, October 8 th	Mid-term #2 – 3 PM
Friday, October 29 th	Mid-term #3 –3 PM
Friday, November 19 th	Mid-term #4 –3 PM
Wednesday, November 24 th – Friday, November 26 th	No class, Thanksgiving
Wednesday, December 10 th	Last lecture
December 6 th – 10 th	FINALS WEEK

The schedule for Finals Week will be posted when available.

Additional policies:

Students with disabilities will receive reasonable modifications in CHMY221. Be prepared to provide verification of the disability and its impact from Disability Services for Students (DSS; <http://www.umt.edu/disability>).

Changes to syllabus: We reserve the right to change any or all the syllabus at any time. It is the responsibility of the student to learn of these changes should they miss class.