

Syllabus : CHM 234, General Organic Chemistry II : Spring 2019
Onground Classes SLN 10145 & 32023 Hybrid Classes SLN 13285 & 32025

Office: PS D-126
Phone: 965-7278
Lectures: Mon., Wed., Fri., 7:30 - 8:20 AM
Location: LS-A191

Office Hours
Mon. 8:30 AM- 9:30 AM
Thurs. 4:00 PM – 5:00 AM
Fri. 8:30 AM - 9:30 AM

Website: <https://www.asu.edu/courses/chm234/>

I do not use Canvas. Check the class website regularly for announcements, I will assume that you have read all announcements posted on the website.

Learning Objectives.

- Retrosynthetic analysis, simple multi-step synthesis.
- Chemistry of Alkynes
- Chemistry of Alcohols.
- Carbon-carbon bond forming reactions
- Chemistry of Ethers and Epoxides.
- Reactions and Molecular Orbitals of Conjugated Systems.
- Pericyclic Reactions.
- Aromaticity and Reactions of Benzenes.
- Chemistry of Aldehydes and Ketones.
- Chemistry of Enols and Enolates.
- Chemistry of Carboxylic Acids and their Derivatives
- Chemistry of Amines

Textbook. This class does NOT use a textbook. Textbooks are good for **reference**, but I believe that they are not very good for teaching and learning. Your lecture notes should give you all of the information you need, and you can only learn organic chemistry by doing organic chemistry, not by reading it in a textbook. This class places a lot of emphasis the homework site, this is where you will learn and do organic chemistry.

If you would like to have a textbook as a reference book, then by all means get one. A good textbook is Organic Chemistry by Paula Bruice, however, just about all organic textbooks are the same, buy any one of them. Used, older editions of textbooks from Amazon are a fantastic deal.

Model Kit. A Molecular Model Kit, IS **SUGGESTED** for CHM 234 but is not required. If you buy a model kit make sure it is one of the **HGS kits**. The [1013Alpha kit](#), is the least expensive one that is still useful. This kit is available in the **ASU Bookstore** and also [from Amazon](#). The least expensive source is probably [direct from the manufacturer](#). You will not be able to use a model kit that you inherited from a sibling/friend etc. if it is not an HGS kit. The **HGS kit is the only one** that will work for this course and for the lab course. A model kit by Molecular Visions, or in particular, the one from Pearson will **not work**.

Examinations and Grading. Three midterms will be given from **7:30 - 8:20 AM** on **Monday Feb. 17th**, **Monday Mar. 23rd**, and **Monday Apr. 13th**. The final exam is on **Monday May 4th 7:30 - 9:20 AM**. I will not change an exam date for ANY reason since changes will merely result in new conflicts. Although the emphasis of the midterms will be on the most recent material, all exams are necessarily cumulative. The final exam will be on material from the entire course. No late or early exams will be given, you *must* be present for ALL exams, *none* are dropped!

Weekly Quizzes. There will be 14 multiple-choice online quizzes, roughly one each week. The deadline for submission of most of the quizzes will 6:00 PM each Sunday (except for Quiz #1), so that the answer key can be posted on the Sunday before each Monday midterm as a study aid. No excuses will be accepted for missing quizzes, *you will not be able to make them up, please do not ask*. However, the lowest FOUR quiz scores *will* be dropped. If you are ill, have a job interview etc. just forgot to submit in time or missed the deadline or had computer/internet problems, that is what the dropped quizzes are for, that way I don't have to decide whether

your excuse is legitimate or not. Note that there will NOT be any multiple-choice questions on any of the exams. Your quiz score (after dropping the lowest 4) will be normalized to a maximum of 50 points at the end of the semester.

Homework Site. Using the homework site is the only way that you will actually learn organic chemistry. You will access the homework site via a link on the main class webpage.

There are roughly 1200 problems on the homework site, but you do not need to do them all in order to earn all of the homework credit (50 points). To earn all 50 points credit you will need to "attempt" 800 of these problems. An "attempt" means trying to answer the problem, and getting it correct OR incorrect, both of these earn the same credit. We don't punish you for trying to learn by doing work. The homework site counts the number of attempted problems throughout the semester. Studying a problem, does not count as an attempt, but any other way of using a problem does. Any number of problems less than 800 receive credit proportionally, and so 400 problems earns 25 points, etc. There are no deadlines, no number of problems you need to complete each week etc., except that the problems need to be attempted by the end of the day, May 6th.

I do not award grades in this class, you earn your grade. It is my job to **help you earn** the highest grade that you are capable of. Grades are **earned** on the basis of 1000 total points:

Quizzes	10 x 5 pts.	=	50 pts.
Homework		=	50 pts.
Midterm Examinations	3 x 175 pts.	=	525 pts.
Final Examination	1 x 375 pts.	=	375 pts.
Total		=	1000 pts.

You will need to obtain the following points totals to earn the grades as shown.

Grade A :	890 points
Grade B :	780 points
Grade C :	620 points
Grade D :	500 points

There are NO +/- grades for this class!

I reserve the right to change these point totals (although I almost never do). Grades are earned based on the points totals *only*. For example, if your score on the first midterm is low but is high on the final, there is no way for you to earn a higher grade than you deserved based on your points *total*. In this way, no student will earn a higher grade than another even though his or her points total is lower. Note that you are NOT competing against anybody else in this class, in principle EVERYBODY **could** get an A, although this is unlikely to happen.

Once the final course grades have been posted there will be *no mechanism* for you to get a higher grade, no extra credit, nothing. Don't ask! If you missed a grade by a few points it will not have gone unnoticed by me. Your final exam will have been entirely regraded by me and I will not have been able to find enough points to raise your grade. You earn your grade by **EXCEEDING** the required number of points, **NOT by getting close!**

Procedures. This class uses "gapped" lecture notes, see the web site for details under "Lecture Material". These should be purchased at the bookstore, see class for details. Use the Gapped notes in class, completed versions of the notes will be posted on the web site at the end of each section.

If you need to get a certain grade in this class to maintain a scholarship, or to graduate, you need to tell me about this at the *beginning* of the semester! I will do *whatever I can to help you*. However, do not come to me at the end of the semester, or after you have failed 2 midterms to ask for help. By then it is too late! I cannot give grades to "deserving" cases or out of sympathy, you have to earn your grade.

Material Covered. Exam material will be taken from your lecture notes, the website problems and any other materials distributed to the class.

Voluntary Review Sessions. Voluntary review sessions will be held before the exams, look for announcements in class and on the web site for times and locations.

Incomplete Policy. An incomplete will *only* be given under exceptional or catastrophic circumstances, usually for medical reasons that force you to miss multiple classes or tests. I will not give you an incomplete because you do not want a W on your record. Please note the University withdrawal deadlines:

Course Withdrawal Deadline	Apr 5th
Complete Withdrawal Deadline	May 1st

If you have continuing medical issues that force you to miss or affect your performance on assignments or tests throughout the semester, an incomplete is not appropriate for you, you should take a medical Withdrawal.

INFORMATION Specific to Hybrid/Online Class Students (SLN 13285 & 32025). Your class is a hybrid class. All lecture and other class materials are online, you are only required to come to class to take the 3 midterm and the final exams, dates and times given below.

The hybrid class runs in parallel with the regular on-ground CHM 233 class. The two classes will share the same website, lectures and all class materials. The two classes will have same midterm and final exams. Both classes will take the exams on the same dates at the same times, except that hybrid students take the tests in a different room. **All exams for the Hybrid class will be held in PS H-152**, do NOT come to LSA-191, only the regular/onground students take their tests in that room.

Each class period, the on-ground class lectures will be recorded and posted the same day on the class website for use by both the online and on-ground students. Online quizzes will be assigned each week (see above). The quizzes will be the same for the online and on-ground classes.

The regular on-ground classroom is unlikely to be full, and you are welcome to attend lecture if you like. These are held in LS-A191, 7:30 - 8:20 AM, Mon, Wed, Fri.

A critical issue with any demanding online class is making sure that you have the discipline to keep up with the material and work. For most students this will not be a big issue in this class, since most of you will be motivated towards getting a good grade in organic chemistry anyway to help in your application to pre-professional school etc.

Academic integrity

Plagiarism, using unauthorized aids on an exam or altering an exam for regrading is obviously considered cheating. Exams will be photocopied for record-keeping purposes so it is not very smart to consider alteration. Academic honesty is expected of all students in all examinations, papers, and laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see <http://provost.asu.edu/academicintegrity>

Students with disabilities

Students who feel they will need disability accommodations in this class but have not registered with the Disability Resource Center (DRC) should contact DRC immediately. The DRC Tempe office is located on the first floor of the Matthews Center Building. DRC staff can also be reached at: (480) 965-1234 (V) or (480) 965-9000 (TTY). For additional information, visit: www.asu.edu/studentaffairs/ed/drc.

Expected classroom behavior

Be sure to arrive on time for class, arriving late disturbs your classmates. Do not allow your cell phone to ring during class. Disruptive behavior, which includes ringing cell phones, listening to music, text messaging, constant talking, eating food noisily, etc. is obviously disrespectful, please don't do it.

Policy against threatening behavior

All incidents and allegations of violent or threatening conduct by an ASU student (whether on-or off campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. If either office determines that the behavior poses or has posed a serious threat to personal safety or to the welfare of the campus, the student will not be permitted to return to campus or reside in any ASU residence hall until an appropriate threat assessment has been completed and, if necessary, conditions for return are imposed. ASU PD, the Office of the Dean of Students, and other appropriate offices will coordinate the assessment in light of the relevant circumstances.

Policy against exclusion

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish to discuss any concerns confidentially and privately.

CHM 234 > Spring 2020 : Onground and Hybrid Classes : Ian R. Gould**Exam/Lecture Schedule***Subject to change as necessary!*

Dates	Lectures	Subject	Section
Jan 13 - Jan 17	1 - 3	Eliminations of Halides	A
Jan 22 - Jan 24	4 - 6	Retrosynthesis	1
<i>Jan 20</i>	<i>No Class, MLK Day</i>		
Jan 29 - Feb 5	7 - 10	Alkynes	2
Feb 7 - Feb 12	11 - 13	Alcohols	3
Feb 14	14	Organometals	4
Feb 17	Midterm Exam #1: Emphasis on Sections A and 1 - 3 <i>(but all exams are cumulative)</i>		
Feb 19 - 21	15 - 16	Ethers/Epoxides	5
Feb 24 - Mar 4	17 - 21	Conjugated Systems	6
Mar 6 - 16	22 - 24	Aromaticity	7
<i>Mar 9 - Mar 13</i>	<i>No Classes, Spring Break</i>		
Mar 20 - 27	25 - 27	Benzene Reactions	8
Mar 23	Midterm Exam #2: Emphasis on Sections 4 - 7 <i>(but all exams are cumulative)</i>		
Mar 30 - Apr 8	28 - 32	Aldehydes/Ketones	9
<i>Apr 5</i>	<i>Course Withdrawal Deadline</i>		
Apr 10 - Apr 17	33 - 35	Enols/Enolates	10
Apr 13	Midterm Exam #3: Emphasis on Sections 8 - 9 , part of 10 <i>(but all exams are cumulative)</i>		
Apr 20	36	Carboxylic Acids	11
Apr 22 - 27	37 - 39	Acid Derivatives	12
Apr 29 - May 1	40 - 41	Amines	13
<i>May 1</i>	<i>Complete Withdrawal Deadline</i>		
May 4	Final Exam (7:30 - 9:20 AM)		

CHM 234, Spring 2020: Quiz Schedule

Deadlines are always Sundays 6:00PM EXCEPT Quiz #1

WEDNESDAY Jan 22, 11:59PM	Quiz #1
Sunday Jan 26 6:00PM	Quiz #2
Sunday Feb 2 6:00PM	Quiz #3
Sunday Feb 9 6:00PM	Quiz #4
Sunday Feb 16 6:00PM	Quiz #5
Sunday Feb 23 6:00PM	Quiz #6
Sunday Mar 1 6:00PM	Quiz #7
Sunday Mar 8	No Quiz (Spring Break)
Sunday Mar 15	No Quiz (Spring Break)
Sunday Mar 22 6:00PM	Quiz #8
Sunday Mar 29 6:00PM	Quiz #9
Sunday Apr 5 6:00PM	Quiz #10
Sunday Apr 12 6:00PM	Quiz #11
Sunday Apr 19 6:00PM	Quiz #12
Sunday Apr 26 6:00PM	Quiz #13
Sunday May 3 6:00PM	Quiz #14