

CHM 238 Syllabus Spring 2021

*This is an ASU Sync/In-person course so attendance at all scheduled recitations and labs is expected in Zoom

Instructor: Dr. Jason O. Houtchens

Zoom Meeting Room: <https://asu.zoom.us/j/2948887292>

Email: jason.houtchens@asu.edu (put "CHM 238" in subject line to ensure a timely response)

Course Web Site: Canvas

Office Hours (held from 1/11/21 through 4/21/21 in Zoom): M & W 9:00am – 10:00am; you can also make an appointment by contacting me via email

College of Integrative Sciences and Arts:

This course is offered by the College of Integrative Sciences and Arts. For specific course information, contact your instructor. For more information about the college, visit our website: <https://cisa.asu.edu/>. If you have questions or concerns, please send your inquiry to cisa@asu.edu.

Course Meetings:

All students are required to be enrolled in both the recitation and lab components of this course. Instructors and Instructional Aides (IAs) are responsible for the recitation and lab periods during the meeting times below:

Course	Day	Time	Room	Component Instructor
CHM 238 (Recitation)	F	10:30am – 11:45am	CRONK 122 & Zoom	Dr. Jason Houtchens
CHM 238 (Lab)	M	4:30pm – 7:20pm	UCENT 375 & Zoom	Nicole Ostaszewski
CHM 238 (Lab)	T	7:30am – 10:20am	UCENT 375 & Zoom	Andrew Irby
CHM 238 (Lab)	T	10:30am – 1:20pm	UCENT 375 & Zoom	TBD
CHM 238 (Lab)	T	1:30pm – 4:20pm	UCENT 375 & Zoom	Daniel Evans
CHM 238 (Lab)	T	4:30pm – 7:20pm	UCENT 375 & Zoom	Daniel Evans

Course Description:

Welcome to Chemistry 238, General Organic Chemistry II Laboratory, at Arizona State University. CHM 238 is a one semester lab course intended to provide you with hands-on experience with many of the synthetic reactions in organic chemistry, including substitutions, oxidations, additions, condensations, and polymerizations. You will also learn how to scale down reactions that are typically performed on a macroscopic level. You will be required to follow instructions and think critically about each experiment you perform in the lab and then complete a post-lab write up summarizing your results.

You are responsible for knowing all of the information in this syllabus—please read it carefully!

Student Learning Outcomes:

Through the completion of pre-lab assignments, laboratory experiments, quizzes, and exams, each student will have demonstrated that they are able to:

- Apply safety rules in the practice of laboratory investigations.
- Demonstrate the use of critical thinking to effectively solve problems in organic chemistry.
- Apply basic techniques used in the organic laboratory for preparation, purification, and identification of organic compounds.

- Employ the major techniques used in organic chemistry laboratory for analyses such as melting point determination, recrystallization, filtration (gravity and vacuum), extraction, distillation, and thin layer chromatography.
- Apply basic stoichiometry (such as calculating limiting reagents, theoretical yield and mole ratios) in the context of organic chemistry.
- Demonstrate the ability to maintain a proper lab notebook.
- Construct a lab report that includes an analysis of the data collected, and discussion of the outcomes and answers to open questions associated with the experiment.
- Deduce organic structures using spectroscopic methods: especially infrared (IR) and nuclear magnetic resonance (NMR) spectroscopy.
- Perform an effective multi-step synthesis.
- Identify unknown organic compounds through classification tests and the synthesis of derivatives.

ASU Sync/In-person:

This course is scheduled as an ASU Sync/In-person (face-to-face) course. You will attend some class sessions in-person and be remote for other sessions to ensure we keep the room occupancy below 50%.

For the remote option, this course uses ASU Sync. ASU Sync is a technology-enhanced approach designed to meet the dynamic needs of the class. During Sync classes, students learn remotely through live class lectures, discussions, study groups, and/or tutoring. You may participate remotely for any and/or all class meetings. You can find out more information about ASU Sync for students here: <https://provost.asu.edu/sync/students>. To access live sessions of this class, [log into your ASU Zoom account](#), then go to MyASU and click the “Attend via Sync” button next to this class on your schedule.

All students who wish to attend the Friday recitation in-person should be able to attend all scheduled classes; however, you must follow ASU's policies regarding face coverings and social distancing.

To ensure in-person participation in the lab stays below 50% of the lab occupancy, only four students maximum will be allowed to participate in a given lab in-person. A sign-up sheet has been created to facilitate this process. If you would like to see what is available, or sign up, you can use the following link:

<https://docs.google.com/spreadsheets/d/1tKoQ5IZtlf814A1yrWfC2neanO9q1jOJ7DltXPfRTi0/edit?usp=sharing>

In order to reserve your spot you should add your name to this list before 11:59pm on the day of the corresponding recitation (i.e. the Friday before your lab meets). After this time the cells will be locked and edits will no longer be able to be made. Only sign up for one of the four available slots during the lab time you are currently registered. In addition, please be courteous to other students that wish to attend in-person and only sign up for a maximum of two in-person lab periods. If other times are still available for a given experiment they will be announced during recitation. By signing up you are making a commitment to attend lab in-person. Once you have signed up it will be expected that you show up to lab prepared and ready to perform the experiment. Failure to attend the lab you have agreed to perform, or attempting to attend in Zoom instead, will result in a forfeiture of all associated credit. If an emergency, or similar event, prevents you from attending an in-person lab that you have signed up for you must notify the IA responsible for the lab with a minimum of 24 hours of notice. In addition, you must provide the appropriate documentation for the absence.

All students will participate in the live class discussions on Zoom via ASU Sync. Once the discussion is over remote students may leave and watch the posted video of the lab. In-person students will perform the experiment. All students will then use the data presented/collected to complete your notebook, and all assignments.

Face Coverings:

Everyone is required to wear a face cover while in ASU buildings and community spaces, regardless of distance. Face covers help prevent pre-symptomatic and asymptomatic individuals from inadvertently spreading COVID-19 to others. They are meant to protect others in case you are sick. Students will be required to wear a face cover in the classroom.

If you require accommodations due to a disability or health-related concern, please contact Student Accessibility and Inclusive Learning Services.

Required Materials (ASU Sync and In-Person):

- *Organic Chemistry Lab Manual CHM 238 Arizona State University, Pavia*
 - *This is a customized version that is only available through the bookstore, or the publisher. The link for the electronic version of the manual is: <http://services.cengagebrain.com/course/site.html?id=4685427>).*
- *Computer including webcam (See Computer Access Requirements in the syllabus)*
- *iClicker Reef account*
- *Scientific Calculator*
- *A Blank, Bound Lab Notebook*

Required Materials (In-Person Only):

- *Splash-proof Safety Goggles*
- *Lab Coat*

Computer Access Requirements:

ASU Sync classes can be live streamed anywhere with the proper technology. We encourage you to use a PC or Apple laptop or desktop equipped with a built-in or standalone webcam. You will need an internet connection that can effectively stream live broadcasts. It is recommended that your internet download speed is at least 5.0 mbps. You can use this [tool to test your current connection](#).

We do not recommend the use of iPads or Chromebooks for ASU Sync because these devices do not work for class exams that may be proctored remotely.

If you are not able to personally finance the equipment that you need to attend class via ASU Sync, ASU has a laptop and WiFi hotspot checkout program available through [ASU Library](#).

Who is eligible?

- Any currently enrolled ASU student is eligible to checkout a laptop or WiFi hotspot. The current availability of laptops can be found [here](#).

Borrowing and returning laptop rules

- Laptops are lent on a first-come, first-serve basis, and cannot be reserved in advance. They can be returned at any time, but will be due at the conclusion of the fall 2020 semester.
- Rentals are limited to one laptop per student.
- Laptops are available for checkout at the following libraries on all four campuses: ([Please check online for current library hours](#))
 - Downtown Phoenix campus Library
 - Polytechnic campus Library
 - Tempe: Hayden and Noble Libraries
 - West campus: Fletcher Library
- Return laptops to any ASU Library Information Desk (not at the drop box or other location)
- [Refer to ASU Library Computer Use Policy and ASU Computer, Internet, and Electronic Communications Policy](#).
- Borrowers are responsible for loss, damage, and theft of the laptop while in their possession. Borrowers should verify the condition of the laptop at the time of check-out and upon check-in.

Additional Requirements:

This course requires the following technologies:

- Web browsers ([Chrome](#), [Mozilla Firefox](#))
- [Adobe Acrobat Reader](#) (free)
- [Adobe Flash Player](#) (free)
- Webcam, microphone, headset/earbuds, and speaker
- Zoom
- Microsoft Office ([Microsoft 365 is free](#) for all currently-enrolled ASU students)
- Reliable broadband internet connection (DSL or cable) to stream videos.

Note: A smartphone, iPad, Chromebook, etc. will not be sufficient for completing your work in an online environment. Although you will be able to access course content with mobile devices, you must use a computer for all assignments, quizzes, and virtual labs completed in Canvas.

iClicker Information:

iClicker is a cloud based polling software that will be used for in-class activities. In order to be able to use this service you must download and become familiar with the software. The following information may be useful:

Registration-

1. Visit <https://app.reef-education.com>
2. Select “Arizona State University” from the dropdown menu at the bottom of the page
3. Click “Go”
4. You will be redirected to an ASU sign-in page. Sign-in using your ASU credentials
5. You’ll land on a iClicker Reef page that says “We didn’t find an iClicker Reef account associated with your institution email” > Click on the “Create New Account” option
6. The next page will ask you to verify your information -- this should be auto-filled with your ASU credentials. Click “Ok” to proceed
7. A new account will be created for you with your ASU credentials
8. You’ll receive a prompt to register a physical clicker -- you can skip this step for now
9. **If it is not populated, enter your ASURITE username (NOT your numerical student ID) in the “Student ID” field and click “Save Profile”.**
10. Finally, you should end up on a “Courses” page that says “You don’t have any courses.” See the “Add instructor’s course” section below for information on adding a course.
11. Your registration is complete.

* You may have to manually add your instructor’s course. Instructions on doing so can be found here:

[Video](#)
[Article](#)

Responding to Questions:

Mobile Phone Users-

Launch the application from your mobile device, select your course from your “Courses” list, and follow the instructions in the articles below:

How to participate in a poll: [Article](#)
How to participate in a quiz: [Article](#)

Browser Users-

Log into your student account at <https://app.reef-education.com/#/login>, select your course from your “Courses” list, and follow the instructions in the articles below:

How to participate in a poll: [Article](#)

How to participate in a quiz: [Article](#)

LockDown Browser and Webcam Requirement:

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be the type that’s built into your computer or one that plugs in with a USB cable. Watch this brief video to get a basic understanding of LockDown Browser:

<https://www.respondus.com/products/lockdown-browser/student-movie.shtml>

Download Instructions-

Download and install LockDown Browser from this link:

<https://download.respondus.com/lockdown/download.php?id=197112001>

Once Installed-

- Start LockDown Browser
- Log into to Canvas
- Navigate to the quiz

Note: You won't be able to access a quiz that requires LockDown Browser with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

Guidelines-

When taking an online quiz or exam, follow these guidelines:

- Select a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers, etc.) and place them outside of your reach
- Before starting the assessment, know how much time is available for it, and also that you've allotted sufficient time to complete it before time expires
- Clear your work area of all external materials - books, papers, other computers, or devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:
 - Avoid wearing baseball caps or hats with brims
 - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
 - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete
 - Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)

- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Getting Help-

Several resources are available if you encounter problems with LockDown Browser:

- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- You may also contact the help support for Canvas by using the "Help" link to the left in Canvas. Then click "ASU Live Chat" to begin a ticket. Be sure to "Save Chat" at the end.
- Respondus has a Knowledge Base available from support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If your problem is with a webcam, select "Respondus Monitor" as your product
- If you're still unable to resolve a technical issue with LockDown Browser, go to support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it

Student Success:

To be successful:

- check the course Canvas site daily (See Canvas Website below)
- read announcements
- read and respond to course email messages as needed (at least once daily)
- complete assignments by the due dates specified
- communicate regularly with your instructor and peers
- create a study and/or assignment schedule to stay on track access [ASU Online Student Resources](#) or [CISA Academic Resources](#)

Canvas Website:

To access the CHM 238 Canvas website, you must have an ASURITE account. If you have difficulty obtaining ASU computer access, the staff in the Information Commons can provide assistance. The course Canvas site can be accessed through the ASU Canvas website, <http://my.asu.edu>. First, log in using your ASURITE ID and password. If you are registered for this class then you are automatically enrolled as a Canvas user for CHM 238. The CHM 238 course should appear as a link in the COURSES folder when you login. This site contains lecture notes, practice problems, answer keys, and other useful information. All quizzes and exams will be administered through Canvas. Grades are also posted on Canvas. **Often the system will calculate its own averages. Please ignore these calculations and use the information below when determining your overall grade in the course.**

Course Grading:

Assignment	Points
Lab Work (6 x 50; 3 x 100)	600
Lab Quizzes (10 x 10)	100
Midterm Exam (1 x 100)	100
Final Exam (1 x 200)	200
TOTAL	1000

% of Total Points	Point Total	Letter Grade*
88-100	880+	A
76-87.9	760-879	B
64-75.9	640-759	C
52-63.9	520-639	D
Below 52	<520	E
Failure due to academic dishonesty		XE

*The +/- scale may be used when determining grades that are close to the cutoffs (typically the top/bottom 1% of each grade category)

Since your grade in this course is not curved, you will not be affected by the performance of others. You should therefore be encouraged to participate in study groups, help your fellow classmates, and actively participate in classroom activities.

To calculate your current course grade at any point during the semester, simply determine your overall percentage for each assignment (using decimal format) and use the following formula. Be sure to adjust for the points distributed at any point in the course:

$$\text{Course Grade} = 600 \times (\text{Lab Work Avg. \%}) + 100 \times (\text{Lab Quiz Avg. \%}) + 300 \times (\text{Exam Avg. \%})$$

Course Assignments are described below:

- **Lab Notebook:** Each student is required to have a lab notebook for use during this course. A bound notebook of any kind is acceptable, but it must remain intact. Everything done in the lab should be written down in the lab notebook whether you are watching the lab from home or attending in-person. Writing things down on scratch paper is not acceptable. By the end of every investigation your notebook will contain the pre-lab information, and your results and discussion (see descriptions below). Copies of your notebook work will be submitted to your lab instructor through the appropriate method at the end of each investigation.
- **Laboratory Work (600 points):** The majority of the points earned in this course come from the laboratory work. Each experiment is worth 50 points total: pre-lab (10 pts. each), results and discussion (10 pts. each), and the post-lab report (30 pts. each). Your final grade in the lab will be based on the submission of the laboratory work (i.e. pre-lab, results and discussion, and post-lab reports), quizzes, and exams. All submissions of completed lab work will be made through Canvas as photos (.png or .jpg), Word documents (.doc or .docx), or PDF documents. The typical week will include the following: 1) attending recitation (either in-person or in Zoom); 2) write a pre-lab in your lab notebook using the recitation information and the customized lab manual (before you attend the lab); 3) attend the lab, either in-person or in Zoom (based on the sign-up sheet), to collect your results; 4) complete the post-lab assignment; and 5) submit the appropriate documents. There are exceptions to this, but these will be discussed in more detail as we continue through the course.
- **Pre-labs:** Since there is a limited amount of time to complete each investigation some preparation on your part will be required outside of class. Descriptions of each investigation are provided in the documents posted on Canvas. During recitation these documents will be completed to give you the background information necessary to perform the experiment. Attendance at recitation is required either in-person or in Zoom. From the information presented you will complete a pre-lab. These must be completed BEFORE you are allowed to enter the lab in-person. Without a completed pre-lab you will not be allowed to enter the laboratory. Important ideas are highlighted in pre-lab exercises, including an introduction, list of chemicals outlining any physical properties and hazards, and procedures. Descriptions of each investigation are in the required lab manual. From this information you must write your pre-lab as follows:
 - **Introduction** – this section will include any background information about the technique(s) and/or reaction(s) that are important in understanding the investigation. Be as thorough as possible and be sure to use any key words that are described in the text or used in class.
 - **List of Chemicals** – Before handling chemicals you should know how to properly handle the compounds. You are required to look up any chemical in the investigation and provide data on any physical properties and hazards inherent to the compound, including: name, molecular formula, molecular weight, structure (typically skeletal/line-angle type where appropriate), melting and/or boiling point, density, solubility, and hazards. Citations must be included. The best way to present this is in table format. These can be referenced throughout the notebook if the compound is used more than once during the semester.
 - **Diagrams and Reactions** – All new techniques must include labeled diagrams. These can be referenced throughout the notebook if the technique is used more than once during the semester. Any reaction and/or

mechanism that may be involved in the investigation must be provided, including structures of reactants and products (typically skeletal/line-angle type where appropriate), and any specific conditions used.

- **Procedures** – This is a detailed account of the procedures that will be used in the lab. General descriptions of the techniques are presented in the introduction, but in this section you will give the actual steps to be performed. Another student or instructor should be able to use your procedures to duplicate the investigation. For new techniques include instructions on how to set up any apparatus. Subsequent experiments that use the same apparatus can reference the original description.
- **Results and Discussion:** As you work in the lab, either in-person or through Zoom, you will gather many pieces of information such as mass, volume, density, melting points, etc. No matter how you obtain your data you will need to construct a set of results for the experiment. This information must be neatly organized in your lab notebook. Often tables can help with this, but be sure to include correct headings, where appropriate. Each student will have their own way of recording their data however it must be clear, legible, and complete. You must show all relevant calculations. Remember that all numbers have a magnitude, unit, and confidence expressed with significant figures. The discussion should clearly analyze/interpret the data and come to a conclusion on how this ties back to the topics addressed in the introduction. Lab videos may be provided for some experiments performed. These are provided as additional information rather than an alternative to attending the required components of the recitation and lab periods. During the lab videos you will observe someone performing the relevant experiment, or presenting data for an experiment. Using this video, along with sample data provided, may be necessary at times.
- **Post-lab Reports:** From the results of your experiment you will be able to answer the questions at the end of the investigation document. Completion of these assignments counts as your post-lab report. The report will be graded on the thoroughness of your answers and explanations.

Completed investigation materials (i.e. pre-lab, results and discussion, and post-lab reports) are due by 11:59pm the night before your next lab session. However, because all assignments will be submitted electronically, the actual work can be submitted anytime during the week before the deadline. Feel free to submit your work early! All materials are submitted through the “Assignments” link in Canvas. Late lab reports will be accepted; however, they must be submitted directly to your IA and there will be a penalty of 10% per day (including weekends).

- **Lab Quizzes (100 points):** Quizzes will be given once per week on Friday, except when there is an exam (see tentative schedule for exact dates). The quiz will be administered on Canvas and will cover information from the experiment performed earlier in the week. These are designed to make sure you have retained and can apply the information learned in the laboratory. Each quiz will open at 12:00am and close at 11:59pm on the day indicated in the tentative schedule. Although you can take the quiz at any time during the day, once you begin you will only have 15 minutes to complete the quiz. Be sure to leave yourself enough time to complete the quiz before it closes automatically. There will be 11 total quizzes, but the lowest grade will be dropped and only 10 quizzes will count toward your grade at the end of the semester. **Canvas will NOT be updated with this dropped quiz, but your overall recitation quiz and course averages will be adjusted and posted at the end of the semester.**
- **Missed Quizzes:** There are **NO** make-up quizzes! In cases where a medical emergency, military service, a university observed religious holiday (in compliance with ACD 304-04), or travel for a university-sanctioned event (in compliance with ACD 304-02) interferes with a quiz date special accommodations may be made. If such plans do interfere with a quiz date, then it is **your** responsibility to notify your instructor in advance and provide appropriate documents verifying the event. The documents must be from the appropriate official to be considered. Because all quiz dates are scheduled at the beginning of the semester, personal travel, work schedules, etc. do not constitute grounds for accommodations. Please come see me if you have any questions about these policies.
- **Midterm Exam (100 points):** There will be a 100 point midterm exam around the middle of the semester (see tentative schedule for exact date). The exam will be administered on Canvas. The midterm exam will open at 12:00am and close at 11:59pm on the indicated Friday. Although you can take the exam at any time during the day, once you begin you will only have 1.25 hours to complete the exam. Be sure to leave yourself enough time to complete the exam before it closes automatically. This exam will test your understanding of techniques, reactions, and safety of chemicals used in the laboratory. The types of questions on the exam will vary but can include multiple choice, matching, fill in the blank,

mechanism, and explanation questions. Only material leading up to this exam will be covered. However, because the course content builds through the semester, and the final is cumulative, you shouldn't forget what you've learned.

- **Final Exam (200 points):** There will be a 200 point final exam at the end of the semester (see tentative schedule for exact date). The exam will be administered on Canvas. The final exam will open at 12:00am and close at 11:59pm on the indicated Friday. Although you can take the exam at any time during the day, once you begin you will only have 2 hours to complete the exam. Be sure to leave yourself enough time to complete the exam before it closes automatically. This exam will test your understanding of techniques, reactions, and safety of chemicals used in the laboratory. The types of questions on the exam will vary but can include multiple choice, matching, fill in the blank, mechanism, and explanation questions. The final exam is cumulative and will cover material from all of the investigations performed.
- **Missed Exams:** There are **NO** dropped exams! In cases where a medical emergency, military service, a university observed religious holiday (in compliance with ACD 304-04), or travel for a university-sanctioned event (in compliance with ACD 304-02) interferes with an exam date special accommodations may be made. If such plans do interfere with an exam date, then it is **your** responsibility to notify your instructor in advance and provide appropriate documents verifying the event. The documents must be from the appropriate official to be considered. Because all exam dates are scheduled at the beginning of the semester, personal travel, work schedules, etc. do not constitute grounds for accommodations. Please come see me if you have any questions about these policies.

Please keep track of your own grades so you know if something is awry. You have a two-week limit to let us know about grading errors—after this, scores are considered permanent.

Classroom Behavior:

During this course you will be involved in Zoom meetings where other students are present. Participation during these Zoom meetings is encouraged, and in some cases required. Be sure all background pictures and/or video environments are appropriate and conducive to learning. Please be respectful of the instructors and the other students **by using the Zoom tools rather than blurting out a question in the middle of a discussion**. Also, please try not to talk while your instructor is speaking, as it can be very disruptive to everyone else in the room. I will do my best to control this by muting participants at the beginning and continuing to monitor microphones, chat windows, etc. as our discussion continues. We want to build a climate that is comfortable for all. It is important that we 1) display respect for all members of the classroom – including the instructor and students; 2) pay attention to and participate in all interactive student partner/instructor sessions and activities; 3) observe the rules of appropriate online behavior (also known as netiquette). This term is defined by the instructor and includes keeping course discussion posts and oral communication with other students (or the instructor) focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. In addition, they must avoid racist, sexist, homophobic, or other negative language that may unnecessarily exclude course members. This is not an exhaustive list of behaviors; rather, it represents examples of the types of things that can have a dramatic impact on the course environment. Your final grade may be reduced each time you engage in the types of negative behaviors indicated above.

Trigger Warning:

Please note that some course content may be deemed offensive by some students, although it is not my intention to offend anyone. In addition, some materials that we link with online might also be considered offensive, troubling, or difficult to review in terms of language or graphics. I attempt to provide warnings when introducing this kind of material; yet if I forget to do so, or if something else (in my materials or posts from fellow students) seems offensive, please contact me at jason.houtchens@asu.edu or the faculty head, Richard Bauer.

Student Accessibility and Inclusive Learning Services:

If you need academic accommodations or special consideration of any kind (including those related to face coverings) to get the most out of this class, please let me know at the beginning of the course. If you have a disability and need a

reasonable accommodation for equal access to education at ASU, please contact the Student Accessibility and Inclusive Learning Services. More information can be found here: <https://eoss.asu.edu/drc>.

Downtown Phoenix Campus University Center building, Suite 160 Phone: 602.496.4321 E-mail: DRCDowntown@asu.edu	Tempe Campus Matthews Center building, 1st floor Phone: 480.965.1234 E-mail: DRCTempe@asu.edu
Polytechnic Campus Sutton Hall - Suite 240 Phone: 480.727.1039 E-mail: DRCPoly@asu.edu	West Campus University Center Building, Room 130 Phone: 602.543.8145 E-mail: DRCWest@asu.edu

Attendance Policy:

Attendance at ALL scheduled class meetings is mandatory. All points for a given experiment are forfeit if either the recitation or the laboratory session is not attended (either in-person or Zoom) for any reason. **In addition, if the recitation period is not attended, you may not enter the lab.** I will be taking attendance with the iClickers each day. Due to the short time allotted for lab, tardiness to lab will not be tolerated. If you are late you will not be allowed in the lab and the absence will be considered unexcused. In cases where a medical emergency, military service, a university observed religious holiday (in compliance with [ACD 304-04](#)), or travel for a university-sanctioned event (in compliance with [ACD 304-02](#)) interferes with attending a class it is **your** responsibility to notify your instructor in advance and provide appropriate documents verifying the event. The documents must be from the appropriate official. Because all exam dates are scheduled at the beginning of the semester, personal travel, work schedules, traffic, etc. do not constitute grounds for a substitution. Please come see me if you have any questions about these policies.

Academic Integrity:

Academic honesty is expected of all students in all examinations, papers, 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/academic-integrity>.

If you fail to meet the standards of academic integrity in any of the criteria listed on the university policy website, sanctions will be imposed by the instructor, school, and/or dean. Academic dishonesty includes, but is not limited to, cheating on an academic evaluation or assignment, borrowing ideas without proper citation, copying others’ work (including information posted on the internet), academic deceit (such as fabricating data or information), failing to turn in your own work for group projects, or falsifying academic records. You may work with other students on assignments, however, all writing that you turn in must be done independently. Turning in an assignment (all or in part) that you completed for a previous class is considered self-plagiarism and falls under these guidelines. Any infractions of self-plagiarism are subject to the same penalties as copying someone else’s work without proper citations. Please be aware that the work of all students submitted electronically can be scanned using SafeAssignment, which compares them against everything posted on the internet, online article/paper databases, newspapers and magazines, and papers submitted by other students (including yourself if submitted for a previous class).

If you have any questions about your work and the academic integrity policy, please discuss your assignment or concerns with your instructor, IA, or your college Academic Integrity Officer in advance of submitting an assignment. Student resources on Sun Devil Integrity and strategies for completing your work with integrity and avoiding plagiarism are available here: [ASU Student Resources for Academic Integrity](#) or provost.asu.edu/academicintegrity for more information.

Establishing a Safe Environment:

Learning takes place best when a safe environment is established in the classroom, whether it be virtual or in-person. In accordance with [SSM 104-02](#) of the Student Services Manual, students enrolled in this course have a responsibility to support an environment that nurtures individual and group differences and encourages engaged, honest discussions. The success of the course rests on your ability to create a safe environment where everyone feels comfortable to share and explore ideas. We must also be willing to take risks and ask critical questions. Doing so will effectively contribute to our own and others intellectual and personal growth and development. We welcome disagreements in the spirit of critical academic exchange, but please remember to be respectful of others' viewpoints, whether you agree with them or not. ASU policy prohibits harassment on the basis of race, sex, gender identity, age, religion, national origin, disability, sexual orientation, Vietnam era veteran status, and other protected veteran status. Violations of this policy may result in disciplinary action, including termination of employees or expulsion of students. Contact the professor if you are concerned about online harassment of any kind, and he/she will put you in contact with the Dean of Students office.

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.

Student Code of Conduct:

ASU and the College of Integrative Sciences and Arts expects and requires its students to act with honesty, integrity, and respect. Required behavior standards are listed in the [Student Code of Conduct and Student Disciplinary Procedures](#), [Computer, Internet, and Electronic Communications policy](#), [ASU Student Academic Integrity Policy](#), and outlined by the [Office of Student Rights & Responsibilities](#). Anyone in violation of these policies is subject to sanctions. [Students are entitled to receive instruction free from interference](#) by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per [Instructor Withdrawal of a Student for Disruptive Classroom Behavior](#). The Office of Student Rights and Responsibilities accepts [incident reports](#) from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Students must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

Prohibition of Commercial Notetaking Services:

In accordance with [ACD 304-06 Commercial Note Taking Services](#), written permission must be secured from the official instructor of the class in order to sell the instructor's oral, or video, communication in the form of notes. Notes must have the note taker's name as well as the instructor's name, the course number, and the date. This includes submission of course materials to online sources (e.g. Wikipedia, Chegg, Jove, Yahoo Answers, etc.).

Title IX:

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 discuss any concerns confidentially and privately.

Statement on Inclusion:

ASU is a comprehensive public research university, measured not by whom we exclude, but rather by whom we include and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.

Arizona State University is deeply committed to positioning itself as one of the great new universities by seeking to build excellence, enhance access and have an impact on our community, state, nation and the world. To do that requires our faculty and staff to reflect the intellectual, ethnic and cultural diversity of our nation and world so that our students learn from the broadest perspectives, and we engage in the advancement of knowledge with the most inclusive understanding possible of the issues we are addressing through our scholarly activities. We recognize that race and gender historically have been markers of diversity in institutions of higher education. However, at ASU, we believe that diversity includes additional categories such as socioeconomic background, religion, sexual orientation, gender identity, age, disability, veteran status, nationality and intellectual perspective.

ASU Counseling Services:

As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These emotional health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. ASU Counseling Services provides counseling and crisis services for students who are experiencing a mental health concern. Any student may contact the ASU counseling center for a same day or future appointment to discuss any personal concern. Here is the website: <http://students.asu.edu/counseling>. After office hours and 24/7 ASU's dedicated crisis line is available for crisis consultation by calling (480) 921-1006.

Syllabus Disclaimer:

The course syllabus is an educational contract between the instructor and students. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes via email, or in the Announcements section on Canvas.

Recorded Recitations and Labs:

Recitation and lab videos may be provided for some experiments performed. These are provided as additional information rather than an alternative to attending the required components of the recitation and lab periods. During the lab videos you will observe someone performing the relevant experiment, or presenting data for an experiment. Using this video, along with sample data provided, may be necessary at times.

Sources of Help:

The best source of help outside of class is to regularly attend office hours. I try to make myself readily available to all of my students. Although I have scheduled office hours you will notice I also take appointments for individual and/or small group Zoom sessions. In order to take advantage of one of these half-hour sessions, just email me to set up a day and time. I do schedule these appointments on a first-come first-served basis, so be sure to make the appropriate arrangements with as much advanced notice as possible. Outside of attending all recitation and lab meetings, scheduling and attending these Zoom meetings on a regular basis may be your best source of help.

Incomplete Policy:

A grade of incomplete (indicated on the transcript as a grade of “I”) is given by the instructor when you have completed most of the course and are otherwise doing acceptable work but are unable to complete the course because of illness or other conditions beyond your control. You are required to arrange with the instructor for the completion of the course requirements. The arrangement must be recorded on the Request for Grade of Incomplete form which can be found at (<http://students.asu.edu/forms/incomplete-grade-request>).

Course Withdrawals:

The course withdrawal deadline is Sunday March 28th. The complete session withdrawal deadline is Friday April 23rd. More information about these deadlines can be found at <https://students.asu.edu/drop-add>.

Grade Appeals:

Students must first speak with the instructor of the class to discuss any disputed grades. If, after review, a resolution is not achieved, students may proceed with the appeal process. Student grade appeals must be processed in the regular semester immediately following the issuance of the grade in dispute (by commencement for fall or spring), regardless whether the student is enrolled at the university. Complete details are available in the [CISA Grade Appeals policy](#).

Course Evaluations:

Students are expected to complete the course evaluation. The feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available. The results are always anonymous and cannot be reviewed by the instructor/department until after final grades have been posted.

Campus Resources:

As an ASU student you have access to many resources on campus. This includes tutoring, academic success coaching, counseling services, financial aid, disability resources, career and internship help and many opportunities to get involved in student clubs and organizations.

- Tutoring: <https://students.asu.edu/academic-success>
- Counseling Services: <http://students.asu.edu/counseling>
- Financial Aid: <http://students.asu.edu/financialaid>
- Disability Resource Center: <http://www.asu.edu/studentaffairs/ed/drc/>
- Major/Career Exploration: <http://uc.asu.edu/majorexploration/assessment>
- Career Services: <http://students.asu.edu/career>
- Student Organizations: <http://www.asu.edu/studentaffairs/mu/clubs/>
- ASU Writing Centers: <https://tutoring.asu.edu/writing-centers>
- ASU Police Department: <https://cfo.asu.edu/police>
- International Student Resources: <https://students.asu.edu/international/support/academic>

CHM 238: Elementary Organic Chemistry
TENTATIVE LECTURE SCHEDULE*
Spring 2021

DAY	DATE	LABORATORY INVESTIGATION
M, T, F	1/11, 1/12, 1/15	NO LAB OR RECITATION MEETINGS!!
M	1/18, 1/19	MARTIN LUTHER KING JR. HOLIDAY (OBSERVED) – NO LAB MEETINGS!!
F	1/22	Course Introduction (Syllabus)
M, T	1/25, 1/26	Lab Safety Introduction
F, M, T	1/29, 2/1, 2/2	Lab A: Experiment 23A & C---Synthesis of n-Butyl Bromide and t-Pentyl Chloride --- Sign-up To Attend Lab In-Person (Lab Quiz #1 on 1/29)
F, M, T	2/5, 2/8, 2/9	Lab D: Experiment 30 & 31---Preparation of Soaps and Detergents --- Sign-up To Attend Lab In-Person (Lab Quiz #2 on 2/5)
F, M, T	2/12, 2/15, 2/16	Lab G: Experiment 49A & B---Preparation and Properties of Polymers --- Sign-up To Attend Lab In-Person (Lab Quiz #3 on 2/12)
F, M, T	2/19, 2/22, 2/23	Lab H: Experiment 66---An Oxidation Puzzle --- Sign-up To Attend Lab In-Person (Lab Quiz #4 on 2/19)
F, M, T	2/26, 3/1, 3/2	Lab B: Experiment 27---Relative Reactivities of Several Aromatic Compounds --- Sign-up To Attend Lab In-Person (Lab Quiz #5 on 2/26)
F	3/5	MIDTERM EXAM
M, T	3/8, 3/9	NO LAB MEETINGS!!
F, M, T	3/12, 3/15, 3/16	Lab E: Experiment 38---Triphenylmethanol and Benzoic Acid --- Sign-up To Attend Lab In-Person (Lab Quiz #6 on 3/12)
F, M, T	3/19, 3/22, 3/23	Lab E: Experiment 38---Triphenylmethanol and Benzoic Acid (cont.) --- Sign-up To Attend Lab In-Person (Lab Quiz #7 on 3/19)
F, M, T	3/26, 3/29, 3/30	Lab E: Experiment 36---Multistep Reactions: The Conver. of Benzaldehyde to Benzilic Acid -- Sign-up To Attend Lab In-Person (Lab Quiz #8 on 3/26)
F, M, T	4/2, 4/5, 4/6	Lab E: Experiment 36 (cont.)---Multistep Reactions: The Conver. of Benzil to Benzilic Acid --- Sign-up To Attend Lab In-Person (Lab Quiz #9 on 4/2)
F, M, T	4/9, 4/12, 4/13	Lab I: Experiment 52---Identification of Unknowns --- Sign-up To Attend Lab In-Person (Lab Quiz #10 on 4/9)
F, M, T	4/16, 4/19, 4/20	Lab I: Experiment 52---Identification of Unknowns (cont.) --- Sign-up To Attend Lab In-Person (Lab Quiz #11 on 4/16)
F	4/23	FINAL EXAM

*This is a tentative schedule and may be changed at any time. Any changes to the schedule/syllabus will be posted on Canvas.