THE OHIO STATE UNIVERSITY

CHEMISTRY 1220 – General Chemistry II
Spring 2023 Lecture Syllabus

TR | 3:55 PM – 5:15 PM | McPherson 1000 **5 credit hours**

Introduction

Instructional Team	
Lecturer:	Dr. Robert J. Zellmer www.asc.ohio-state.edu/zellmer.1
Lab Supervisors:	Dr. Bernice Opoku-Agyeman and Dr. Camilla Fontes Neves da Silva
Course Coordinator:	Jennifer Stebick
Office & SLDS Contact:	Holly Wheaton
TA:	(Varies with recitation/lab section)

Please see this "Contacts" page in Carmen for information on your instructors and who to contact for your unique needs.

Undergraduate Office: 614-292-6009, Celeste Laboratory, room 110 (CE 110). Holly Wheaton keeps us afloat from there and has the answers to life's big and small questions. Stop by any time Monday–Friday, 8:00am–4:30pm for assistance (but if you're going to ask Holly what the meaning of life is, maybe call first and schedule an appointment).

Welcome to CHEM 1220! We are so glad you are here and are excited to explore general chemistry concepts with you this semester. Our goal is that you leave this course with an appreciation of how chemistry impacts your everyday lives. We also want to provide you with the foundational chemistry concepts that will facilitate your success in future science courses and careers. Our team of lecturers and administrators are deeply committed to supporting your learning journey.

This syllabus outlines the resources, policies, and procedures that will ensure your success in this course. Please familiarize yourself with this syllabus and keep it in a convenient place for reference throughout the semester (buckle up—it's a big course, so it's got a big syllabus). If you have questions or concerns about the syllabus itself, please contact your lecturer, Dr. Zellmer, at Zellmer.1@osu.edu

---

Carmen: carmen.osu.edu: Carmen is the Learning Management System (LMS) used at Ohio State. It is the central hub from which your course will be conducted. Everything you need for the course is available in and communicated through Carmen, so daily engagement with it is crucial to your success in this course. It is important that you check your Carmen notification settings to ensure you receive course announcements in a timely manner. You can find instructions on how to set your Carmen notifications if you click option **#2** on this webpage.

Log in to Carmen to:

- Access your textbook and course materials
- Read important announcements
- Interact with your instructional team
- Complete assignments
- Turn in lab reports
- Take exams
- View your grades
- Find complete policies
- Locate learning and personal resources

A free Canvas app is available to download for both Android and iOS, making it easy to log in to your course from anywhere.

Required Text: The textbook and online homework software for the lecture portion of this course are provided by and accessible through Carmen. You do not need to purchase a textbook for the course; instead, you will be charged for your access to the e-text and online homework software through a "Carmenbooks fee" of $55.99 on your statement of account. You can learn more about the e-textbook fee for this course by visiting the "Textbook Information" Carmen page.

If you work better with a hard copy of the textbook, you can purchase one at a bookseller of your choice. A hard copy of the text is *not* sold in the university bookstore. The textbook is *Chemistry: The Central Science*, 15th edition, by Brown, LeMay, Bursten, Murphy, Woodward, & Stoltzfus.

Other Required Materials: Required laboratory materials appear in your Lab Syllabus.

1. An iPad

- All exams must be taken on an iPad. Some lab work also requires an iPad.
- If you do not already own an iPad, you may borrow one for the semester from the College of Arts and Sciences. Please follow the instructions on the "Borrowing an iPad" Carmen page.

2. An approved calculator

All components of CHEM 1220 require a calculator. Only four calculator models are approved for use in this course. Please note that these are the only calculators permitted during exams:

- Texas Instruments TI-30XiiS
- Texas Instruments TI-30Xa
- Texas Instruments TI-83
- Texas Instruments TI-84
- *Plus* and *Plus CE* models of the above calculator models are also permitted.

If you do not already own one of these calculators, the most cost-effective models are the TI30Xiis and the TI30Xa. You can purchase your calculator at the retailer of your choice.

Course Components

Your CHEM 1220 course consists of four components that meet at different times.

1. Two lecture sessions

(1 hour and 20 minutes each)

a. Your lecture schedule appears on page 7.
b. Your lecturer will assign homework through Mastering Chemistry. While each assignment may have a unique due date set by your lecturer, no homework assignments will be accepted after **Monday, April 24 at 11:59 PM.**
c. Though attendance is not directly graded in lecture, being present and engaged during lecture sessions is integral to your understanding of the course material.
d. Your point of contact for lecture is Dr. Zellmer.

2. One recitation

(55 minutes)

a. A description of how recitations are conducted, graded, and scheduled appears on pages 8-9.
b. Your class BuckeyeLink schedule lists 2 lab times per week, but the 55-minute "lab" is your recitation meeting.
c. Your point of contact for recitation is your recitation TA, who you will meet on your first day of recitation. Your TA will give you their contact information at that time.

3. One lab

(2 hours 55 minutes)

a. The policies, procedures, and schedules for the lab component of this course appear in your lab syllabus.
b. The lab portion of this course is worth 20% of your total course grade. However, **a minimum of 50% of the total lab points is required to pass the overall course**. See your lab syllabus for more information.
c. Your first point of contact for lab is your lab TA, who you will meet on the first day of lab. For more complicated questions and concerns about lab, contact your Lab Supervisors at chem1220labsupervisor@osu.edu.

4. Exams

(three 70-minute midterms and one 105-minute final)

a. Exams take place *outside of* regularly scheduled class time
b. Exam information and the exam schedule appear on page 10.
c. Your point of contact for exams is your Course Coordinator, Jennifer Stebick, at genchemexams@osu.edu. Please state your course, lecturer, and lecture time in your email.

Health and Safety

Classroom Safety Measures: We will follow all university guidelines regarding classroom safety. Since these guidelines may change during the semester given the unpredictable nature of the COVID-19 pandemic, you can find the latest updates to university safety guidelines here.

COVID-19 Absences: The university's office of Student Life Disabilities Services (SLDS) will give you the documentation and resources you need if you contract COVID-19, must quarantine due to COVID-19, or have a high-risk factor that leaves you vulnerable to COVID-19. Please request temporary accommodations for COVID-related conditions through SLDS's online form and reach out to Dr. Zellmer and your Lab Supervisors to make a personalized plan for your academic progress while you recover. If COVID-19 prevents you from attending an exam, please read the Alternate Midterm Policy or Final Exam Make-up Policy and submit the request form linked within.

Accommodations for other illnesses: If you experience a serious illness that necessitates an extended absence, please reach out to Dr. Zellmer to make alternative arrangements for your success. If you will miss an exam during your absence, please read the Alternate Midterm Policy or Final Exam Make-up Policy and submit the request form linked within.

Course Information and Policies

Communication: Your instructional team will communicate important information to you throughout the term via Carmen announcements and your Buckeyemail email account. Please verify that your OSU email is set up appropriately on your electronic devices so we can keep in touch. We highly recommend that you check email and Carmen at least once per day.

Enrollment Information: In accordance with federal regulations (Title IX), we must report your attendance status to the University Registrar after the first week of classes. The Academic Misconduct Quiz is the assignment we use to gauge your enrollment in the course. You may also hear this assignment referred to as "The COAM Quiz." If you do not complete the quiz by **11:59 PM, Sunday January 15,** you will be reported to the Registrar as "non-attending," which may lead to disenrollment and problems with your financial aid.

Switching Sections: We are happy to help you switch sections, but after August 26, you will need permission from Holly Wheaton in the Chemistry & Biochemistry (CBC) Undergraduate Studies Office to do so. Stop by the office or email Holly (wheaton.4@osu.edu) before **January 20** to switch sections. When you switch sections, ask your TA to transfer the grades you have already earned to your new section. They will be sad to see you go.

Switching between sections of General Chemistry is *not* permitted after **January 20.**

In accordance with the missed laboratory policy detailed in the Laboratory Syllabus, if you know you will miss more than one laboratory period (for reasons such as OSU athletic competitions, military training or duties, or religious observances), please see/contact Holly by **January 13** to move to a laboratory section that minimizes scheduling conflicts.

ONLY the Lecturer and Lab Supervisor of the course may modify due dates and assignment details in this syllabus. Teaching assistants are not authorized to alter any syllabus information or course policies.

Goals and Outcomes

Chemistry 1220 is a physical science course in the natural science category of OSU General Education courses (GE). Natural science courses have the following goals and learning outcomes:

1. Students understand the basic facts, principles, theories, and methods of modern science.
2. Students understand key events in the development of science and recognize that science is an evolving body of knowledge.
3. Students describe the inter-dependence of scientific and technological developments.
4. Students recognize social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

Course Components

Your performance in this course will be evaluated based on the components below. **There is no extra credit.** Sixty days after grades are posted, your grade in Carmen is considered final and all other records are destroyed. If you have a concern or question about a grade, please contact Dr. Zellmer promptly and we will work to adjust any inconsistencies in a timely manner.

Individual assignments within the Recitation, Online Homework, and Laboratory categories will be scaled to contribute toward the established percentage of your total course grade:

Assignment Group	%
Mandatory Quizzes	0%
Recitation Activities	8%
Online Homework	10%
Midterm 1	14%
Midterm 2	14%
Midterm 3	14%
Final Examination	20%
Laboratory	20%

Mandatory Assignments: These mandatory assignments do not contribute to your course grade but must be completed with a 100% score to pass this course.

1.) The Academic Misconduct Quiz not only confirms your enrollment in the course, but also teaches you about academic integrity, which we take very seriously. Therefore, please complete this quiz by **11:59 pm, Sunday, January 15.** Please note that if you do not receive a 100% on this quiz by the due date, ***you will be assigned an "E" as your final course grade.*** You may take the quiz as many times as you need to receive 100%.

2.) **Mandatory lab assignments**: The lab component of your course requires you to complete mandatory assignment/s before you can participate in laboratory activities. That information is in your lab syllabus.

Course Letter Grade Assignment: Once your overall point total (final score) has been calculated using the weighting scheme shown above, your letter grade will be assigned based on the following scale:

Letter Grade	Final Score (%)
A	90 ≤ score ≤ 100
A−	86 ≤ score < 90
B+	82 ≤ score < 86
B	78 ≤ score < 82
B−	74 ≤ score < 78
C+	70 ≤ score < 74
C	65 ≤ score < 70
C−	60 ≤ score < 65
D+	55 ≤ score < 60
D	50 ≤ score < 55
E	< 50

If exam performance falls outside of historical norms the department retains the right to make changes in the grading scale.

Dr. Zellmer is happy to clarify the grading process and discuss your performance in this course.

[continue to next page]

Component Descriptions and Schedules

1. Lecture: The only grades associated with the lecture component of your course are the online homework grades you earn through the Mastering Chemistry program in Carmen. Your homework score is worth 10% of your overall score in the course, but beyond that, the more homework and practice problems you complete, the better prepared you will be for exams.

This course will cover the topics according to the schedule below:

Week	Chapters	Lecture Topics
Jan 9-13	***13***	**Properties of Solutions (Ch. 13.4, 13.2, 13.1, 13.3):** expressing solution concentration; saturated solutions and solubility; the solution process; factors affecting solubility
Jan 16-20*	**13, 14**	**Properties of Solutions (Ch. 13.5-13.6):** colligative properties; colloids; **Chemical Kinetics (Ch. 14.1-14.3):** reaction rates; rate laws & initial rates; integrated rate laws
Jan 23-27	**14**	**Chemical Kinetics (Ch. 14.3-14.6):** integrated rate laws; temperature and rate; reaction mechanisms; catalysis
Jan 30 – Feb 3	**14, 15**	**Chemical Kinetics (Ch. 14.6):** Catalysts; **Chemical Equilibrium (15.1-15.7):** equilibrium; equil. constants and calculations (ICE tables); applications of equilibrium constants; Le Châtelier's principle
Feb 6-10 *Midterm 1*	**15, 16**	**Chemical Equilibrium (Ch. 15.7):** Le Châtelier's principle; **Acid Base Equilibria (Ch. 16.1-16.5):** acids and bases review; acid-base equilibria; Brønstead-Lowry concept; the autoionization of water; the pH scale; strong acids and bases
Feb 13-17	**16**	**Acid Base Equilibria (Ch. 16.5-16.9):** strong acids and bases; weak acids and bases; relationship between K_a and K_b; salt solutions;
Feb 20-24	**16, 17**	**Acid Base Equilibria (16.10, 16.1):** acidity & structure; Lewis concept (16.1); **Additional Aspects of Aqueous Equilibria (Ch. 17.1-17.3):** common ion effect; buffers; acid-base titrations
Feb 27 – Mar 3	**17**	**Additional Aspects of Aqueous Equilibria (Ch. 17.3-17.5): titrations;** solubility equilibria and K_{sp} ; Factors affecting solubility
Mar 6-10 *Midterm 2*	**17**	**Additional Aspects of Aqueous Equilibria (Ch. 17.5-17.6): f**actors affecting solubility; selective precipitation of ions**;**
Mar 13-17	**X**	**SPRING BREAK – No Classes**
Mar 20-24	**19**	**Chemical Thermodynamics (Ch. 19.1-19.6):** spontaneous processes; entropy and the 2nd law of thermodynamics; molecular interpretation of energy & the third law of thermodynamics; entropy changes in chemical reactions; Gibbs free energy; free energy and temperature
Mar 27-31	**19, 20**	**Chemical Thermodynamics (Ch. 19.7):** free energy and the equilibrium constant; **Electrochemistry (Ch. 20.1-20.5)** oxidation states and oxidation-reduction reactions; balancing redox reactions; voltaic cells; cell potentials under standard conditions
Apr 3-7	**20, 23**	**Electrochemistry (Ch. 20.6-20.9):**; free energy and redox reactions; cell potentials under nonstandard conditions; batteries and fuel cells; corrosion; electrolysis; **Transition Metals and Coordination Chemistry (Ch. 23.1):** transition metals
Apr 10-14 *Midterm 3*	**23**	**Transition Metals and Coordination Chemistry (Ch. 23.2-23.6):** transition-metal complexes; ligands; nomenclature excluded; isomerism; color and magnetism of transition metal compounds; crystal field theory
Apr 17-21	**21**	**Nuclear Chemistry (Ch. 21.1-21.9):** radioactivity; patterns of nuclear stability; nuclear transmutations; rates of radioactive delay; detection of radioactivity; energy changes in nuclear reactions; nuclear fission and fusion; radiation in the environment and living systems
Apr 24-28†	**X**	**April 24th is last day of regular classes, April 25th is Reading Day, Final Exams start Wed, 4/26**

** No class Monday, January 16th due to Martin Luther King Day*
† Last day of class is Monday, April 24th

2. Recitation: Recitation is a small-group class designed to give you a space to review and practice what you've covered in lecture. Your TA will fearlessly lead you in graded recitation activities, but recitation is also a place to ask questions about lecture, your textbook, and homework assignments. Regular engagement in recitation will contribute to your mastery of the material.

Your recitation grade will consist of a total of 14 recitation attendance scores and 12 graded quizzes (which will be given according to the schedule on the next page). You will get 10 pts for attendance for each recitation and 40 pts for each quiz. Your lowest 2 quiz scores and lowest 2 attendance scores will be dropped. **If you miss a quiz or recitation for any reason, it will be scored as a zero and counted toward your drops.**

Points earned in recitation will be scaled to contribute 8% to your total course grade.

Your recitation grade will be based on attendance **and** quizzes.

Recitation Attendance: Attendance for each recitation is worth a maximum of 10 pts.

Requirements to receive full credit for attendance:

- You will sign in on the sheet provided by your TA using "first name" "lastname.#" (e.g. Robert Zellmer.1).
- Be present for the whole period to receive the full 10 pts.
- If late, you will enter the time of arrival when you sign in. An appropriate percentage of the 10 points will be deducted depending on how late you are.
- If you leave early the same deduction penalties apply.
- The 2 lowest attendance scores will be excused. A missed recitation will be an excused attendance score.

Recitation Quizzes: Quizzes are each worth 40 points and will be taken on Carmen. Quizzes will consist of several questions and generally cover material from the previous week and maybe Tuesday of the same week. This coverage may vary slightly, especially during exam weeks. I will keep you informed about what each week's quiz will cover via e-mail and my personal class web page (not Carmen).

- Quizzes will be available 7-10 PM Sundays.
- You'll have 40 minutes to take an approximately 30-minute quiz. You must begin it no later than 9:20 PM to get the full 40 minutes for the quiz.
- You can use your notes, course lecture videos from Carmen, or the textbook. You cannot get help from another individual or other sources on the internet other than those provided to you from this class.
- You are not allowed to upload any portion of the quiz or answers to the internet during or after the quiz.
- Your lowest 2 quiz score will be dropped. **No** makeup quizzes will be provided. A score of zero resulting from a missed quiz would be one of your drops. The whole purpose of the dropped quizzes is to cover missing a quiz for ANY reason.

The pre-quiz (on Carmen) the first week is not for credit and is due by Friday, 11:59 PM, 1/13.

Recitation schedule follows on next page.

CHEM 1220 Recitation Schedule*			
Week	**Monday**	**Wed, Fri**	**Quiz Dates (7 PM)**
Jan 9 - 13	Activity 1	Activity 1	Prequiz (due Fri. 1/13, 11:59 PM)†
Jan 16 - 20	**No Classes**	Activity 2	Quiz 1, Sunday, 1/22
Jan 23 - 27	Activity 2	Activity 3	Quiz 2, Sunday, 1/29
Jan 30 – Feb 3	Activity 3	Activity 4	Quiz 3, Sunday, 2/5
Feb 6 - 10 *Midterm 1*	Activity 4	Activity 5	Quiz 4, Sunday, 2/12
Feb 13 - 17	Activity 5	Activity 6	Quiz 5, Sunday, 2/19
Feb 20 - 24	Activity 6	Activity 7	Quiz 6, Sunday, 2/26
Feb 27 - Mar 3	Activity 7	Activity 8	Quiz 7, Sunday, 3/5
Mar 6 - 10 *Midterm 2*	Activity 8	Activity 9	NO Quizzes 3/12 or 3/19
Mar 13 - 17	**SPRING BREAK – No Classes**		
Mar 20 - 24	Activity 9	Activity 10	Quiz 8, Sunday, 3/26
Mar 27 - 31	Activity 10	Activity 11	Quiz 9, Sunday, 4/2
Apr 3 - 7	Activity 11	Activity 12	Quiz 10, Monday, 4/10‡
Apr 10 - 14 *Midterm 3*	Activity 12	Activity 13	Quiz 11, Sunday, 4/16
Apr 17 - 21	Activity 13	Activity 14	Quiz 12, Sunday, 4/23
Apr 24 - 28	Activity 14	**Final Exams**	
May 1 - 2	**Final Exams**		

** Quizzes will be available each Sunday at 7 PM. The window is 7-10 PM. The quiz time limit is 40 min. within this time window.*
† Prequiz score does NOT count toward your final grade, but the score and results will be posted in Carmen.
‡ Quiz 10 will be held on Monday, April 10th rather than Sunday, April 9th, due to Easter.

3. Laboratory: Please consult your Lab Syllabus for lab schedules, policies, and procedures.

4. Exams: All exams are administered *in person* on the dates and times below. Please note your midterm exams take place outside your regular classroom and class time. **All exams will be completed on an iPad.** You are responsible for borrowing or obtaining an iPad. See "Other Mandatory Materials" on page 2 of this syllabus.

Exam	Date	Textbook Coverage
Midterm 1	Wednesday, Feb. 8 from 7:30 – 8:45 PM in Hitchcock 131	Chapters 13-14
Midterm 2	Wednesday, Mar. 8 from 7:30 – 8:45 PM in Hitchcock 131	Chapters 15, 16, 17.1-17.2
Midterm 3	Wednesday, Apr. 12 from 7:30 – 8:45 PM in Hitchcock 131	Chapters 17.3-17.6, 19, 20
Final Exam	Monday, May 1 from 6:00 – 7:45 PM (evening) in room TBA	Cumulative, including parts of 21 & 23

Make-Up Exams: Since your midterm exams are administered in out-of-class sessions, we understand that you may have commitments or emergencies that prevent you from taking an exam as scheduled above. For this reason, we provide two alternative exam sessions for each midterm. You must apply in advance for an alternative exam and submit documentation of your conflict with your application. Full details are found in the Alternate Midterm Policy and Final Exam Make-up Policy in your Carmen course. It is important that you read the policies carefully, as alternative testing sessions will only be provided to students who follow policy instructions and deadlines. A link to each request form appears at the bottom of the appropriate policy. Please read the policy in its entirety for a full description of the testing options available to you.

Your Course Coordinators evaluate alternate exam applications and schedule exams for all General Chemistry courses. **Unfortunately, Dr. Zellmer cannot arrange alternative or make-up exams, so if you need one, please do not contact them. Simply fill out the application form and it will reach the appropriate coordinator for consideration**. You can also reach your coordinators at genchemexams@osu.edu. Please state your course, lecturer, and lecture time in your email.

Important Resources for Academic Success

Supplemental Lecture Videos: To support your learning, we provide short lecture videos to *supplement* (not replace) *some* of the topics covered in your in-person lectures. Your actual lecture will be more interactive, personalized to your needs, and tailored to the content on your exams. That said, the videos can help you review or better understand some of the topics covered in lecture. Links to the videos are—you guessed it—available on Carmen in the "Supplemental Videos" module.

Learning Resource Center (LRC): Located in Celeste Lab (CE) 170, the LRC is where TAs hold office hours and where students can come for individual help and instruction. A schedule that lists the time each TA is available, as well as the courses they teach, is posted here. You are welcome (and encouraged) to stop by anytime during posted hours. You do not need to make an appointment and you are *not* limited to meeting with your own TA. Limited evening and weekend hours may also be available through Zoom. Check the schedule for details.

Additionally, the LRC has computers with general chemistry instructional programs. These programs offer single-concept problems that must be understood in order to grasp the more difficult multi-concept questions on exams. Computers are available for student use any time the LRC is open, on a first-come, first-served basis.

Textbook Practice Assignments: Textbook practice assignments are posted on-line on the course web page (not Carmen). These are the End-of-Chapter (EOC) Exercises which I feel you need to be able to do or you will not learn the material and will not do well on quizzes and exams. These practice assignments will **NOT be graded**, **only the on-line Mastering Chemistry (MC) is graded**. However, doing **ALL** assigned problems is often the best way to determine how well you understand the material.

The publisher's solution manual for the 15th edition containing worked-out solutions and explanations for every EOC exercise is on Carmen. See the "Textbook End-of-Chapter Exercises and Solutions Manuals" module. Use the solutions manual to check your answers **after** doing each problem (do not do a whole bunch before checking to see if you're doing them correctly). Having the solutions allows you to check your work for every single EOC exercise. Do not simply read the solutions and use them as a crutch rather than using them to help you learn the material.

There aren't enough problems assigned in MC for you to really learn the material. I always suggest doing at least some of the textbook problems before you do the MC homework, the latter being for credit. This way you can work out the "bugs" in your understanding by working on textbook problems which aren't for credit before doing the MC. This will allow you to get through the MC homework faster and maximize your points because you'll hopefully make fewer mistakes on them. **Points are deducted in MC for wrong answers (3%) and for asking for a hint (2%).** That's not much but it could add up if all you're doing is trying to guess answers.

Remember, you don't have to worry about losing points for doing EOC Exercises. Also, you can use the solutions manual on Carmen when you get stuck for hints and then try to complete the problem on your own. Then check your work and answer with the rest of the solution. Anytime you need help to answer a question you need to do another problem. Most EOC exercises come in pairs so if you needed help on a problem do the companion problem as well. Most times the MC problems will be due on Fridays and Saturdays. They will generally be available for several days, most often for a week, before the actual due date so you don't have to wait until Fri and Sat to do them, or at least get started on them. My suggestion is to do the EOC Exercises during the week as we go along. Then use the MC problems the following weekend as your review for the quiz on Sunday. The MC problems generally cover the material from the previous week and are related to what's on the Sunday night quiz.

Lecture Notes: Available on the course web page (not Carmen). I would suggest printing them and bringing them to lecture. It will make it easier for you to keep up. See course web pages and Carmen for additions or corrections. These are PDF files so you can use a tablet computer (iPad, Android, etc.) which, with the proper app (like Notability), would allow you to write on them and record the lecture, a very useful feature (more useful than "Angry Birds"). Notability will also allow you to record the lecture audio (there's a microphone symbol at the top right in). Then if you rewatch the lecture notes the audio is there as well.

Asynchronous, pre-recorded lecture videos are posted on Carmen using these notes. How to use them? That's up to you. My suggestion is to skim 3-4 sections in the book before lecture (read through them quickly w/o worrying if you're understanding things). Then come to lecture and take notes. Then when studying if you get stuck on something in the book and think you missed something in lecture you can watch that part of the video. You can also simply decide to rewatch the lecture to aid in your understanding. You could watch them before lecture instead of skimming the book but if you do, I suggest you speed them up a little (like 1.5 to 2 times the speed). They're really meant for people who miss lecture due to an illness or emergency.

Office Hours: I will be available via Zoom on T, R 9-10 AM, 1-2 PM and Tue, 7:30-8:30 PM. This is on my personal course homepage. You can find the links in the Zoom module in Carmen and the "Contacts" area in Carmen. You can also make an appointment for other times by sending me an e-mail or just stop by my office (1052 Evans Lab). I will limit the number of students in my office to a few at a time (small office). During the Zoom office hours there may be multiple students present. This is a good thing since it allows for better discussions, and someone may ask a question you didn't think about. Feel free to call my office phone (614-292-2149) and leave a message. Our phone system lets me know of voice messages via e-mail.

Additional Resources: The "Campus Resources" page in your Carmen course offers links for help with everything from course content to mental health to finances and extracurricular involvement. It is a good place to start if you aren't sure where to go for information or assistance. Carmen is truly the beginning and end of all things.

Disability Services: The general chemistry department strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), reasonable accommodations can be established in partnership with Student Life Disability Services (SLDS).

Please note: Applying for SLDS accommodations in general chemistry is a multi-step process that involves working with both the SLDS office and our office.

- First, follow these directions to register with SLDS.
- Second, follow these directions to use your accommodations in CHEM 1220.
- Finally, carefully read all correspondence you receive regarding your SLDS accommodations.

We understand setting up SLDS accommodations can be a confusing and daunting process, but Holly is especially good at navigating it, so please reach out to her if you have any questions or uncertainties. You can stop in the office, call (614-292-6009), or email Holly for help.

Disability Services Contacts	
Contact SLDS	**Contact Holly Wheaton**
Email: slds@osu.edu Phone: 614-292-3307 Address: 098 Baker Hall	Email: wheaton.4@osu.edu Phone: 614-292-6009 Address:110B Celeste Lab

Commitment to Diversity: Advancing diversity, inclusion, and student success is central to the mission of the Department of Chemistry and Biochemistry. We are excited to serve and support students from diverse backgrounds with respect to race, ethnicity, gender, sexual orientation, socioeconomic status, disability, religion, and national origin. The department's faculty and staff have collectively committed to create a welcoming and inclusive learning environment, both virtually and in-person. We want every student to successfully learn and achieve their academic and career goals.

We acknowledge that systemic racism and various forms of injustices have contributed to the marginalization and exclusion of many student populations in scientific fields of study including chemistry. As a department, we have made progress towards enacting equity-minded actions to address systemic inequities and barriers that students encounter in the classroom, department, and university. However, we continually strive to do more to advance the success of our diverse student body. As we do the important work of teaching and supporting students, we welcome your feedback and look forward to learning from you! Please email your Dr. Zellmer or the Vice Chair of Undergraduate Studies, Dr. Jane Jackman, with your suggestions, concerns, and questions. We value each student's perspectives and are excited to collectively work towards ensuring Black, Latinx, Indigenous, LGBTQ+, and female students are well-represented in scientific disciplines and professions.

Mental Health Resources: As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, feeling down, difficulty concentrating and/or lack of motivation. Mental health concerns or stressful events may lead to diminished academic performance or impact a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

You can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline, which you can reach by dialing 988. They also have a website: suicidepreventionlifeline.org.

Academic Conduct

ACADEMIC CONDUCT IN GENERAL CHEMISTRY

The university expects us all to know and adhere to the University Code of Student Conduct, so please do check it out here. Below are some highlights you need to know for the purposes of CHEM 1220.

Any graded material you submit (for any component of this course) must be your own work. We are obligated by university rules to report any suspicions that you have compromised academic integrity or committed academic misconduct.

Here are some examples of academic misconduct in chemistry courses:

On exams:

- Having another person take your exam.
- Receiving assistance from another person while taking the exam (including looking at another student's exam without their knowledge.
- Taking screenshots or photos of the exam.
- Using screen sharing software during the exam.
- Sharing or receiving exam questions or materials in group chats, text messages, phone calls, or on websites, apps, and the like.

On Lab Assignments – Notebooks, Post-Labs, and/or Smart Worksheets:

- Altering or "making-up" lab data in your lab notebook, Post-Labs, and/or Smart Worksheets.
- Submitting a previously completed lab assignment (whether completed by yourself or someone else). Self-plagiarism (i.e.: submitting your own work from another course or semester) is expressly forbidden.
- Copying lab assignments from another individual (assignments may be submitted to TurnItIn, an originality checker.)
- Working in a group to complete your Post-Lab/Smart Worksheet.
- For more information about academic misconduct and data integrity policy in the lab portion of your course, see your lab syllabus.

And here are some hints on how you can avoid academic misconduct[1]:

1. Acknowledge Your Sources. Whenever you use words or ideas that are not your own, use quotation marks, cite your source in a footnote, and end your work with a list of sources consulted.
2. Protect Your Work. In examinations, do not allow your neighbors to see what you have written; you are the only one who should receive credit for what you know.
3. Avoid Suspicion. Do not put yourself in a position where you can be suspected of having copied another person's work, or of having used unauthorized notes to complete an assignment or exam.
4. Do your own work. The purpose of assignments is to develop your skills and measure your progress. Letting someone else do your work defeats the purpose of your education and may lead to serious charges against you.
5. Never fabricate data, citations, or experimental results.
6. Know Your Rights. Do not let other students in your class diminish the value of your achievement by taking unfair advantage. Report any academic dishonesty you see.

If you are unsure about what constitutes academic misconduct in CHEM 1220, PLEASE ASK a member of your instructional team (lecturer, lab supervisor, TA)

[1] From Northwestern University, "Academic Integrity: A Basic Guide." Pg. 5. Sept 2020. Available at https://www.northwestern.edu/provost/policies/academic-integrity/academic-integrity-guide-20201.pdf

ACADEMIC CONDUCT IN THE UNIVERSITY

The university requires that all course syllabi include the following statement on academic integrity:

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

Conclusion

Conclusion: We are going to have a great semester learning and experimenting together. We know this syllabus is a lot of information to digest at once but remember that there is a whole instructional team (listed on pg. 1) to guide you when you have questions. Remember to visit the “Contacts” page in Carmen to find out more about who we are and to find which one of us has the specific expertise to address your unique needs. We can’t wait to meet you!