

**Chemistry 11200 in Spring 2022
(CRN 13821, 13822)****Brightspace page:** <https://purdue.brightspace.com/d2l/home/457911>**Lecture:** Tuesday & Thursday, 1:30, 2:30 PM, EST in WTHR 200**Laboratory and Recitation:** Check your schedule in MyPurdue**Modality:** Face-to-Face**Instructor:** Dr. Towns, WTHR 107**Email:** mtowns@purdue.edu**Telephone:** 496-1574**Office Hours:** Monday at 3:30-4:20 PM and Thursday at 10:30-11:20 AM EST online and by appointment online. Zoom link will be announced on Brightspace.**Instructor:** Dr. Harwood, BRWN 1153**Email:** charwood@purdue.edu**Telephone:** 494-7012**Office Hours:** Wednesday at 3:30-4:20 PM and Thursday at 6:30-7:20 PM EST online and by appointment online. Zoom link will be announced on Brightspace.

Chemistry 11200 is a 3-credit-hour, foundational general chemistry course for agriculture, health and human science, and other majors. The minimum prerequisite for CHM 11200 is credit for CHM 11100. The course is oriented around helping you learn some of the fundamental chemistry concepts, calculations, and laboratory skills you need in your major.

In CHM 11200, General Chemistry II, the following topics will be covered:

- Intermolecular forces (IMF) with an emphasis on understanding IMF at the molecular level and connections between the molecular level and macroscopic properties.
- Acids, bases, and buffers. Many disciplines use these concepts and chemists have developed different kinds of models to describe acids and bases. You will learn and use three different models. We will focus on acid-base reactions, equilibria, and the application of quantitative equilibrium concepts to such reactions. Buffers have important applications in agriculture and in health sciences that will be explored in lecture and laboratory.
- Rates of chemical reactions, known as kinetics, and the quantitative application of zero-order, first-order, and second-order kinetics concepts to understand the factors that control rates of reaction and rates of chemical change.
- Oxidation-reduction reactions, strengths of oxidizing and reducing agents.
- A brief overview of organic compounds and biologically important molecules.

There are two in-person lecture sections of CHM 11200 taught by Professors Towns and Harwood. There are 24 graduate and undergraduate teaching assistants who teach weekly face-to-face recitation sections and offer an opportunity to reinforce and extend what is discussed in lecture, explore new topics, and discuss laboratory. We strongly encourage you to attend recitation! Finally, most labs face-to-face, although we have decided to put in two online labs to begin the semester to address the Omicron surge.

The Chemistry 11200 team—the professors, lecture and laboratory coordinators, graduate and undergraduate teaching assistants, administrative assistants, general chemistry preparations lab, and SI leaders—are committed to and focused on helping you learn chemistry. We know that this is a foundational course for your major, and in order to achieve your goals and dreams, you need to do well in the course!

Please read on to learn about the required materials, lecture and lab schedule, recommended ways to study, grading, and other course policies and procedures.

Detailed learning objectives are provided for each chapter/topic of the course. Broad course learning outcomes for this course are:

1. Explain basic chemical concepts including intermolecular forces and their effect on physical properties, chemical kinetics and factors affecting rates of reactions, acid-base chemistry and pH, oxidation-reduction reactions and oxidizing and reducing agent strengths, and the nomenclature and properties of hydrocarbons..
2. Apply problem-solving skills to calculate unknown information related to chemical concepts such as kinetics, acid-base, and redox chemistry .
3. Analyze tabulated data, graphs, raw data from laboratory experiments, observations, and molecular-level models to answer scientific questions and construct evidence-based arguments supporting a scientific claim.
4. Demonstrate competence in collecting, analyzing, and interpreting data in the laboratory, using computers in data acquisition and processing, using available software in data analysis, and applying safe laboratory practices.

Dr. Towns and Dr. Harwood: Our contact information is above and we will hold office hours this semester online. When emailing please address us as “Dr. Towns” or “Dr. Harwood”, or “Professor Towns” or “Professor Harwood”. In the subject line please use the following: CHM 11200 – “your question here”. It will be very helpful if you title the subjects that way because we can search on CHM 11200 and find those emails in our inbox. We have nearly 900 students in the course and receive over 100 emails each day, M-F. For questions pertaining to lab, please include your TopHat lab section number and or your TA name!

Please email us from your Purdue email account only. Generally, we respond within 24 hours, except on the weekend, when it might take closer to 48 hours. Do not email us from an account that is not your @purdue.edu account because we will not answer it – we can’t tell for certain who is emailing us!

BRWN 1144, The General Chemistry Office, 49-45250, genchem@purdue.edu: The General Chemistry office handles all the administrative details associated with the course. All non-chemistry questions about the course should be directed to this office. For example, go to BRWN 1144 to get grade checks, to get clarification on course policies, to resolve grade issues, to change your schedule (weeks 2 and 3), and to get signatures on university forms such as add/drop forms. Instructional specialists Mrs. Marybeth Miller and Mrs. Leah Everly and assistants Ms. Marlene Miller and Mrs. Melissa Roadruck are able to help you with a variety of requests so you can maximize your success in general chemistry.

Lecture and Lab Coordinators: We have two course coordinators this spring who will cover lecture and lab: Victoria Paluzzi is the lab coordinator, vpaluzzi@purdue.edu, and Hanna Bovill is our lecture coordinator, jbovill@purdue.edu.

Supplemental Instruction: Supplemental Instruction (SI) is a program built around peer-led group study sessions. Our SI Leaders Avery and Abby are undergraduate students at Purdue (Abby is a returning SI leader in CHM 11200) and they know what it takes to succeed. They know how to facilitate or guide learning through fun, collaborative activities that provide more practice with challenging course material and concepts. SI attendance is correlated with higher grades in the paired course, but it shouldn’t be thought of as a quick fix or a place to go for last minute help before a quiz. To get the most benefit, you should attend SI early in the semester and continue coming as often as you can. Keep in mind that 1 hour of productive group study is equal to 2 hours of solo studying – *SI helps you maximize your study time while also getting to know your peers and having fun.*

Times and locations for the SI sessions can be found here: <https://www.purdue.edu/asc/si/> and you can access the sessions from Brightspace. Amrita’s and Abby’s SI sessions, office hours, and email are:

SI Leader: Avery Hurst (hurst37@purdue.edu)

SI Sessions: Monday and Wednesday at 4:30 PM (Eastern time) in UNIV 019

Office Hour: Friday at 1:30 PM (Eastern time)

SI Leader: Abby Myers (myers365@purdue.edu)

SI Sessions: Tuesday and Thursday at 5:30 PM (Eastern time) in STEW 320

Office Hour: Thursday at 3:30 PM (Eastern time)

Course Information: Lecture outlines, links to homework assignments, reading assignments, announcements, and other course information are available on the course Brightspace page. INSERT BRIGHTSPACE LINK HERE. We recommend you visit it often!

Required Materials

Textbook: The textbook we have chosen for you this semester is Chang, Chemistry, 13th edition (ISBN: 9781259911156). We have also chosen the McGraw-Hill **Connect** online homework program for our homework platform this year. When you purchase Connect it includes an electronic copy of the textbook, Chang, Chemistry, 13th edition (ISBN: 9781260694420). You can purchase Connect from the University bookstores or directly through McGraw-Hill (it's cheaper directly from McGraw-Hill because the bookstore adds a small markup to the McGraw-Hill price). If you would like a physical textbook (loose-leaf version) as well, you must purchase Connect directly through McGraw-Hill online (ISBN: 9781260694857). If you are using an old book (any edition) you will still need to purchase access to the Connect program and that will automatically include an electronic copy of the text. A link on the course Brightspace page will direct you to the McGraw-Hill site where you can make your purchases. (NOTE: If you were in CHM 11100 in Fall 2020, you do not need to repurchase Connect. Connect codes are good for 2 years. Contact Dr. Harwood if you have questions about this.)

Lab Manual: We have a digital laboratory manual this semester from Bluedoor Labs/Tophat. You can purchase access to the online lab manual directly from a link in Brightspace. This will also give you access to BeyondLabz which is an online lab simulation site that we will be using this year.

Calculator: A **simple battery operated scientific calculator** with exponential, logarithm and square root functions will be needed (a TI-30 works well). Two-line non-programmable calculators are allowed.

Week #1 Assignments:

- **Complete the Online Learning 101 module if you are new to Brightspace.**
- **Sign up for Brightspace notifications, see Online Learning 101 for how to do this!** *Sign up for email & announcements!*
- Purchase required materials (see above) and register for the current semester Connect course.
- Read all the information in this course packet.
- Read the weekly organizer.
- Begin the first Connect weekly homework assignment.
- Read the Reading Assignments and Learning Objectives (on Brightspace).
- Attend recitation and lecture.
- Purchase lab access through TopHat as soon as the link is available and get connected.
- Use Shovel as your go-to time management tool for success in all your classes.

Weekly Assignments: (Refer to the "Some Ways to Study Chemistry" on the course Brightspace page.)

- Read the weekly organizer each week.
- Attend lecture and recitation.
- Complete reading assignments *before* lecture (see lab/lecture schedule at end of this document).
- Connect homework assignment are due each Friday at 11:59 pm (except Week 1).
- Activities and Explorations are due on Sundays at 11: 59 PM.
- Pre-labs and labs are due on Monday at 11:59 PM.
- Quizzes are given each Thursday and are due by 11:59 PM.

***For more information on the topics in this course summary, please see course Brightspace page. ***

Overview of CHM 11200 Activities and Policies

For more detailed information, see the course Brightspace page.

Brightspace

This is the learning management system (LMS) that we use in the course. We will post all the course resources on our Brightspace page and you will need to access this page multiple times each week. The course content is broken up into 6 modules that are explained on the course lecture schedule at the end of this document.

Reading

See the lecture schedule in the course syllabus for the reading assignments. These are also posted on our Brightspace webpage. *Reading the assigned material prior to attending or listening to the lecture and laboratory materials is recommended.*

Lecture – in person!

Attend your lecture section on T or Th. When you attend lecture please follow the Protect Purdue Plan – wear your mask.



Cell phones, computers, iPods or other electronic devices not being used for instruction purposes are distracting for everyone in a learning situation. Remove your earpods when you come to class (yes, we can see that you have them in). Computers can be used to take notes and follow lecture, but you should not be using Facebook, twitter, SnapChat, Instagram, etc. during class. Talking out loud to classmates during lecture is distracting to other students and is disrespectful to the lecturer and your classmates. If you have a question please ask, but otherwise remain quiet and allow the students around you the opportunity to learn. Talking is encouraged, however, during active learning activities in the classroom.

Recitation

Your teaching assistant conducts a weekly face-to-face recitation designed to help you understand the upcoming laboratory and to discuss any questions you may have from lecture or the homework. Worksheets (recitation guides) containing relevant conceptual and numerical questions are provided each week. Your teaching assistant will facilitate group discussions over these problems. You will have time to ask questions and check your homework and pre-lab answers so take your homework questions and lab manual with you to recitation.

Homework (CONNECT)

Each week you will have an online homework assignment in CONNECT which will consist of required questions and possibly optional questions. Required questions will contribute to your homework point total, while optional questions will not. However, optional questions and tutorials can be used to help understand how to work problems. A few homework problems may appear as questions on quizzes.

Deadlines for completing the on-line assignments will be listed on the online CONNECT Assignment page. Homework will usually be available on Monday mornings and due the following week on Friday at 11:59 pm, 11 days after it is assigned. You will have a maximum of three attempts to complete each homework **question** before the listed due date. Homework will be scored and recorded on-line and there is no hand grading or regrading of homework. *No time extensions are possible for homework unless there is a class-wide technical problem or unless you are in quarantine or isolation due to COVID.*

Activities and Explorations

These are activities where you may be asked to consider some data or how molecules interact and then make a claim and support it with your reasoning (claim-evidence-reasoning sheets). You might explore a simulation and answer questions about the demonstration. There also will be worksheets with a chance to apply the skills you are learning to problem solving.

There are 100 points of activities of these kinds in the course. The activities, explorations, and worksheets are submitted through Brightspace as pdf files. We will take the best 10 of 11 activities for your 100 points. Activities and explorations will be due on Sundays at 11:59 PM EST as noted in Brightspace.

Capstones

There are 80 points of capstone activities broken up into 2-4 assignments during the semester. The capstones are more integrative and go across multiple lectures/chapters/modules in the course. Capstones may be due during the semester and during finals week. They take the place of a final exam in this course.

Quizzes

There will be 13 online quizzes worth 30 points each. All quizzes can be accessed through Brightspace. The best 12 out of 13 scores will count toward your final grade. The content will include problems and concepts from the prior week of class, as noted in the Lecture Schedule. Quizzes will be due on Thursdays and we will announce on Brightspace when they will open and close. Brightspace's quiz function was used in the fall and should be familiar to you. In some quizzes we may require you to upload a file to collect better evidence of your learning. For example questions where you have to draw Lewis structures or show your work on a calculation – you will be able to upload your file and we can grade it. In addition, you should expect to see quiz questions that cover laboratory and in-class demos that occur during the semester.

Laboratory

Laboratory exercises are an integral part of CHM 11200. We will be using a TopHat digital Lab Manual and BeyondLabz laboratory simulation program. Please see your Brightspace PSO page to get connected to Top Hat/BeyondLabz. Below are due dates and guidelines.

- Pre-labs and the lab procedure and report for the following week will be released on Fridays by 8:00 PM EST (12:00 AM GMT).
- Pre-labs will be due on Mondays at 11:59 PM EST.
- Lab reports will be due on Mondays at 11:59 PM EST.
- Your lab report will be completed online. You should make sure to always:
 - Click SAVE or SUBMIT after you type your responses!
 - Label graphs and tables.
 - Use the data you collected for the calculations and analysis.
 - Use correct units of measurement and significant figures.
 - Use chemical terms and concepts correctly.
 - Ensure results and conclusions are consistent with your data and observations.

Laboratory Expectations

- **You must complete the online safety certification in Brightspace with a score of 20/25 or better by 11:59 pm on Monday, January 31, 2022.** You may not engage in in-person laboratory activities if you have not completed the safety certification.
- Follow all lab safety regulations (see below). These regulations may seem inconvenient but they are **necessary for your safety and the safety of others in the lab.**
- Before lab, read the experiment and attend recitation to help you prepare.
- Complete the pre-lab exercises in Top Hat before coming to lab. Pre-labs are due at 11:59 pm on Monday.
- Arrive on time, properly dressed, and prepared for lab work. If you arrive at lab more than 10 minutes late or improperly dressed, will be asked to leave the lab and will receive a score of zero.
- Endeavor to work as an effective member of your team.
- Your lab report will be completed online. You should make sure to always:
 - Label graphs and tables.
 - Use the data you collected for the calculations and analysis.
 - Use correct units of measurement and significant figures.
 - Use chemical terms and concepts correctly.
 - Ensure results and conclusions are consistent with your data and observations.

- Lab reports for in-person and online lab are due on Mondays at 11:59 pm. (See due dates in lab procedure.)
- You will be able to review your graded lab reports online within 1-2 weeks after they are submitted. If you have questions about your grade, speak with your lab instructor or the lab coordinator.

Laboratory Policies

You will be sharing the equipment in your assigned drawer with up to 3 other students. Students in CHM 11100 have a history of functioning as a responsible community. Your lab partners will depend upon your commitment to keeping the equipment clean and in good working condition.

- It is important that you do your part to maintain the equipment throughout the semester by cleaning all the pieces of equipment after use by washing with hot water, soap, and a brush, rinse with tap water, then rinse with deionized water (it's a 3-step process to get the glassware clean and you will have better experimental results with clean glassware).
- If you are responsible for a piece of equipment becoming unuseable i.e. the piece becomes chipped, cracked, stained, broken, etc., you must go to the storeroom (immediately) and purchase a replacement.
- Should you discover that a piece of equipment is missing, first check with the other students in the lab and the lost and found box. If the piece is still missing, your group must replace it immediately. The storeroom staff can split the cost of a replacement among all or any number of lab partners.
- Often times pieces of equipment are broken accidentally; for instance, a thermometer rolls off the bench and breaks. Replacing the thermometer is still the responsibility of the group and the storeroom staff can split the cost of a replacement among the lab partners.
- There is not much room in the drawer for storing personal items, such as goggles, but you may do so. You are sharing the drawer with others so label anything that you keep in the drawer. For your safety, place all personal items in a plastic bag.

Lab Safety

Students' safety in the laboratory is a priority and everyone is required to comply with the following safety regulations. Failure to comply will result in being sent home from lab with a score of zero, which counts as a lab absence.

- Dress appropriately (see below).
- Wear gloves when specified. Nitrile (non-latex) gloves will be provided in the laboratory.
- Food and beverages are not allowed in the labs. **(This includes water bottles.)**
- If your hair is longer than shoulder length you must tie it behind your head.
- Contact lens wearers are encouraged to wear glasses in the laboratory.
- Follow your instructor's guidance on appropriate handling of hazardous materials and disposal of chemical waste.
- Promptly clean up spills and tidy the laboratory before leaving
- Proper dress (clothing, socks and shoes) is required. Chemistry department regulations state that you must wear clothing in the laboratory that protects your skin. Your clothing must **cover you from your neck (collarbone) to your ankles (thus, you need socks, not footies, SOCKS)** when sitting, standing, or reaching. Your feet must be completely covered by your shoes.

If you attend lab in unacceptable attire, you will be sent home and will receive a zero for the lab (failure to complete).

Proper Lab Attire



Unacceptable clothing includes, but is not limited to:

- tops that are sleeveless, low-cut or V-neck (below the collar bone), bare midriff or tank-style
- see-through, transparent or sheer clothing
- pants that are ripped or have **holes** in the fabric of any size
- tights or thin (translucent or transparent) **leggings**
- capri or cropped pants
- shorts
- skirts (unless they extend to the floor)
- open-toed and/or open-heeled shoes (including Crocs, Birkenstocks, or other clogs)
- sandals (with or without socks)
- boat shoes, ballet flats, slippers, moccasins, **or any shoe that doesn't cover the entire top of your foot, with or without socks**

If you come to lab wearing anything in the list above, you will be sent home and you will receive a zero for that lab.

► Your best option for chemistry lab attire is a crew neck t-shirt, jeans without holes, and sneakers (tennis shoes) with socks.

Lab attendance

As stated in the attendance policy below, if you are quarantined or isolated due to COVID, have a MAPS or GAPS absence, or a university sponsored event, then you will have an opportunity to complete an assignment to make up for the missed in person laboratory. We are happy to work with you.

If you miss lab because **you are ill and/or have COVID symptoms, but you are not quarantined**, then get tested for COVID and/or seek medical attention. Please provide hard copy evidence of testing by uploading a pdf to Brightspace in the ungraded assignment titled “COVID testing documentation” to justify the absence. You will be excused with any documented test and will be given the opportunity to complete a make-up assignment. This policy augments the existing Protect Purdue standard process of ODOS issuing notification of any student who is instructed by PPHC to isolate or quarantine. As always, please follow the Protect Purdue guidance found here <https://protect.purdue.edu/protect-purdue-health-center/what-to-do-if-you-are-sick/>.

Exams

There are no exams and no final exam in this course.

Weekly Organizers!

Every Sunday we will post a weekly organizer for you! It will have the week’s activities – reading, lecture, labs, homework, quizzes, activities/explorations/worksheets, SI meetings, and office hours! They are a marvelous way to help you stay organized and on track in the class. Download them each week!

Late Work Policy

We do not accept late work unless there are extenuating circumstances (quarantine, isolation, grief absence, university sponsored activity for example).

Determining your Course Grade, Spring 2022

Each of the assigned course activities for CHM 11200 is worth the number of points listed below. Before course grades are finalized at the end of the semester the following scores will be dropped:

- your lowest homework score
- your lowest lab score
- your lowest Activity & Exploration score
- your lowest quiz score

The total number of points for CHM 11200 will be distributed as follows:

Homework	110 pts	(Best 13 of 14 @ 8.46 pts. each)
Quizzes	360 pts	(Best 12 out of 13 @ 30 pts each)
Labs	275 pts	(Best 11 out of 12 @ 25 pts each)
Syllabus quiz, in class activities, extra A&E.....	75 pts	
Activities & Explorations.....	100 pts	(Best 10 out of 11 @ 10 pts)
Capstone Activities/Worksheets	80 pts	(comprehensive; in lieu of final exam)
Total	1,000 pts	

At the end of the semester your course grade will be based on the following scale:

- A: 875 pts and above
- B: 775 – 874 pts
- C: 675 – 774 pts
- D: 575 – 674 pts
- F: 0 – 574 pts

Save copies of all work you turn in until after you have received your course letter grade for CHM 11200. To resolve any discrepancies, your paper(s) will need to be reviewed.

Course Activities, Policies and Procedures

Studying Chemistry

Expect to spend at least 8-12 hours per week on chemistry. This time includes reading course materials, listening to lectures, watching demonstrations, completing homework and assignments and explorations, quizzes, and lab assignments.

Sources of Help

There are several **free** sources of help for CHM 11200 students: (1) professor office hours, (2) TA office hours, and (3) SI sessions with Avery and Abby.

Changing Sections/Dropping

CHEMISTRY DEPARTMENT DEADLINES – SPRING 2022

Fri. Jan 14: LAST day to add CHM 11200 or switch lab sections *without* instructor approval.

Fri. Jan 28: LAST day to switch lab sections or to add CHM 11200 *with instructor approval*.

Fri. Feb 4: LAST day to switch from another CHM course to CHM 11200 (subject to instructor approval)

UNIVERSITY DEADLINES - Spring 2022

Mon. Jan 24: Last day to cancel (drop) a course in myPurdue, without it appearing on your record.

Mon. Feb 7: Last day to withdraw a course with a grade of W.

Fri. Mar 11: Last day to withdraw from a course with a W or WF grade.

Changing Sections: A change in lecture or lab section requires the approval of the course coordinator in BRWN 1144 after the first week of classes. Because of the limits on lecture section and recitation section enrollment/attendance, and Brightspace and Connect enrollment, we will not make a section change for students after week #3 of the semester.

Adding the Course/Late Registration: Students are usually not permitted to add CHM 11200 after week 3 of the semester (Friday, February 5). Email Hanna Bovill (jbovill@purdue.edu), our course coordinator for lecture, if you register late to see about making up missed assignments.

Emergencies

In the event of a major campus emergency, course requirement, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to CHM 11200 will be posted on the course Brightspace site or can be obtained by contacting the instructors or TAs via email or the General Chemistry office via phone at 765-494-5250. You are expected to read your @purdue.edu email on a frequent basis.

Again: You are expected to read your @purdue.edu email on a frequent basis.

- “**Shelter in Place**” means seeking immediate shelter inside a building or University residence. This course of action may need to be taken during a tornado, earthquake, release of hazardous materials in the outside air, active shooter, building intruder, or a civil disturbance. If you hear the **All Hazards Outdoors Emergency Warning Sirens** or are notified via text or other means, immediately go inside a building to a safe location and use all communication means available to find out more details about the emergency. **Remain in place** until police, fire, or other emergency response personnel provide additional guidance or tell you it is safe to leave. There is no “all safe siren;” the notification will come via text, internet, or email announcement.

Accessibility and Accommodations:

Purdue University strives to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. You are also encouraged to contact the Disability Resource Center at: drc@purdue.edu or by phone: 765-494-1247.

Disability Accommodations

If you require accommodations to access course activities or materials, the accommodations must be described and approved by Disability Resource Center, Young Hall Room 830, 302 Wood Street, 494-1247, drc@purdue.edu, www.purdue.edu/drc. To implement accommodations, you must follow the instructions provided by the Disability Resource Center, *in addition to* sharing your “Notification of Course Accommodations” with the CHM 11200 instructors via the AIM system *at least one week before* a quiz for which accommodations are desired. Once we receive notification, we will discuss your individual case and your options within this course with you if required or if you have a modified attendance agreement. *Implementation of accommodations may not be possible if insufficient notification is given.*

Academic Integrity statement and consequences.

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breaches of this value by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern.” Please read <http://www.purdue.edu/odos/osrr/academic-integrity/index.html>.

In CHM 11200, academic integrity means “doing your own work” at all times. Discussion of chemical concepts and problem-solving methods is encouraged, but sharing your answers and work on social media for the express purpose of letting other students copy it is not acceptable. Such a use of technology does not help you learn and is considered academic dishonesty.

Online quizzes in CHM 11200 are open book and open note, however all collaboration with others (such as Group Me, Zoom, discussion boards, text, in-person, etc.) during a quiz is prohibited. Using online resources such as Chegg to gain answers to any graded assignment (including homework, labs, quizzes, activities and explorations, and worksheets) is *not* allowed. Posting any course materials to websites is a violation of copyright laws and is *not* allowed. Instructors can obtain user information from Chegg and other sites when inappropriate course material is posted and investigate it.

Consequences of academic dishonesty include receiving a lower or failing grade for an assignment, being required to repeat the assignment, receiving a lower or failing grade for the course and/or dismissal from the University. Incidents of academic integrity are referred to the Office of the Dean of Students. A student accused of academic dishonesty will be afforded due process as defined by Purdue University procedures.

To be clear, we encourage you to collaborate and share ideas except when working on a quiz! Additionally, although you have partners in lab you are required to complete your own work in your own handwriting (for example, on calculations), and turn it in. You may not have one set of calculations across partners that is turned in for both students.

Purdue Honors Pledge

We support and affirm the academic integrity of Purdue in accordance with the Purdue Honors Pledge : “As a Boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together – we are Purdue.” <https://www.purdue.edu/provost/teachinglearning/honor-pledge.html>

Diversity Welcome

We believe every student in this course has something of value to contribute. Please take care to respect the different experiences, beliefs and values expressed by students and staff involved in this course. We support Purdue's commitment to diversity, and welcome individuals of all ages, backgrounds, citizenships, disabilities, education, ethnicities, family statuses, genders, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences. See: <http://www.purdue.edu/diversity-inclusion/>.

Nondiscrimination Statement

Purdue university is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange ideas, and enriches campus life. Purdue's nondiscrimination policy can be found at https://www.purdue.edu/purdue/ea_eou_statement.php.

Attendance Policy

Students should stay home and contact the Protect Purdue Health Center (496-INFO) if they feel ill, have any symptoms associated with COVID-19, or suspect they have been exposed to the virus. In the current context of COVID-19, in-person attendance will not be a factor in the final grades, but the student still needs to inform the instructor of any conflict that can be anticipated and will affect the submission of an assignment, attending laboratory, or the ability to take a quiz. Only the instructor can excuse a student from a course requirement or responsibility.

When conflicts can be anticipated, such as for many University-sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible. For unanticipated or emergency conflict, when advance notification to an instructor is not possible, the student should contact the instructor as soon as possible by email, through Brightspace, or by phone. When the student is unable to make direct contact with the instructor and is unable to leave word with the instructor's department because of circumstances beyond the student's control, and in cases of bereavement, quarantine, or isolation, the student or the student's representative should contact the Office of the Dean of Students via [email](#) or phone at 765-494-1747.

Quarantine or Isolation

If you become quarantined or isolated at any point in time during the semester AND you have worked through the Protect Purdue Health Center (PPHC), the Office of the Dean of Students is automatically notified and they send an absence letter to all your instructors and advisors. If you work with a doctor outside of PPHC the process is not automatic and you MUST work with PPHC in order to have the Office of the Dean of Students notified so that an absence letter will be sent to us. You MUST also send us your release letter to campus.

In addition to support from the Protect Purdue Health Center, you will also have access to an Academic Case Manager who can provide you academic support during this time. Your Academic Case Manager can be reached at acmq@purdue.edu and will provide you with general guidelines/resources around communicating with your instructors, be available for academic support, and offer suggestions for how to be successful when learning remotely.

Importantly, if you find yourself too sick to progress in the course, notify your academic case manager and notify Dr. Towns and Dr. Harwood via email or Brightspace. We will make arrangements for you to continue to learn remotely based on your particular situation and we are happy to work with you and support you although we cannot guarantee remote access to all course activities. The Office of the Dean of Students (odos@purdue.edu) is also available to support you should this situation occur.

If you attend any course element while under quarantine or isolation you will automatically fail the course. We are happy to work with you to reset due dates if they cannot be met while you are quarantined or isolated. We also can work with you if you miss an in-person laboratory!

If you miss lab because **you are ill and/or have COVID symptoms, but you are not quarantined**, then get tested for COVID and/or seek medical attention. Please provide hard copy evidence of testing by uploading a pdf to Brightspace in the ungraded assignment titled "COVID testing documentation" to justify

the absence. You will be excused with any documented test and will be given the opportunity to complete a make-up assignment. This policy augments the existing Protect Purdue standard process of ODOS issuing notification of any student who is instructed by PPHC to isolate or quarantine. As always, please follow the Protect Purdue guidance found here <https://protect.purdue.edu/protect-purdue-health-center/what-to-do-if-you-are-sick/>.

Grief Absence Policy for Students (GAPS)

If you experience the death of a family member or close friend, notify the Office of the Dean of Students at 765-494-1747. Scores for any missed assignments under a verified GAPS absence will be pro-rated (assigned a score based on your average and the class average). See the Lecture or Lab Course Coordinator for more information.

MAPS Absence Policy for Students (MAPS)

A student should contact the Office of the Dean of Students (ODOS) to request that a notice of the leave be sent to instructors as soon as the student is informed of the dates of mandatory military training. Given proper documentation, the instructor will excuse the student from class and provide the opportunity to earn equivalent credit and to demonstrate evidence of meeting the learning outcomes for missed assignments or assessments.

Absences Due to University Sponsored Activities

A student should bring his or her letter stating the reason for the absence to the instructor as far in advance as possible. The student and instructor will meet to discuss the absence and how, if possible, the learning outcomes associated with any missed class activities may be addressed.

Mental Health and Wellness Statement

If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try [WellTrack](#). Sign in and find information and tools at your fingertips, available to you at any time.

If you need support and information about options and resources, please contact or see the [Office of the Dean of Students](#). Call 765-494-1747. Hours of operation are M-F, 8 am- 5 pm.

If you find yourself struggling to find a healthy balance between academics, social life, stress, etc. sign up for free one-on-one virtual or in-person sessions with a [Purdue Wellness Coach at RecWell](#). Student coaches can help you navigate through barriers and challenges toward your goals throughout the semester. Sign up is completely free and can be done on BoilerConnect. If you have any questions, please contact Purdue Wellness at evans240@purdue.edu.

If you're struggling and need mental health services: Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact [Counseling and Psychological Services \(CAPS\)](#) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office on the second floor of the Purdue University Student Health Center (PUSH) during business hours.

CAPS also offers resources specific to COVID-19 on its [website](#). Topics range from "Adjusting to the New Normal" to "How to Talk with Professors about Personal Matters."

Basic Needs Security:

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. There is no appointment needed and Student Support Services is available to serve students 8 a.m.-5 p.m. Monday through Friday. Considering the significant disruptions caused by the current global crisis as it relates to COVID-19, students may submit requests for emergency assistance from the [Critical Need Fund](#).

Protect Purdue

The [Protect Purdue Plan](#), which includes the [Protect Purdue Pledge](#), is campus policy and as such all members of the Purdue community must comply with the required health and safety guidelines. Required behaviors in this class include: staying home and contacting the Protect Purdue Health Center (496-INFO) if you feel ill or know you have been exposed to the virus, wearing a mask [in classrooms and campus building](#), at all times (e.g., no eating/drinking in the classroom), disinfecting desk/workspace prior to and after use, maintaining proper social distancing with peers and instructors (including when entering/exiting classrooms), refraining from moving furniture, avoiding shared use of personal items, maintaining robust hygiene (e.g., handwashing, disposal of tissues) prior to, during and after class, and following all safety directions from the instructor.

Students who are not engaging in these behaviors (e.g., wearing a mask) will be offered the opportunity to comply. If non-compliance continues, possible results include instructors asking the student to leave class and instructors dismissing the whole class. Students who do not comply with the required health behaviors are violating the University Code of Conduct and will be reported to the Dean of Students Office with sanctions ranging from educational requirements to dismissal from the university.

Any student who has substantial reason to believe that another person in a campus room (e.g., classroom) is threatening the safety of others by not complying (e.g., not wearing a mask) may leave the room without consequence. The student is encouraged to report the behavior to and discuss next steps with their instructor. Students also have the option of reporting the behavior to the [Office of the Student Rights and Responsibilities](#). See also [Purdue University Bill of Student Rights](#).

For details about other Purdue University policies, including academic integrity, class attendance and absence reporting, emergency, nondiscrimination, and disability services, see the course Brightspace site.

Lecture, Lab, Quiz Schedule

Chemistry 11200

Week	Date	Lecture Topic	Reading (textbook)	Video Lectures (required)	Laboratory (Top Hat laboratory manual)	Quizzes
1	11-Jan	Introduction			No laboratory during week 1.	Due Th. at 11:59 PM
	13-Jan	Intermolecular Forces	11.1-11.2: pp 463-464			
2	18-Jan	Intermolecular Forces Phase Changes	11.2: pp 465-469; 11.8: pp 495-498	Liquid Properties 11.3: pp 469-474	Check-in to your laboratory drawer in person. Complete safety certification if you have not done so.	Quiz 1 (IMF)
	20-Jan	Solutions & Solubility	12.1-12.3: pp 514-522			
3	25-Jan	Intermolecular Forces Applications	12.4: pp 522-524;	Solution Properties 12.6-12.7: pp 527-540 Colloids 12.8: pp 541-543	L1: Intermolecular Forces (IMFs) Introduction (Online)	Quiz 2 (IMF)
	27-Jan	Equilibrium	14.1-14.2: pp 617-620			
4	01-Feb	Acids and Bases	15.1-15.2: pp 661-664		L2: IMFs Applications (Online)	Quiz 3 (IMF)
	03-Feb	Acids and Bases – pH	15.3: pp 664-669			
5	08-Feb	Weak Acids and Bases	15.4-15.5: pp 670-681	Polyprotic Acids 15.8: pp 684-688	L3: Antacid analysis (In person)	Quiz 4 (Acid-Base)
	10-Feb	Weak Acids and Bases	15.6-15.7: pp 681-684			
6	15-Feb	Salt Solutions & pH	15.10: pp 692-697	Structure & Acid Strength 15.9: pp 688-692	L4: Understanding pH (Online)	Quiz 5 (Acid-Base)
	17-Feb	Common Ion Effect; Buffers	16.1-16.2: pp 715-719			
7	22-Feb	Buffers	16.3: pp 719-723		L5: Describing Acids (In person)	Quiz 6 (Acid-Base)
	24-Feb	Buffers	16.3: pp 723-724			
8	01-Mar	Titrations	16.4: 724-728		L6: Preparation of Buffers and Buffer Capacity (In person)	Quiz 7 (Buffers)
	03-Mar	Titrations	16.4: 728-732			

Chemistry 11200

Week	Date	Lecture Topic	Reading (textbook)	Video Lecture	Laboratory (Top Hat laboratory manual)	Quizzes
9	08-Mar 10-Mar	Buffer/Titration Applications Lewis Acids/Bases	15.12: pp 699-701	Lewis Acids/Bases; 15.12: pp 699-701	L7: Acid-Base Titrations (In person)	Quiz 8 (Titrations)
10	14-18 Mar	Spring Break!				
11	22-Mar 24-Mar	Kinetics Kinetics	13.1: pp 557-564 13.2: pp 565-568		L8: Workup of Acid-Base Titrations (In person)	Quiz 9 (Buffers, titrations, Lewis)
12	29-Mar 31-Mar	Kinetics Kinetics	13.3: pp 569-576 13.3: pp 576-581		L9: Factors Influencing Rates of Reactions (In person)	Quiz 10 (Kinetics)
13	05-Apr 07-Apr	Kinetics Kinetics Applications	13.4: 582-583 13.6: pp 594-599	Reaction Mechanisms 13.5: pp 588-593	L10: Chemical Kinetics (In person)	Quiz 11 (Kinetics)
14	12-Apr 14-Apr	Redox Redox	18.1: pp 807-808 18.1: pp 807-808	Oxidation Numbers Review 4.4: pp 138-140	L11: Lab Report Workup – Chemical Kinetics (In person)	Quiz 12 (Kinetics)
15	19-Apr 21-Apr	Redox Applications Redox Applications	18.1: pp 808-810 18.7: pp 832-835		L12: Redox of Metals and the Activity Series (In person)	Quiz 13 (Redox)
16	26-Apr 28-Apr	Organic Chemistry Applications Organic Chemistry Applications	24.1-24.3: pp 1021-1035 24.4: 1037-1041	Organic Chemistry	Check out of laboratory In person	
17	02-May 07-May	Final Exams Begin Final Exams End Saturday Evening				