
CHM 11200 Course Packet Summer 2025

CHM 1120 – General Chemistry II

CRN: 30011 (<https://purdue.brightspace.com/d2l/home/1324751>)

Instructor: Dr. Cindy Harwood

Email: charwood@purdue.edu

Lecture: MTWTh, 2:10-3:00 pm EDT (synchronous; recorded)
(<https://purdue-edu.zoom.us/j/94043325326>)

Recitation: M/W, 8:40 am, 9:50 am, 5:00 pm (synchronous; recorded)

Laboratory: Online, asynchronous

Dr. Harwood's Office Hours: T & Th 3:00-4:00 pm EDT online or by appointment online.

TAs:

Anusha Anusha (aanusha@purdue.edu)

Bright Adu (adub@purdue.edu)

Issaka Obuaba (iobuaba@purdue.edu)

General Chemistry Office, BRWN 1144, 765-494-5250

Marlene Miller (marlenem@purdue.edu), Administrative Assistant

Melissa Roadruck (melissa@purdue.edu), Administrative Assistant

The General Chemistry office handles ALL the administrative (non-chemistry) details associated with the course. Direct all non-chemistry questions about the course to this office.

Communication My contact information above. I will hold office hours this semester online. Please feel free to email me with questions at any time. I generally will respond within a few hours on weekdays. To avoid wasted time and duplicated effort, please do not email multiple course or university personnel *individually* about the same issue, rather send *one* email addressed to multiple people.

All communication should be through your @purdue.edu email

Course Information

Chemistry 11200 is an online, 3-credit-hour, general chemistry course for agriculture, health and human science, and other majors. CHM 11200 is a continuation of CHM 11100 (General Chemistry I) and meets the science requirement of the University's foundational core. The course is oriented around helping you learn some of the fundamental chemistry concepts, calculations, and laboratory skills you need in your major. Topics covered include intermolecular forces, acids, bases, buffers, titrations, and reaction rates.

The CHM 11200 team—the professor and graduate teaching assistants, administrative assistants, and general chemistry preparations lab—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.

Lecture Powerpoints, links, assignments, and other course information are available through the course Brightspace page (<https://purdue.brightspace.com/d2l/home/1324751>). You should visit it often and sign up for notifications so you can keep up-to-date on any helpful course information.

Required Materials

Textbook: I have chosen the McGraw-Hill **ALEKS** online homework program for our online digital homework platform this semester. When you purchase ALEKS access it includes an electronic copy of the textbook, *Chemistry* by Overby, 15th edition. There is also an option available for purchasing a loose-leaf version of the book directly from McGraw-Hill. See Brightspace for further information.

Lab Manual: We have a digital laboratory manual this semester from Top Hat. You can purchase instant access to the online lab manual for Summer 2025 using the link on the Brightspace course page.

Lab Simulations: We will be using the BeyondLabz lab simulation platform for most of the labs this semester. You can purchase instant access to BeyondLabz using the link on the Brightspace course page.

NOTE: If you purchased ALEKS and BeyondLabz in CHM 11100 or CHM 11200 in Fall 2024 or Spring 2025 you probably do not need to repurchase these again. Details are given on the Brightspace course page. Contact Dr. Harwood with any questions.

Week #1 Assignments:

- **Sign up for Brightspace notifications for email & announcements**
- Purchase required materials: ALEKS (includes textbook), TopHat, and BeyondLabz (if necessary).
- Read all the information in this course packet.
- Complete the ALEKS Initial Knowledge Check
- Start the ALEKS Prerequisite Review Module
- Complete the first ALEKS weekly homework assignment.
- Read the Reading Assignments and Learning Objectives for Week 1.

Overview of CHM 11200 Activities and Policies

***For more detailed information, see the course Brightspace page. ***

Weekly Assignments

During *most* weeks, you will have the following assignments:

Item	Platform	Day	Time (EDT)
Lab Reports	Top Hat	Tuesdays/Thursdays	Due 11:59 pm
Problem Sets	Gradescope	Fridays	Due 11:59 pm
Homework	ALEKS	Sundays	Due 11:59 pm
Learning Modules	ALEKS	Sundays	Due 11:59 pm

Brightspace

This is the learning management system (LMS) that we use in the course. I will post all course resources on our Brightspace page and you will need to access this page multiple times each week. You will access all course content using links on Brightspace. The course content is broken up into 4 topics 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 listening to the lecture and laboratory materials is recommended.*

Lecture – Online

Lectures will be presented synchronously online through Zoom. Lectures will be recorded and posted on Brightspace. See lecture schedule on the last two pages for details.

Recitation (PSO)

- Twice weekly recitation provides the opportunity for you to ask questions, learn about the upcoming labs, and work problems with your fellow students and TA. Your questions are always the first agenda item, so come prepared.
- Recitations will be held synchronously.
- Recitation guides containing relevant conceptual and numerical questions are provided for you in Brightspace each week.
- Note that it is not your TA's responsibility to provide you with answers to homework, pre-lab, or lab report questions. Rather, they are expected to guide you to the correct solutions, help you identify mistakes, and add details to help you further understand concepts.

Homework (ALEKS)

- You will have a weekly homework assignment on the ALEKS platform, due Sundays by 11:59 pm.
- You will have a maximum of **three (3)** attempts to complete most homework **questions** plus a maximum of **three (3)** submission attempts for each assignment before the listed due date.
- New submission attempts will allow you to complete only the questions you missed in the previous attempt. You will not start the homework assignment over from scratch.
- Homework will be scored and recorded on-line; there is no hand grading or regrading of homework.

Learning Modules (ALEKS)

- You will have a **four (4)** learning modules to complete on ALEKS, due Sundays by 11:59 pm.
- These modules will help you learn and practice the main ideas you'll need to know and retain for this course and beyond.
- These learning modules require you to demonstrate mastery of specific topics. This means you may be required to correctly answer questions on a specific topic several times to prove mastery.
- The subject matter and timing will be coordinated with the course exams and will play a big role in helping you do well on the exams.

Problem Sets

Toward the end of each course topic you will have a short set of problems to work on that topic. These are a low stakes opportunity for you to challenge yourself with practice problems on course material.

- **Five (5)** problem sets during session due Fridays at 11:59 pm
- Problem sets are worth 16.25 points each. 6.25 points will be given just for completing the problem set (a complete problem set has reasonable answers for every problem and has uploads showing work for specified questions). 10 points will come from randomly selected questions in the problem set that will be graded for correctness. These will not be announced before problem sets are due.
- You are encouraged to work with others on problems sets! Like lab reports, you are expected to submit your own work, but you are encouraged to talk to your peers and work together.
- Problem sets will be completed on Gradescope, just like exams, and they will be available starting after class on Tuesdays.
- You will be able to view and work on the problem sets as much as you want during that time. If you upload multiple submissions for a question, only your final submission will be graded.
- Keys for all problem sets will be posted on Brightspace following the due date.

Exams

There will be three online, timed exams during the session, each worth 140 points. The dates and content of the exams are outlined on the course schedule and will be discussed in lecture. **Exams are held during the lecture time and will be monitored over Zoom with video on.** There will be an option for an early evening exam time on the same day, if necessary. You must alert Dr. Harwood at the beginning of the semester if you will need to take your exams in an alternate evening session. No makeup exams or exceptions will be made unless you have a university approved absence. No exam scores are dropped. If you are unable to have your camera on during the exam for any reason, please reach out to Dr. Harwood *before* exam week to determine another solution. Exams will be given on Gradescope.

- If you take the exam but do not login to Zoom for proctoring, you will earn a 0 on the exam.
- If you fail to take the exam during a scheduled time, you will earn a 0 on the exam.
- Exams are open note and open book. You may not, however, consult with anyone about the exam via text, call, the internet (including use of Chegg or other sites), social media, or in person. If it is determined that you did consult unapproved outside sources during the exam, that is considered academic dishonesty and you will be reported and face grade penalties.
- Exam dates:
 - Monday, July 7
 - Monday, July 21
 - Tuesday, August 5

Final Exam

There is no final exam for CHM 11200 during the summer.

Laboratory (Top Hat & BeyondLabz)

Laboratory exercises are an integral part of CHM 11200 and we will complete our labs this year using Top Hat Labs as our digital lab manual and BeyondLabz as our main lab simulation platform. Please see the Brightspace course webpage for Top Hat and BeyondLabz access purchase information. Below are due dates and guidelines.

- There will be 1-2 labs per week (most weeks) during the summer semester.
- **There will be NO LABS during Week 1.**
- Labs for the following week will be released in Top Hat on Fridays by 8:00 pm EDT.
- Lab reports will be due on Thursdays (1st lab of the week) and the following Tuesdays (2nd lab of the week) at 11:59 pm EDT
- Your lab report will be completed online through Top Hat. You should make sure to always:
 - Click SAVE or SUBMIT after you type your responses. (VERY IMPORTANT!)
 - Label graphs and tables, where appropriate.
 - 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.

You will be able to review your graded lab reports online within one week after they are submitted. If you have questions about your grade, speak with your graduate lab instructor.

Determining your Course Grade, Summer 2025

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:

- lowest homework score
- lowest lab score
- lowest problem set score

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

ALEKS Homework	150 pts	(Best 6 out of 7 @ 25 pts each)
ALEKS Modules	140 pts	(4 @ 35 pts each)
Labs	225 pts	(Best 9 out of 10 @ 25 pts each)
Exams	420 pts	(3 @ 140 pts each)
Problem Sets	65 pts	(Best 4 out of 5 @ 16.25 pts each)
Total	1,000 pts	

At the end of the summer session, your course grade will be based on the following scale:

- A: 875 pts and above ($\geq 87.5\%$)
- B: 775 – 874 pts ($\geq 77.5\%$)
- C: 675 – 774 pts ($\geq 67.5\%$)
- D: 575 – 674 pts ($\geq 57.5\%$)
- F: 0 – 574 pts ($< 57.5\%$)

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

Studying Chemistry

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

Sources of Help

There are several **free** sources of help for CHM 11200 students: (1) professor and (2) TA office hours.

Changing Sections/Dropping

UNIVERSITY DEADLINES - Summer 2025

Fri. June 20: Last day to cancel (drop) a course in myPurdue, without it appearing on your record.

Wed. July 30: Last day to cancel (drop) a course (with a passing or failing grade).

Adding the Course/Late Registration

Students are not permitted to add CHM 11200 after June 20. Email Dr. Harwood (charwood@purdue.edu) if you register after the course begins to see about making up missed assignments.

Technology Problems

In the event of a major technical problem, course requirements, deadlines, and grading cutoffs are subject to changes that may be necessitated by 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 Dr. Harwood via email. **You are expected to read your @purdue.edu email on a frequent basis.**

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, 765-494-1247, drc@purdue.edu, www.purdue.edu/drc. To implement accommodations you must follow the instructions listed as “*Responsibilities of the Student*” in the letter prepared by the Disability Resource Center. **Within the first week of the semester or within one (1) week of the date of the letter**, you are required to electronically share a copy of your letter to Dr. Harwood (charwood@purdue.edu). *Implementation of accommodations may not be possible if insufficient notification is given.*

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. The University believes that intellectual and cultural diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life.” Purdue’s full nondiscrimination policy can be found at https://www.purdue.edu/purdue/ea_eou_statement.php.

Medically Excused Absence Policy for Students (MEAPS)

You should contact the Office of the Dean of Students (ODOS) at 765-494-1747 (odos@purdue.edu) to request that a notice of the leave be sent to instructors if you have experienced hospitalization, emergency department or urgent care visits. ODOS will require documentation. Please follow up with your instructors to make arrangements per this policy.

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 or (odos@purdue.edu). You will need to complete the Grief Absence Request Form (<https://www.purdue.edu/advocacy/students/absences.html>). I will receive an email from the Dean of Students informing me of your absence. Scores for any missed assignments under a verified GAPS absence can be either made up or pro-rated (assigned a score based on your average and the class average). Contact Dr. Harwood for more information.

MAPS Absence Policy for Students (MAPS)

You should contact the Office of the Dean of Students to request that a notice of the leave be sent to instructors as soon as you are informed of the dates of mandatory military training. You will need to complete the Military Absence Request Form (<https://www.purdue.edu/advocacy/students/absences.html>). Given proper documentation, I will excuse you 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

You should email your letter stating the reason for the absence to me as far in advance as possible. We 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 stressed, anxious and/or 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 to help you, please contact or see the [Office of the Dean of Students](#). Call 765-494-1747. Hours of operation are M-F, 8:00 a.m. - 5:00 p.m.

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'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.

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 am-5 pm Monday through Friday. Considering the significant disruptions caused by the current global crisis as it related to COVID-19, students may submit requests for emergency assistance from the [Critical Needs Fund](#).

The campus also has a food pantry open to the entire Purdue community: *The [ACE Campus Food Pantry](#)*

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>.

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 exams 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 an exam is prohibited. Using online resources such as Chegg to gain answers to any graded assignment (including homework, labs, exams, 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.

CHM 11200 Artificial Intelligence (AI) Usage Policy

Artificial intelligence (AI) and large language learning model (LLM) tools such as ChatGPT, Bard, Claude, etc. can assist in providing explanations and suggestions and are great resources for brainstorming ideas. They can be very useful when used correctly. AI can help you improve your skills and knowledge, but it cannot replace your creativity, critical thinking, or judgment. It is best to use AI as a supplement to your learning, not just to produce content. Keep in mind that AI does not discriminate between fact and fiction. Information provided by AI can be inaccurate or incomplete.

This course has an AI full disclosure policy. If you use AI as part of your work in this class, please explicitly describe how you used it and provide a link to your chat history.

AI tools should not be used for direct answers to graded assignments in this course and you should not submit AI-generated content as your own work. I consider this to be a form of cheating and plagiarism. If your AI use appears to entail plagiarizing, I will contact you directly to talk about how to use AI in an acceptable way and we will discuss any possible penalties at that time. If you are uncertain about whether a particular use of AI is acceptable, just ask me.

Disclaimer

This syllabus is subject to change. You will be notified of any changes as far in advance as possible via an announcement on Brightspace. Monitor your Purdue email daily for updates.

Lecture, Lab, Activity, Exam Schedule

Topics: Intermolecular Forces (IMFs); Acids & Bases; Buffers/Titrations; Kinetics

Chemistry 11200

Week	Date	Lecture Topic**	Reading Assignments (textbook sections)	Recorded Video Lectures	Laboratory (Top Hat lab manual)
1	16-Jun	Course Introduction	11.1-11.2 11.2		NO LABS WEEK 1 Purchase and get set up with TopHat Lab manual and BeyondLabz
	17-Jun	Intermolecular Forces			
	18-Jun	Intermolecular Forces			
	19-Jun	Intermolecular Forces			
2	23-Jun	Phase Changes	11.3; 11.8	Properties of Liquids	L1: IMFs Introduction
	24-Jun	Solutions & Solubility;	12.1-12.3; 12.6-12.7	Properties of Solutions	L2: IMFs Applications
		Equilibrium	14.1-14.2		
	25-Jun	Strong Acids and Bases	15.1-15.2		
	26-Jun	Strong Acids and Bases	15.2		
3	30-Jun	Strong Acids and Bases	15.3		L3: Analysis of Baking Soda
	01-Jul	Strong Acids and Bases	15.3		
	02-Jul	Weak Acids	15.4		
	03-Jul	Weak Acids (recorded)	15.4		
4	07-Jul	Exam 1 (during lecture)	15.5 15.6-15.9 15.10; 16.1	Polyprotic Acids Structure & Acid Strength	L4: Identifying Acids & Bases
	08-Jul	Weak Acids and Bases			L5: Describing Acids
	09-Jul	Weak Acids and Bases			
	10-Jul	Salt Solutions & pH; Common Ion Effect			

** Synchronous online session through Zoom during regular class meeting (2:10-3:00 pm). Will be recorded and posted on Brightspace.

Chemistry 11200

Week	Date	Lecture Topic	Reading (textbook)	Required Video Lectures	Laboratory (Top Hat laboratory manual)	
5	14-Jul	Buffers	16.2		L6: Preparation of Buffers	
	15-Jul	Buffers	16.2		L7: Acid-Base Titrations	
	16-Jul	Titration	16.3			
	17-Jul	Titration	16.3			
6	21-Jul	Exam 2 (in lieu of lecture)	13.1		L8: Weak Acid-Strong Base Titrations	
	22-Jul	Kinetics			L9: Factors Which Influence the Rates of Reactions	
	23-Jul	Kinetics				
	24-Jul	Kinetics				
7	28-Jul	Kinetics	13.3		L10:Chemical Kinetics Molecular Investigations	
	29-Jul	Kinetics	13.3			
	30-Jul	Kinetics	13.4			
	31-Jul	Kinetics	13.4; 13.6			
8	04-Aug	Kinetics	13.6			
	05-Aug	Exam 3 (in lieu of lecture)				
	06-Aug	NO FINAL EXAM IN CHM 11200!!				
	07-Aug					

** Synchronous online session through Zoom during regular class meeting (2:10-3:00 pm). Will be recorded and posted on Brightspace.